VICTORIA UNIVERSITY OF TECHNOLOGY

Popular environmental education:
Progressive contextualization of local practice in a
globalizing world

by

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Declaration

I declare that this thesis is my original work,
except where otherwise cited, and has not been submitted,
in whole or in part, for any other academic award.

Jose Roberto Quintos Guevara

March 2002

ABSTRACT

**Popular environmental education: Progressive contextualization
of local practice in a globalizing world**

The thesis examines the popular environmental education practice of the Center for Environmental Concerns – Philippines (CEC) and distils insights into educational practice in a globalizing world. Progressive contextualization is used to examine the development of CEC's educational practice. It is a human ecology research method developed by Andrew Vayda that studies people and environment interactions within progressively denser or wider contexts. In the context of educational practice, CEC described it as a process of adjusting the module to the local context. The research observed educational tensions between the context of the local and the global, the emphasis of content on the biophysical and political, and the methodology as participatory and prescriptive.

The thesis identified time, space, and the context of the learners as the key local factors of progressive contextualization. An action research approach and an emphasis on participation were identified as the key organizational and educational processes. The main organizational structures that contributed to these processes were the People's Faculty and the progressive people's movement in the Philippines. The research observed that although progressive contextualization initially involved the localization of the education module, it was equally an organizational development process for CEC and the organizations it worked with. Examination of CEC's approaches to linking the local to national context indicated a development from an ecological, geographic and holistic approach to a mode of production analysis. However, these same frameworks were not applied in dealing with the global context, which emphasized scale and space, rather than holistic relationships. The thesis proposes a description of progressive contextualization in relation to popular environmental education as an on-going and reciprocal process of educational and organizational development that begins from the local context. It establishes local-global links that are not limited to space and scale and values the intermediary role of non-governmental organizations and the networks of local efforts and organizations as part of this process.

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To you all.… *Maraming, maraming salamat.*

ABBREVIATIONS

ACIAR	Australian Centre for International Agricultural Research
ADB	Asian Development Bank
ASPBAE	Asian-South Pacific Bureau of Adult Education
ASE	Academic Search Elite (Database)
ATT	Advanced Trainers Training
Bayan-KM	*Bagong Alyansang Makbayan – Kanlurang Mindoro*
BCC-CO	Basic Christian Community – Community Organizations
BINGOs	Business-initiated or influenced NGOs
BNPP	Bataan Nuclear Power Plant
CBEM	Community-based Environmental Monitoring
CCM	Context-Content-Method Framework
CCODP	Canadian Catholic Organization for DEVELOPMENT AND PEACE
CDO	Cagayan de Oro
CEC	Center for Environmental Concerns – Philippines
CEC@10	National Evaluation Conference and Workshop of 10 years of the Center for Environmental Concerns – Philippines
CIDA	Canadian International Development Agency
COMENGOS	Fly-by-night initiatives
CONFINTEA V	Fifth International Conference on Adult Education
CORETECH	Community-based Rehabilitation Technology
CPD	Council for People's Development
CPP	Communist Party of the Philippines
DA	Department of Agriculture
DECS	Department of Education, Culture and Sports
DENR	Department of Environment and Natural Resources
DGs	Discussion groups
DJANGO	Development, justice and advocacy NGOs
EduCATOR	Educator, Campaigner, Activist, Trainer, Organizer, Researcher
EE Guide	Environmental Education Guide
EE	Environmental Education
EIA	Environmental Impact Assessment
EIM	Environmental Investigations Mission
ELAC-PLLP	Environmental Legal Assistance Center -Protestant Lawyers League of the Philippines
EMB	Environmental Management Bureau
EMI	Ecological Monitor Inc (changed to SOS-Earth)
ERA	Environmental Risk Assessment
ESSC	Environmental Science for Social Change
FFF	Federation of Free Farmers
FQS	First Quarter Storm (late 1960s – 1972)
FTAA	Financial or Technical Assistance Agreement
FUNDANGO	Funding agency dependent or initiated NGOs
GAS	Golden Apple Snail
GATT	General Agreement on Tariff and Trade

GEF	Global Environmental Facility
Gen San	General Santos City, South Cotabato
GRINGOs	Government-initiated or influenced NGOs
ICCO	Dutch Interchurch Organization for Development Cooperation
IIRR	International Institute for Rural Reconstruction
IIZ/DVV	Institute for International Cooperation of the German Adult Education Association
IKSER	Indigenous Knowledge Systems in Ecology Research
IMF	International Monetary Fund
INGOF	International NGO Forum
IUCN	International Union for the Conservation of Nature
KAMP	*Kalipunan ng mga Katutubong Mamamayan ng Pilipinas* (Federation of Indigenous Peoples of the Philippines)
KMP	*Kilusang Magbubukid ng Pilipinas* (Philippine Peasant Movement)
KPML	*Kongreso ng Pagkakaisa ng Maralita ng Lungsod* (Congress of the Solidarity of the Urban Poor)
LCMC	Lepanto Consolidated Mining Company
LIDE	Leyte Industrial Development Estate
MAI	Multi-lateral Agreement on Investment
MAPISAN	Federation of farmer's groups in Southern Negros
MASAI	Management Advancement System Association, Inc
MCPA	Mass Campaign Planning and Administration
Mindex	Mindex Resource Development, Inc.
Mis Or	Misamis Oriental
MTADP	Medium Term Agricultural Development Plan
MTPDP	Medium Term Philippine Development Plan
MUNGOs	Mutant NGOs
nat sit	national situationer
NCCP	National Council of Churches of the Philippines
ND	National Democrat
NDF	National Democratic Front
NFL	National Federation of Labor
NFSW	National Federation of Sugar Workers
NGDO	Non-governmental Development Organization
NGO	Non-governmental Organization
NPA	New People's Army
ODA	Official Development Aid
OECD	Organization for Economic Cooperation and Development
PALMS	People's Analytical Laboratory and Mapping System
PAMPIL	Pamalakaya Pilipinas
PAR	Participatory Action Research
PARUD	Partners in Rural Development
PASAR	Philippine Associated Smelting and Refining Corporation
PCHRD	Philippines-Canada Human Resources Development Program
PCIJ	Philippine Center for Investigative Journalism
PDG	*Paghida-et sa Kauswagan* Development Group
PEAN	Philippine Environmental Action Network

People's Faculty	People's Faculty of Grassroots Environmental Education and Studies
PETA	Philippine Educational Theater Association
PHILPHOS	Philippines Phosphate and Fertilizer Corporation
PIES	People's Integrated Evaluation Systems
PMT	People's Monitoring Team
PO	People's Organization
ppb	parts per billion
PROGREEN	Program for Grassroots Environmental Education
PSSD	Philippine Strategy for Sustainable Development
PUP	Peasant Update Philippines
QC	Quezon City
RENEW	Restoration Ecology Workshop
SAPs	Structural Adjustment Programmes
SEC	Securities and Exchange Commission
SEDD	Socio-Ecological Development Department
SEED Program	Sectoral Environmental Education Program
SIBAT	*Sibol ng Agham at Teknolohiya* (Seed of Science and Technology)
TA	Technology Assessment
TANGOs	Traditional NGOs
TLA	Timber License Agreements
TRIP	Agreement on Trade-Related Aspects of Intellectual Property Rights
UIE	UNESCO Institute for Education
UN	United Nations
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Program
UNEP	United Nations Environment Program
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNRISD	United Nation's Research Institute for Social Development
UPLB	University of the Philippines at Los Banos
US	United States of America
USSR	Union of Socialist Soviet Republics
UUSC	Unitarial Universalist Service Committee
VENRO	Development Policy Association of German Non-governmental Organizations
VISTA	Volunteers in Scientific and Technological Assistance
VMG	Vision, Mission and Goal
WB	World Bank
WCED	World Commission on Environment and Development
WHP	Workers' Health Program
WMC	Western Mining Corporation
WTO	World Trade Organization

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Preface: a personal introduction

This is personal. It is personal because it introduces the person responsible for the thesis. It is personal because it acknowledges my contribution to the organization and the educational practice being studied. But more significantly, it is personal because the ten-year experience being studied plus the four years I have spent conducting this study have been a continuing learning opportunity for me.

When I began the study in 1998 I conducted a seminar entitled *Reflections on community environmental education in the Philippines: Local practice in a globalized world.*[1] At the start of this seminar, I introduced myself by identifying three main tensions that have surfaced from my growth and development as an adult educator, community educator, and environmental educator in the Philippines. First, there was the tension between academic and community knowledge. In particular, knowledge about the environment that I learned from the university, and knowledge about the same environment that I learned from conducting education work with local communities. Second was the tension between science and arts, or from being scientific and being creative. I grew up in my mother's chemistry laboratory[2] thinking that I would always be a scientist. But I was regularly interested, and eventually was involved, in writing, directing and performing for a community theater group. The third tension was my being native to Manila, born into a middle-class family, and having to conduct most of my education work with the grassroots groups often in the rural areas in the Philippines.

Initially I thought that I had to choose between these choices in life. However, I now acknowledge that these tensions exist and instead I negotiate between them. Furthermore, I weave these three tensions together, like threads that support and

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[1] Jose Roberto Guevara, "Reflections on community environmental education in the Philippines: Local practice in a globalized world" (Melbourne: Victoria University of Technology, 5 August 1998) [seminar].

[2] Beatrice Quintos Guevara, PhD (Chemistry), Professor Emeritus, University of Santo Tomas, Manila, Philippines.

strengthen each other. It has been through these processes of negotiating and weaving that I know I have learned, and grown as a person, a researcher, an educator, and a Filipino.

I share this brief story to situate the process of researching and writing the thesis as a journey that has paralleled my own personal journey. Through the thesis I have identified three similar tensions in development of the educational practice of the Center for Environmental Concerns – Philippines (CEC). Briefly, these are the tensions between the local and the global, the biophysical and the political, and being participatory and prescriptive. Similarly, negotiating between these three tensions has contributed to the educational practice of CEC, which is the main subject of the thesis. This negotiation is described and examined by the thesis through a process called "progressive contextualization,"[3] one of the major lessons identified from the early educational practice of CEC.

Noel Duhaylungsod, who was then the Executive Director of CEC, wrote in the Preface of *Renewing RENEW: A Restoration Ecology Workshop Manual (RENEW Manual)* that "the education module has to be progressively contextualized."[4] This statement of Duhaylungsod was one of the major lessons identified from the first four years of conducting the Restoration Ecology Workshops (RENEW) in the Philippines. It was my desire to further understand this process of progressive contextualization, in relation to the growth and development of CEC's educational practice that motivated this research.

Furthermore, by studying CEC's local educational practice, I hope to contribute to an understanding of educational responses that address urgent environmental problems. These environmental problems, the thesis argues, cannot be solved without tackling the issues of development and poverty at the local and global levels. The motto

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[3] Andrew Vayda, "Progressive contextualization: Methods for Research in Human Ecology", *Human Ecology: An Interdisciplinary Journal,* vol.11, no.3 (1983), pp. 265-281.

[4] Noel Duhaylungsod, "Preface from the Executive Director" in J. R. Guevara, *Renewing RENEW: A Restoration Ecology Workshop Manual* (Quezon City: CEC, 1995), p. 8.

"Think globally. Act locally."[5] is one extremely successful attempt by environmentalists to establish links between local action and global environmental problems. However, the reality of a rapidly globalizing world has expanded the realm of environmental action. One example is the series of global protest actions against the effects of economic globalization since Seattle in 1999. On the other side of the spectrum, is the proliferation of United Nations (UN) Summits in the 1990s that were convened to identify solutions to global problems of environment and development, population, women and debt. The 1992 UN Summit on Environment and Development more popularly called the Earth Summit ushered in this decade of UN Summits.

Agenda 21, one of the major treaties of the Earth Summit, identified the critical role of education in addressing environment and development issues.

> Education is critical for promoting sustainable development and improving the capacity of the people to address environment and development issues. … Both formal and non-formal educations are indispensable to changing people's attitudes so that they have the capacity to assess and address their sustainable development concerns. [6]

CEC's educational practice, as the thesis describes, is more closely related to non-formal education. It is within the context of these global events that I have decided to situate the examination of CEC's educational practice within a globalizing world. Specifically, the thesis examines the context of economic globalization and the growth of a global civil society, and their impact on the environment and educational practice.

The thesis documents and analyzes the development of CEC's educational practice from 1989-1999 within this framework of progressive contextualization. CEC calls

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[5] This is attributed to David Ross Brower who founded the Friends of the Earth in 1969. He died on 5 November 2000. An obituary attributes this motto to him. (*The Age*, 11 November 2000, p. 8.)

[6] United Nations, "Chapter 36: Promoting Education, Public Awareness And Training", *Agenda 21,* http://www.igc.apc.org/habitat/agenda21/ch-36.html (25 September 2001).

its education work "grassroots environmental education"[7] to emphasize the focus of working with the farmers, fishers, indigenous peoples, women, workers, and the urban poor in the Philippines. However, in the thesis, I have chosen to use the phrase "popular environmental education"[8] to stipulate an educational practice that begins with the environment from the perspective of the people. These are the grassroots that CEC has identified as its primary constituency. The decision to situate the research within the field of popular environmental education provides it with a broader base in the literature to engage in a dialogue with. Some examples of these fields are popular and environmental education, and adult and community environmental education.

It is important to acknowledge that I have been directly involved in the conceptualization, development, administration and conduct of the CEC's grassroots environmental education program. I was the coordinator of the Education and Training Department from 1989 - 1998. It is also essential to acknowledge that the thesis is not my first attempt to reflect and write on CEC's educational experience, which is the purpose for listing the publications that I have written. However, I need to emphasize that the thesis is a new piece of research that has allowed me, not merely to extend, but to rethink my previous thoughts.

> Guevara, J.R., *Renewing RENEW, A Restoration Ecology Workshop Manual* (Quezon City: Center for Environmental Concerns-Philippines, 1995).

> Guevara, J.R., "Learning, Action Research and Environmental Education", *Education for Development Quarterly* (December 1996), pp. 9-11.

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[7] As early as 1988, CEC documents have used the phrases "environmental education of the grassroots" and "grassroots education for people's empowerment." However the first time the phrase "grassroots environmental education" appeared in "1990 Report to the ICCO" (Quezon City: CEC, February 1991), p. 28 [unpublished material].

[8] Popular environmental education as an educational practice is examined and linked to both popular education and environmental education. However, it is not a mere combination of these two fields of practice. An extensive discussion of both fields and a description of the resulting practice are presented in Chapter 2.

Guevara, J.R., " Planting the SEED: Developing a Sectoral Environmental Education Program in the Philippines", *Case Studies in Adult and Popular Environmental Education* (Toronto: International Council of Adult Education - Learning for Environmental Action Program, 1997), pp.30-33.

Guevara, J.R., "Progressive contextualization", *Feedback,* vol. 10, no. 1 (December 1999), pp. 7-13.

Guevara, J.R., "Re-thinking the local-global links in grassroots environmental education", *Convergence* (Special Issue on Environmental Education), vol. 33, no. 3 (2000), pp. 74-85.

The nature of the research requires citing substantial numbers of unpublished documents, mostly from the files of CEC. Hence I decided to use the Oxford system of referencing for the purposes of documentation. Whenever possible I have included the full name of the authors when they are first cited. The thesis uses American (US) English, as this is the convention used in the Philippines and in most of the CEC documents. When there are quotations in the local Filipino languages, whether in *Tagalog*, *Bisaya* or *Hiligaynon* these are first quoted in italics and then translated into English. I have tried to be more aware of my use of language in the thesis, given that gender sensitivity in language and practice continues to be something with which I struggle. However, I have decided not to change (for example see Table 2.1) or call attention (by inserting *sic*) to non-gender neutral language in quotations included in the text. To assist in situating areas mentioned in the thesis, a map of the Philippines including the relevant cities or provinces is provided as Map 1.1. More detailed maps are provided in each chapter whenever needed. The first numeral before the decimal point of each maps table, figure or appendix indicates the chapter in which they are first referred to. Hence Map 6.2 is the second map in chapter 6. I decided to use this convention, instead of sequential numbering, to facilitate finding these maps, tables, figures, or appendix when they are referred to later in the text.

My work as an environmental educator has been greatly influenced by my experiences as a student and as an activist during the Marcos dictatorship in the

Philippines; as a teacher of biology and ecology; and as a facilitator of theatre in education workshops for young people and teachers. Since joining CEC in late 1989, my practice has been deepened by working in partnership with the marginalized sectors in the Philippines, and with other adult and community educators in Asia and the Pacific regions through the Asian and South Pacific Bureau of Adult Education (ASPBAE).

However, of greater importance is the need to acknowledge that the experience of creating, implementing, and renewing CEC's grassroots environmental education curriculum and program has been a collective effort of the CEC staff, and the trainers and educators who worked with us since 1989. They are often referred to as "local partners" or "partner organizations", as this was the working relationship that CEC established with organizations often located outside Manila. Specifically, I wish to mention the educators who were involved in the establishing the People's Faculty of Grassroots Environmental Education and Studies (People's Faculty), as they played a key role in what is described in the thesis as the practice of progressive contextualization.

It is this experience that I now re-examine. While it involves disentangling some previously written materials, more of it involves weaving new threads from the narratives and theories of other writers, researchers and educators together with the dynamic global context. Through this weaving I hope to identify new patterns. Furthermore, the research process has involved reflecting on the experience from a distance. I conducted most of the writing in Melbourne, Australia with annual trips back to the Philippines between 1998-2002. The trips to the Philippines involved the examination of the CEC files, facilitation and participation in the CEC@10 National Evaluation Workshop, and conduct of focus-group discussions and workshops with past and present CEC staff.

The thesis therefore as a research and inquiry process is primarily a case study of the development of an educational practice of an organization, CEC, situated within the context of a globalizing world. However, as the first few paragraphs suggest, it is also a personal inquiry process. It was timely to read Yoland Wadsworth's own reflections on facilitating participatory action research. She argues that knowing

oneself helps to ensure that the "inquiry efforts are well-grounded."[9] She continues by noting that not only does it mark " the boundaries of the extent- and limits –to our facilitation efforts" but also that "our work on the 'outer projects' rests on how far we get with our 'inner project'." Writing this thesis has been a major contribution to my own journey as an educator and, hesitantly as a "transformative intellectual."[10] John Fien described

> … the hallmark of a transformative intellectual is her and his 'inner life', that commitment to ecological and social justice and transformation, which is sustained not only by moral outrage (and we do need our share of that) but also by the habit of critical reflection upon one's views and work.[11]

Through this thesis I hope that the reader gets a glimpse of both the outer and the inner projects that through critical reflection I now share.

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[9] Yoland Wadsworth, "The Mirror, the Magnifying Glass, the Compass and the Map: Facilitating Participatory Action Research" in Peter Reason and Hilary Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice* (London: Sage, 2000), p. 425.

[10] John Fien, *Education for the environment: critical curriculum theorising and environmental education* (Geelong: Deakin University and Griffith University, 1993), p. 98.

[11] Fien, *Education for the environment,* p. 98.

Map 1.1: Map of the Philippines identifying locations
frequently mentioned in the thesis

Chapter 1
Researching local educational practice

In the Philippines most environmental education workshops begin with a discussion of the local environmental situation prior to establishing links with global environmental problems. However, attempts to tackle the global environment are often abstract and theoretical, far removed from the local concerns. This observation is supported by the current literature, which is dominated by a view of global environmental problems and solutions from the perspective of global economic institutions, corporations and environmental groups, mostly from developed countries. Amidst this influential literature, a growing number of voices struggle to construct the global from the perspective of local communities and organizations in developing countries, like the Philippines. This research draws from these voices and seeks to establish the framework of a dialogue between the current literature and the popular environmental education experiences of the Center for Environmental Concerns-Philippines (CEC).

Progressive contextualization has been identified as a framework through which this dialogue can be initiated. As mentioned in the Preface, Duhaylungsod stipulated a usage of the term 'progressive contextualization' in 1995 to describe the development of CEC's educational practice. This dialogue involves the examination of relevant literature in the areas of popular and environmental education, and a globalizing world. For the purposes of the research, the aspects of a globalizing world that is examined are economic globalization and a global civil society, and their implications on the environment and education. Three main educational tensions are identified from the preliminary analysis of CEC's experience and from the review of the literature. These tensions are:

      (i)   the contexts of the local and the global,

      (ii)   the educational content, the biophysical and the political, and

      (iii)   the educational methodology, participatory and prescriptive.

As a case study of ten years of environmental education practice of CEC, the core of the thesis is an analysis of this educational practice using the framework of progressive contextualization. This examination necessarily includes studying the CEC's grassroots environmental education curriculum, and CEC itself as the organization that supported this curriculum development process. It concludes with a proposal for a theory of progressive contextualization that facilitates the grounding of popular environmental education in a globalizing world. This study aims to contribute to developing educational programs that facilitate an understanding of the nature of, and the links between, the local and the global. Furthermore, it attempts to explore the transformation of this understanding to mobilize sustained local action within the context of global environmental thinking and praxis.

Chapter 1 identifies the specific objectives of the thesis, describes the research methodologies conducted, and identifies the limitations of the research. The chapter then provides background information regarding progressive contextualization and previous attempts by the researcher to describe this based on CEC's educational practice. This background information and previous descriptions establish the starting point for the research. Finally, an overview of the succeeding chapters is presented.

1.1   Research aims and objectives

This thesis examines the progressive contextualization of the popular environmental education practice of the Center for Environmental Concerns – Philippines, within the context of a globalizing world.

Specifically, the thesis interrogates the following:

(a)   The progressive contextualization of the popular environmental education practice of CEC.

(b)   The factors, structures, and processes that contributed to the progressive contextualization of CEC's educational practice.

(c)   CEC's construction of, and the links between, the local and the global in its practice of popular environmental education

(d)   The theories and practices of popular and environmental education, and progressive contextualization in a globalizing world.

(e)   The literature on a globalizing world, specifically, economic globalization and a global civil society, and its implications on environment and education work.

(f)   The constructions of, and links between, the local and the global in the areas of popular and environmental education

It then proposes a theory of progressive contextualization that facilitates the grounding of popular environmental education within the spectrum of the local and the global, in a globalizing world.

1.2   Research methodology

The thesis is situated within the research tradition of qualitative educational research that draws from a number of disciplines and employs a combination of research methods. John Keeves[1] characterized educational research as an enterprise that

> … not only involves the construction of a body of knowledge, but it also involves the investigation of the processes by which all knowledge is passed on to successive generations and by which the skills of inquiry are acquired, as well as the processes by which social action is initiated.[2]

All three aspects identified, specifically, local knowledge, learning methods and social action, are explored with varying degrees of emphasis by this research. The thesis contributes to the body of knowledge, specifically in terms of exploring progressive contextualization as a process of learning and social action.

Based on their studies in 1993 on participatory research in environmental education, Ian Robottom and Paul Hart proposed "we need to recognize that the pressing research issues in environmental education are educational rather than environmental in character." [3] However, Stephen Sterling argues,

> … the educational and environmental goals of environmental education – have to be held in balance and seen as necessary to each other. Seen holistically, they illuminate and advance each other synergistically. [4]

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[1] John Keeves, "Introduction: Towards a unified view of educational research" in J.P. Keeves (ed), *Educational research, methodology and measurement: an international handbook,* 2nd edn. (Oxford: Elsevier Science, 1997), pp 1-7.

[2] Keeves, p. 1.

[3] Ian Robottom and Paul Hart, *Research in environmental education: engaging the debate* (Geelong: Deakin University and Griffith University, 1993), p. 65.

[4] Stephen Sterling, "A View from holistic ethics" in John Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), p. 89.

It is this balance that the thesis attempts to achieve in focusing on the educational aspects that respond to the dynamic environmental context within a globalizing world.

1.2.1   Weaving methodologies

The importance of using a combination of methodologies has been acknowledged in the area of educational research.[5] This research utilized a combination of methodologies, primarily the case study methodology, participatory action research, narrative inquiry and grounded theory. The thesis is a case study of ten years of environmental education practice of the Center for Environmental Concerns-Philippines, which employs a participatory action research (PAR) approach in conducting its work with local communities. Hence, it is understandable that PAR is identified as one of the research methodologies utilized in conducting this research. However, given that the thesis is a major scholarly reflection on ten years of practice and has used organizational documents as its main source of data, it has identified narrative inquiry as an additional research methodology. Furthermore, the examination of these documents has been guided by a grounded theory approach that involved interrogating the organizational documents and allowing the themes and patterns to unfold and reveal themselves.

Case study research, according to Sharan Merriam[6] has been defined as a research process, an end product or a unit of study. Robert Yin views it as a process of

> … empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between the phenomenon and context are not clearly evident.[7]

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[5] Andrew Sturman, "Case study methods" in J.P. Keeves (ed), *Educational research, methodology and measurement: an international handbook,* 2nd edn. (Oxford: Elsevier Science, 1997), pp. 61-66.

[6] Sharan B. Merriam, *Qualitative research and case study applications in education* (San Francisco: Jossey-Bass, 1998), p. 27.

[7] Robert K. Yin, *Case study research: design and methods*, 2nd edn. (Thousand Oaks, California: Sage, 1994), p. 13.

Merriam earlier defined it as an end product that is "an intensive, holistic description and analysis of a single instance, phenomenon, or social unit."[8] In a revised and updated edition of her book, Merriam argues that the "single most defining characteristic of case study research lies in delimiting the object of study, the case."[9] A finite group, phenomenon, event or amount of time must bind the case under study. Each definition emphasizes one particular aspect which, seen as a part of the whole, makes up a case study research.

This thesis encompasses all three aspects identified by Merriam as necessary in a case study. It is a research process that investigates and reports on the particular practice of a single organization within a given timeframe. Specifically, it investigates, describes and analyzes ten years of environmental education practice of the CEC-Philippines. It can be characterized as an historical case study as it describes and analyzes a single institution's programs and practices through a specified time frame, in particular CEC's attempt to localize its educational practice. Because the thesis is concerned more with the processes and the factors that influenced the localization of practice, a case study approach is even more suitable because of the emphasis of the study on process and context.

A case study design was also selected because the research was more concerned about "insight, discovery and interpretation rather than hypothesis testing."[10] However, it is not limited to insight and interpretation based on reflection of practice but attempts to "enhance the understanding of educational action,"[11] which according to Sturman makes it an educational case study, as well. Furthermore, this

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[8] Sharan B. Merriam, *Case study research in education: a qualitative approach* (San Francisco: Jossey-Bass, 1988), p. 21.

[9] Merriam, *Qualitative research*, p. 27

[10] Merriam, *Qualitative research,* p.28.

[11] Sturman, p. 63.

understanding of educational action is expected to contribute to "bringing about change" or social action through education.[12]

The close link between the research and action components of the thesis is the key characteristic that makes the research an action research case study. Stephen Kemmis and Mervyn Wilkinson described PAR as a process that is often "inadequately described in terms of a series of mechanical steps"[13] within a spiral of planning, acting, observing, reflecting, re-planning and so forth. Yoland Wadsworth argues that in essence, "all research is action research."[14] However, she emphasizes that in action research, the action component is an explicit goal of the research process. In this case, two kinds of action can be identified the improvement of educational practice and wider social and environmental change. The thesis studies in greater detail the action in relation to educational practice. Wadsworth, in describing PAR, focuses on the aspect of participation. She argues, however, that all research involves participation, specifically, " the participation of people who are more or less party to the inquiry effort."[15] However, she emphasizes that in participatory action research the participants are more consciously involved in both the inquiry and action phases of the research.

Robin McTaggart argues that the "conception of [educational] 'practice' in action research has been too narrowly understood."[16] In education, he continues, the term 'practice' often has a "purely technical meaning"[17] or "something relatively small and

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[12] Sturman, p. 63.

[13] Stephen Kemmis and Mervyn Wilkinson, "Participatory action research and the study of practice" in B. Atweh, S. Kemmis and P. Weeks (eds), *Action research in practice: partnership for social justice in education* (London: Routledge, 1998), p. 21.

[14] Yoland Wadsworth, *Do it yourself social research,* 2nd edn. (St. Leonards, NSW: Allen & Unwin, 1997), p. 36.

[15] Wadsworth, *Do it yourself*, p. 36.

[16] Robin McTaggart, *Action research: a short modern history* (Geelong: Deakin University, 1991), p. 45.

[17] McTaggart, p. 45.

disconnected."[18] However, McTaggart argues, "educational practice is linked with personal and social histories – its transformation with individual responsibility and collective action."[19] Therefore, instead of a narrow definition of practice, this study takes "a broad, historically sensitive, socially and politically aware perspective in action research"[20] in an effort to contribute to the growth and development of CEC's educational practice.

Kemmis and Wilkinson stress PAR's use "to help people investigate and change their social and educational realities by changing some of the practices, which constitute their lived realities."[21] Specifically in the field of education, PAR has been used " as a means for professional development, improving curricula or problem solving in a variety of work situations."[22] As a research method PAR is consistent with the nature of the work of the CEC, which consciously uses the action-reflection process in all aspects of its environmental work and continues to value and increase the involvement of the local community organizations in its programs. Furthermore, Robottom and Hart describe it as a research process that is very similar to the process of progressive contextualization of educational practice being examined.

> There is a need, in participatory research in environmental education, for the methodology to be continually negotiated with participants as the substantive environmental and educational politics change and as joint understandings of the substantive issues and the relationships of the research to these issues become clearer.[23]

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[18] McTaggart, p. 49.

[19] McTaggart, p. 51.

[20] McTaggart, p. 51.

[21] Kemmis and Wilkinson, p. 22.

[22] Kemmis and Wilkinson, p. 22.

[23] Robottom and Hart, *Research in...*, p. 69.

It is therefore an essential aspect of this research to examine progressive contextualization of CEC's grassroots environmental education practice as both educational and research processes.

Narrative inquiry is the third research methodology utilized in this study.

> Narrativists believe that human experience is basically storied experience. ... [Therefore] one of the best ways to study human beings is to come to grips with the storied quality of human experience, to record stories of educational experience, and to write still other interpretative stories of educational experience.[24]

The aim of most research that utilizes narrative inquiry, as a methodology is to "study the experience through stories."[25] This research, being a historical case study of an organization, studies and analyzes the narratives and stories of the CEC and the individuals who were and are involved in the development and implementation of its educational practice. These narratives and stories are equivalent to what would commonly be called data, but in the realm of narrative inquiry these are generally referred to as "field notes."[26] It worked to the advantage of this research that CEC, like many non-governmental organizations (NGOs) in the Philippines, has been meticulous in documenting both processes and outcomes. Such a practice was developed due to the need of regularly reporting to external funding bodies. The CEC has maintained in the past ten years an extensive archive of documents, which was made available to the researcher.

While for some NGOs annual reports have become the final repositories of their experiences, CEC has regularly reflected on and theorized its experiences. Some of

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[24] F. Michael Connelly and Jean Clandinin, "Narrative inquiry" in J.P. Keeves (ed), *Educational research, methodology and measurement: an international handbook,* 2nd edn. (Oxford: Elsevier Science, 1997), pp. 81-85.

[25] Merriam, *Qualitative research*, p. 157

[26] Connelly and Clandinin, p. 83.

these papers have been published. The relevant papers, both published and unpublished, that have been cited in the thesis are included as a separate list in the bibliography. Most of these reflection and theory-building processes have been internal discussions involving CEC and its local partner organizations. However, on a number of occasions, individuals from the university, government agencies, people's organizations and other NGOs have been invited to participate in the discussions. Aside from these, there have been few opportunities to further extend this dialogue between the theory borne from CEC's practice and the theory documented in the literature and from other people's practices. The use of narrative inquiry helps provide equal importance to the wide range of existing field texts and notes; from the everyday local stories of the workshop participants, evaluations of the local educators, workshop documents and even academic articles on popular environmental education.

The final approach that informed the research methodology is grounded theory. The research did not begin "with a preconceived theory in mind" but rather the research involved allowing "the theory to emerge from the data."[27] Because "emergence is the foundation of the approach to theory building" in grounded theory, neither was there "a guiding theoretical framework" applied to study CEC's educational practice.[28] Progressive contextualization is strictly not a preconceived theory or a guiding theoretical framework but rather was identified as the starting point of this particular stage of the research. In fact progressive contextualization was identified from one of the main field texts, the *RENEW Manual*, examined as part of this research. Situating this within the language of grounded theory, it is the "overarching explanatory scheme"[29] that surfaced from the previous conceptual ordering of the experience under study.

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[27] Anselm Strauss and Juliet Corbin, *Basics of qualitative research: Techniques and procedures for developing grounded theory* (California: SAGE, 1998), p. 12.

[28] Strauss and Corbin, p. 34.

[29] Strauss and Corbin, p. 25.

While the thesis identifies progressive contextualization as the starting point of this particular research, it is important to acknowledge that prior description and conceptual ordering, which Strauss and Corbin identified as essential components of theorizing, have been conducted before the start of this current research. Duhaylungsod[30] identified progressive contextualization as one of the lessons learned from CEC's experience in developing and conducting the Restoration Ecology Workshops (RENEW). This research builds in these previous processes, the outcomes of which were identified at the beginning of this chapter, specifically the two descriptions of progressive contextualization proposed in 1996 and 1997.

The current research revisits and builds on these previous attempts to describe and conduct a conceptual ordering of the field texts, within the overarching explanatory scheme of progressive contextualization. These previous attempts have in effect, become a key part of the process of developing a theory of progressive contextualization, which is proposed as one of the outcomes of this research.

1.2.2   Gathering and selecting field experiences and texts

Narrative research involves three distinctive processes: the field experience, the field texts, and the research text.[31] As mentioned earlier, the field experience covered by the study is the first decade of operation of the Center for Environmental Concerns - Philippines, from 1989 -1999. Popular environmental education, guided by a participatory action research framework continues to be a core process practiced by the Center.

The field text consisted of the archives of the CEC, which included:

- minutes of meetings,
- staff reflection documents,
- workshop process documents,

[30] Duhaylungsod, "Preface…", p. 8.

[31] Connelly and Clandinin, p. 83-85.

- semi-annual and annual reports,

- project proposals, and

- a wide range of publications.

Merriam argues that the advantage of using documentary data for qualitative case studies is that,

> … they exist independent of a research agenda, they are non-reactive, that is, unaffected by the research process. They are a product of the context in which they were produced and therefore grounded in the real world.[32]

In addition to the archives, the most recent source of data has been documents gathered and produced during a four-month comprehensive review process, called CEC@10, conducted from June - September 1999. The processes conducted as part of this review are identified in Table 1.1. The researcher was involved in the activities conducted in August and September 1999, which involved analyzing the trends from the raw data and facilitating specific sessions during the national workshop-conference.

Table 1.1: Processes conducted as part of the CEC@10 review

Date	Activity	Description
3 – 6 July 1999	CEC Internal Review	Past and present CEC staff members evaluated CEC's shifting orientation and programs.
June – August	Regional Reflections	This involved gathering feedback from local

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[32] Merriam, *Qualitative research*, p. 126.

1999		partner organizations (as described in Chapter 5) through a written survey, one-on-one interviews and/or focus group discussions.
August 1999	On-going trend analysis	A committee was established within CEC to analyze and summarize the outcomes of both the Internal Review and the Regional Reflections.
6-10 September 1999	National Workshop - Conference	Presentation and validation of findings, and the identification of future directions together with local, regional and national partner organizations.

In participatory action research,

> … the criterion of success is not whether the participants have followed the steps faithfully, but whether they have a strong and authentic sense of development and evolution in their practice, their understandings of their practices, and the situations in which they practice."[33]

They emphasize the collaborative nature of the action research process, but acknowledge that it is "frequently a solitary process of systematic self-reflection."[34] Most of the information gathered for this research has been generated from a collaborative process involving the researcher with either the CEC staff and/or the CEC local partners, specifically the educators and facilitators involved in the RENEW workshops and the People's Faculty. However, systematic self-reflection that has gone into this thesis was conducted most of the time as a solitary process. This is similar to what Wadsworth called grounding in a research process,

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[33] Kemmis and Wilkinson, p. 21.

[34] Kemmis and Wilkinson, p. 22.

… the time for inquiry to yield and take in, [and] there are also times throughout the cycles of inquiry when there is a need actively to go forward and shape: to focus on the essential nub of the inquiry. [35]

These two processes of grounding and moving forward aptly describe the process involved in reflecting and writing this thesis.

1.2.3   Writing the narrative – the research text

The transformation of the field experience and the field text, the first two distinctive processes involved in narrative research, into the research text or the narrative, was guided by "the underlying narrative threads and themes that constitute the driving force of the inquiry."[36] In this instance, the narrative was informed by the research problem, which was the progressive contextualization of educational practice in a globalizing world. This involved selecting and describing the relevant experiences that best illustrate the development of CEC's educational practice and the current organizational and socio-political context. In qualitative research, the

> … researcher is the primary instrument for data collection and analysis. This factor is usually perceived as an advantage, because humans are both responsive and adaptive. At the same time it carries the responsibility of assessing and reporting researcher biases that might have an impact on the study.[37]

As the researcher, I therefore take full responsibility for the selection of the experiences described in the narrative sections of the thesis.

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[35] Yoland Wadsworth, "The Mirror, the Magnifying Glass, the Compass and the Map: Facilitating Participatory Action Research" in Peter Reason and Hilary Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice* (London: Sage, 2000), p. 427.

[36] Connelly and Clandinin, p. 84.

[37] Merriam, *Qualitative research*, p. 131.

This detailed description of the concrete real-life phenomenon, the narrative, gives case studies its strength. However, Egon Guba and Yvonna Lincoln[38] emphasize that while case studies may read like whole accounts they are always merely "but a part - a slice of life" and therefore should be read as such. Furthermore, it is through the reader that case study knowledge is more developed. The readers' interpretation brings to a case study their own experience, understanding and context, which in turn leads to new generalizations - because new data for the case are added to old data. This is what Robert Stake[39] considers to be "part of the knowledge produced by case studies."

1.2.4   Analyzing the narrative - guided but not limited by theory

The description of an educational setting is considered to be a minimum achievement in conducting participatory educational research.[40] It was after writing an initial description of the educational setting, ten years of CEC's educational practice, that the previously reviewed literature was revisited and updated based on the themes that were surfacing from the narrative.

> There are no formulae or recipes for the 'best' way to analyze the stories we elicit and collect. Indeed, one of the strengths of thinking about our data as narrative is that this opens up the possibilities for a variety of analytic strategies.[41]

Analysis of the narrative involves, in this case, developing a dialogue between that narrative and the current research texts from the disciplines of environmental

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[38] Egon Guba and Yvonna Lincoln, *Effective Evaluation* (San Francisco: Jossey-Bass, 1981), p. 377 as cited by Merriam, *Qualitative research*, p. 42.

[39] Robert Stake, "Case study methodology: an epistemological advocacy" in W. W. Welsh (ed), *Case study methodology in educational evaluation,* (Minneapolis: Minnesota Evaluation Center, 1981), p. 36 as cited by Merriam, *Qualitative research*, p. 32.

[40] Robottom and Hart, *Research in...*, p.66.

[41] Amanda Coffey and Paul Atkinson, *Making sense of qualitative data* (Thousand Oaks, California: Sage, 1996), p.80.

education, popular education, and environmental and globalization studies. Through this dialogue, which can be described as multiple narratives in discussion, the research draws insights to address the main aim of the thesis. The aim being, to develop a theory of progressive contextualization based on the popular environmental education practice of CEC within a globalizing world.

The challenge in conducting inter-disciplinary research is that it cannot be based exclusively within one theoretical framework. This research weaves together a number of theoretical orientations. However, the emphasis is in using these theories as a guide in analyzing the field experience, the field text, and the current literature, in the light of its implications for popular environmental education. This approach is consistent with the view that educational research must be "prospective rather than retrospective."[42] Keeves expounds on this approach by stating that the emphasis of educational research must be the outcomes rather than the foundations, hence the choice of problems is based on the potential contribution of the findings rather than the theoretical firmness of the foundations.[43] Thus the study is informed by a number of theories and grounded in practice, which is consistent with the previously identified influence of a grounded theory approach applied in the conduct of this research.

Theoretical guides were identified to assist in developing a framework for examining CEC's grassroots environmental education practice as popular environmental education. This mainly involved a survey of popular and environmental education, specifically within the context of the Philippines. In addition, relevant literature in the intersecting educational practices that are described as adult, community, environmental, and popular were also reviewed. In addition, educational practices similar to the practice of progressive contextualization were also examined.

The theoretical guides that informed the concept of a globalizing world included the recent literature on economic globalization, and a global civil society. The review

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[42] Keeves, p. 6.

[43] Keeves, p.6.

focused on impact of these globalizing forces on the environment and on education work. From the review of these theoretical guides and from the preliminary analysis of the field experience, three educational themes were identified. These themes relate to the tensions between the context of the local and the global, the educational content of the biophysical and the political, and the methodology of being participatory and prescriptive. These themes were used to further analyze CEC's grassroots environmental education practice and its practice of progressive contextualization in a globalizing world.

1.3   Boundaries and limitations

The organizational case study of ten years CEC's popular environmental education practice provides the boundaries that defines the scope and limitations of the thesis. In addition, the particular streams within the theoretical guides identified: popular and environmental education, environmental and globalization studies, further situates the research. Regarding popular and environmental education, the thesis identifies the curriculum outcomes (e.g. the workshop designs and educational materials developed) and the social action outcomes (e.g. community organizing and action). However, the emphasis on progressive contextualization, places a focus on the curriculum outcomes. In the areas of environmental and globalization studies, the thesis identifies two specific manifestations of a globalizing world, namely, economic globalization, and a global civil society. These two areas are used to frame the examination of their respective implications on the construction of popular environmental education, specifically in terms of linking the local and the global. Finally, the thesis is written from the point-of-view of a reflective practitioner. I have been involved in the conceptualization, development, implementation, and evaluation of CEC's educational practice. Through this thesis, I hope to contribute to further theorizing about this educational practice.

1.4   Progressive contextualization: source and early descriptions

To establish the starting point of the research it is essential to describe the source and the previous descriptions of progressive contextualization. The first mention of progressive contextualization in the context of CEC's educational practice can be traced back to 1991.[44] Duhaylungsod used progressive contextualization to describe CEC's early experience in developing its grassroots environmental education curriculum, during an Asia-Pacific regional environmental education consultation in Quezon City, Philippines. However, it was not until 1995, when the phrase was published in the Preface of the *RENEW Manual* that it became part of the language of CEC.

Since then, it was assumed that there was a shared understanding of this phrase within the CEC staff. A focus group discussion[45] with the CEC staff in October 1999, conducted as part of the preliminary fieldwork revealed a different picture. There was some agreement on the understanding that contextualization meant the adjustment of the education module to the wider socio-economic, political and cultural context at the local level. However, the focus group discussion indicated that there were two different views on the meaning of progressive. The first is a description of an on-going process, and the second is a description of a critical and left-leaning political and ideological stance. This difference is significant. It is an example of the educational tensions that surface in the examination of CEC's educational practice.

Duhaylungsod recalls that he first heard the term progressive contextualization in September 1982 at a seminar delivered by Andrew Vayda.[46] The seminar was hosted by the then Program for Environmental Science and Management (now the School of Environmental Science and Management) at the University of the Philippines at Los

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[44] "Notes from the Asia-Pacific regional environmental education consultation" (Quezon City, September 1991) [author's written notes].

[45] "Notes from CEC focus-group discussion" (Quezon City, October 1999) [author's notes].

[46] Andrew Vayda is currently Professor of Anthropology and Ecology with the Department of Human Ecology, Cook College, Rutgers University, New Jersey.

Banos (UPLB). In a paper published after this seminar, Vayda[47] described progressive contextualization as a methodology in human ecology research that

> … involves focusing on significant human activities or people-environment interactions and then explaining these interactions by placing them within progressively wider or denser contexts.[48]

It is based on a "holistic premise that adequate understanding of problems can be gained only if they are seen as part of a complex of interacting causes and effects."[49] As a research process, Vayda and his team used progressive contextualization in their attempt to understand the forces contributing to the deforestation of East Kalimantan in the island of Borneo in Indonesia as part of the Man and the Biosphere program of UNESCO.[50] In describing their work Vayda mentioned how they began by focusing on activities performed by specific people in specific places at specific times, like timber cutting. They then tried to establish the cause and effects of these activities beyond the specific people, place and time.

Vayda emphasized that he was making no claims to the novelty of this process. But he was advocating progressive contextualization more as

> … a plea to return from more strict academic (and academically fashionable) methods, including some I myself have used, to commonsense, practical ways of seeing what is happening in the world."[51]

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[47] Andrew Vayda, "Progressive contextualization: methods for research in human ecology", *Human Ecology: An Interdisciplinary Journal*, vol.11, no.3 (1983), pp. 265-281.

[48] Vayda, p. 265.

[49] Vayda, p. 266.

[50] The Man and the Biosphere (MAB) is an intergovernmental and global program of UNESCO. It develops the basis, within the natural and the social sciences, for the sustainable use and conservation of biological diversity, and for the improvement of the relationship between people and their environment globally. The MAB Programme encourages interdisciplinary research, demonstration and training in natural resource management. From "The Man and the Biosphere (MAB)", http://www.unesco.org/mab/about.htm (25 September 2001).

[51] Vayda, p. 266.

Vayda's 1983 article continues to be widely used as a basic text for undergraduate and graduate courses in anthropological research.[52] Progressive contextualization was also identified by Robert Cramb[53] in a chapter on *Agricultural Land Degradation in the Philippines Uplands: An Overview*. Cramb cited the work of Piers Blaikie[54], and Piers Blaikie and Harold Brookfield[55] who in turn cited Vayda's 1983 article in the context of "local-level manifestations of land degradation within a wider political economy context." [56]

It is important to note that Duhaylungsod was the first to link CEC's educational practice to progressive contextualization. He used the phrase during the 1991 regional consultation mentioned earlier to describe CEC's educational practice. He later identified it in the Preface of the *RENEW Manual* as a one of the lesson learned by CEC in developing its grassroots environmental education curriculum. Moreover, Duhaylungsod, as the thesis illustrates, continues to play a major role in CEC's intellectual development. His role as CEC's first Executive Director placed him in a key position to influence the organizational policies and the environmental practice and theory of the CEC. He initiated the practice of action research, as exhibited by the regular reflection and evaluation processes conducted by the CEC staff. He encouraged each staff member to document, write and publish the results of the reflection and evaluation processes, which he himself did (see Bibliography of works attributed to Duhaylungsod.) His influence on CEC's organizational and educational practice is further acknowledged in the thesis.

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[52] Internet search was conducted on 24 February 2000.

[53] Robert Cramb, "Agricultural degradation in the Philippines uplands: An overview" in R. Cramb (ed), *Soil conservation technologies for small farming systems in the Philippine upland: a socioeconomic evaluation* (Canberra: ACIAR, 2000), pp. 23-37.

[54] Piers Blaikie, *The political economy of soil conservation in developing countries* (New York: Longman, 1985) and Piers Blaikie, "Understanding environmental issues" in Stephen Morse and Michael Stocking (eds), *People and environment* (London: UCL Press, 1995), pp. 1-30.

[55] Piers Blaikie and Harold Brookfield, *Land degradation and society* (London: Metheum, 1987).

[56] Cramb, p. 24.

Previous attempts by the researcher to describe progressive contextualization, from CEC's experience, are presented as a starting point of this study. Two descriptions can be found in draft documents written in 1996 and 1997. A chapter submitted for publication in 1996 described progressive contextualization as

> … the on-going process of adjusting learning objectives and training modules, revising frameworks and approaches, and reflecting on practice and experience in response to the particular context of the learners.[57]

Later it was again described in a 1997 draft CEC publication.

> Progressive connotes an action that is on-going or dynamic and that becomes better after each action. Together, progressive contextualization indicates a positive dynamism of the education module in terms of changing with the times or the broader context.[58]

Note that both descriptions identify the on-going nature of the process of adjusting the education module, although the earlier statement includes revising frameworks and the process of reflecting on practice. Another difference is that the 1996 description focuses more on the context of the learner, while the 1997 description considers the broader context.

The 1997 draft publication further identifies features of this practice, specifically the contexts that were considered and the aspects of the education module that were influenced by this practice.

> Progressive contextualization is about a dynamic movement for the better, in terms of, designing educational activities that are influenced by time, space,

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[57] Jose Roberto Guevara, "Facilitating community environmental adult education in the Philippines: Transformation in Action" (1996), p.4 [unpublished manuscript].

[58] Noel Duhaylungsod and J. Roberto Guevara, "Purposive Education: An Examination of Context, Content and Process of Grassroots Environmental Education Experience in the Philippines" (Quezon City: CEC, December 1997), Chapter 3, p.6 [unpublished manuscript].

our organizational identity and by our learners. This can be translated into actually influencing the educational content through a local problem as entry point, the depth of analysis to be conducted and the nature of the action proposed.[59]

By citing these previous descriptions, prior thinking and the elements that have been identified in terms of progressive contextualization are acknowledged and documented. This helps to highlight the outcomes of the current research on progressive contextualization, which initially is the expansion of the study from a focus on the education module to more include local educational practice in a globalizing world.

1.5   Overview of chapters

The preface and chapter 1 identify the context, objectives, methodology, and limitations of the research. More importantly, chapter 1 establishes the starting point of the research by identifying previous descriptions of progressive contextualization. The narrative nature of the thesis and the objective of establishing a dialogue between the literature and the practice, make it difficult to isolate the literature review, the data and the analysis. Hence most of chapters 2-10 incorporate some aspects of the literature, the data and the analysis.

Chapters 2 - 4 examine the theoretical guides of the research towards developing a framework for examining and reporting the experience. Chapter 2 examines the theories that informed the development of CEC's grassroots environmental education practice, and consequently the conduct of this research. These include the theory and practice of popular education, specifically in the Philippines, and the different streams of environmental education. The streams examined include socially critical environmental education, adult environmental education, and environmental popular education. The Context-Content-Method framework is identified as one of the

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[59] Duhaylungsod and Guevara, Chapter 3, p. 9.

frameworks used to examine CEC's educational practice as popular environmental education.

Chapter 3 reviews the theoretical guides that informed the development of the major context of the thesis, a globalizing world. Two aspects of a globalizing world are examined, economic globalization, and a global civil society, and their impact on the environment and education work. The impacts of economic globalization programs, such as trade liberalization on the Philippine environment are described, together with the contribution of these impacts to the growth of a global civil society, such as environmental groups like CEC. Similarly, the educational debates that have resulted from the growing influence of economic globalization on lifelong learning and adult education policies are examined. From these discussions, educational tensions of within a globalizing context are identified, namely tensions between the local and global, the biophysical and the political, and the participatory and the prescriptive.

Chapter 4 weaves the theoretical guides with the educational practice of progressive contextualization. It describes educational practices similar to progressive contextualization in adult, popular and environmental education. The Context-Context-Method framework and the educational tensions identified from the context of a globalizing world are combined into a framework that informs the examination of CEC's practice of popular environmental education. This integrated framework identifies the following educational tensions between the context of the local and the global, the educational content of the biophysical and the political, and the methodology of being participatory and prescriptive.

Chapters 5 and 6 provide an organizational history of CEC within the context of the Philippine social movement and the growth of environment and development work. Chapter 5 analyzes the growth and development of CEC within a dynamic political period in the Philippines, from 1988-1999. The chapter uses the changes in CEC's Vision, Mission and Goals statements to identify the major periods in its organizational development. The chapter argues that CEC's decision to define itself as a non-governmental development organization (NGDO), instead of a support organization and service center, was a key element in the progressive

contextualization of its education practice. As an NGDO, CEC was an intermediary organization that had to negotiate between a number of tensions at different levels and times.

Chapter 6 describes the context of environment and development work during the period under study. It specifically examines the influence of this context in the development of CEC's practice of environmental research and education. This context includes the ideological rift within the progressive people's movement, the shifting nature of environment and development work, and the decision of CEC to adopt a grassroots environmental education approach in conducting its environmental work. All of these events contributed to the development of CEC's practice of popular environmental education.

Chapters 7- 10 describe and examine the progressive contextualization of CEC's educational practice through the resulting curriculum. Chapter 7 begins with the examination of the development of RENEW, CEC's basic awareness to environmental action workshop. The chapter identifies the contextual factors that facilitated progressive contextualization of RENEW. The contextual factors are the different aspects of time (duration, change through time and urgency), varying contexts of space (venue, biophysical environment, and the socioeconomic, cultural and political environments) and the specific characteristics of the learners (language and literacy, women and gender, and level of awareness and local organizing). The progressive contextualization of RENEW has been called renewing RENEW, which the chapter suggests was CEC's initial experience of progressive contextualization, more particularly a process of localization

Chapter 8 identifies the organizational and educational processes that facilitated the localization of the RENEW module. Two organizational processes that contributed to the progressive contextualization of the RENEW module are identified and described. These processes are action research approach and participatory approach for people's empowerment as demonstrated by CEC's educational strategy of training the trainers. In addition, five educational processes that contributed to renewing RENEW are described. These five educational processes are the creative

and participatory approach, the expectations check module, the local situation module, the vision-setting module and the daily feedback. The chapter identifies that progressive contextualization was not just a process that shaped the education module but was a complimentary process that shaped CEC as well.

Chapter 9 utilizes examples from CEC's grassroots environmental education curriculum to illustrate the different results of the practice of progressive contextualization. It identifies specific workshop designs as curricular outcomes that were influenced by the contextualization factors and processes identified in the previous chapter. These workshop designs include sector-specific modules, skills-based workshops, a research on local knowledge, and issue-specific and area-based advocacy modules. It identifies the trends in the progressive contextualization of CEC's grassroots environmental education curriculum. The chapter further provides evidence to support the observation that progressive contextualization was primarily focused on localization.

Chapter 10 argues that aside from localization, CEC also attempted to deal with the contexts of the national and global environments. It begins with a presentation and an analysis of CEC organizational statements that acknowledge and support the need to address the global within CEC's work. It presents examples that support the argument that the analysis and teaching of the national context was essentially contextualized from the local. However, the same could not be said for the global context. The chapter illustrates how CEC's approach to the teaching and analysis of the global was limited to the dominant narrow construction of global environmental problems and solutions.

Chapters 11 and 12 summarize and synthesize the research. Chapter 11 reviews the research aims, methodologies and the theoretical guides as a precursor to synthesizing the different findings of the thesis. This chapter focuses on the argument that the progressive contextualization of CEC's popular environmental education practice was primarily a process of localization. It synthesizes the factors, trends and processes that contributed to localization. It then discusses the organizational structures that facilitated this process, namely CEC itself, the People's Faculty, and

the wider progressive people's movement in the Philippines. It argues that the process of localization was a complimentary process, it shaped CEC's educational practice but also CEC as an organization. Finally it examines the process of localization in a globalizing context, specifically CEC's attempts at linking the local to the global and concludes that the lessons from the process of localization were not applied in dealing with the global.

In Chapter 12, the research findings are used to evaluate Andrew Vayda's description of progressive contextualization as it applies to an educational context. Furthermore, the findings are used to re-examine the previous descriptions of progressive contextualization, which were identified at the start of the thesis. Finally, the thesis summarizes and synthesizes the research findings using the frameworks of progressive contextualization and the Context-Content-Method framework. It then makes recommendations towards developing a theory of progressive contextualization of popular environmental education in a globalizing world.

A postscript has been added to identify reflections on the research process and its contribution to my transformation and growth as a researcher, writer and educator.

Chapter 2

Popular and environmental education:

Descriptions and theoretical guides

Context shapes practice. This statement is a concise summary of what this study attempts to understand, in particular as it applies to the development of the educational practice of CEC. The methodologies that have informed the research - such as the case study approach, participatory action research, narrative inquiry and grounded theory - emphasize an inductive approach to the development of theory. Despite the emphasis on an inductive approach, it is essential to acknowledge, as Michael Booth[1] suggests, that there are always theoretical ideas that have in some way informed any empirical work. In this instance the theoretical guides that have informed both the educational practice under study, and the research itself, are closely related to the areas of popular and environmental education, (examined in this chapter) and the context of a globalizing world (examined in the next chapter). These are introduced to provide preliminary theoretical grounding and to assist in describing and defining some of the words and concepts that are used in the thesis.

A further analysis of the influence of these theoretical guides to CEC's educational practice and to the research itself is discussed within the research narrative and the analysis section of the thesis. Included in these two chapters are references to and analyses of the works of authors who have contributed to the development of CEC's practice, plus a selection of more recent authors in the literature from the disciplines identified. Whenever possible the works of Filipinos, relating to the Philippine context are identified and described to provide the additional grounding needed for the local educational practice being studied. Both chapters 2 and 3 conclude with the identification of key themes that are explored in the thesis, which have surfaced from the review of the relevant literature.

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[1] Michael Booth, *Rethinking Social Development: Theory Research and Practice* (Essex: Longman, 1994), p. 308.

This chapter argues in support of the decision to situate the research within the practice of popular environmental education. This decision is based on the recognition that CEC's education work emphasizes the need to understand and respond to environment problems from the perspective of the grassroots. This rationale is further studied through the examination of the descriptions of CEC's grassroots environmental education in the light of popular education, environmental education and the growing field of popular environmental education.

2.1   Popular education

This section begins with a description of CEC's practice of grassroots environmental education and its similarities to popular education. It then traces the development of the practice of popular education within the social movement in the Philippines to identify historical tensions that continue to be experienced by CEC in the development of its own practice.

2.1.1   Grassroots environmental education as popular education

There are five identifiable characteristics to support the argument for situating the CEC's grassroots environmental education practice within the realm of popular education. These characteristics are:

      (i)   It is an alternative form of education,

      (ii)   It works with people within the poorer sectors,

      (iii)   It focuses on people's empowerment and action,

      (iv)   It is within the context of a wider movement, and

      (v)   It is liberative.

The CEC Concept Paper proposed the formation of CEC identified both a task and the primary constituency of CEC when it stated that "one of CEC's major tasks will be geared towards promoting environmental education in the grassroots." [2]   The

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[2] "Draft Concept Paper" (QC: CEC, October 1988), p.5 [unpublished document].

focus on grassroots is an indication of CEC's positive discrimination in favor of the marginalized sectors in the Philippines, which it initially defined as "farming and fishing communities."[3] This definition of grassroots was expanded in 1991 to encompass workers, farmers, fishers, urban poor, women and indigenous peoples as part of the Sectoral Environmental Education Program (SEED Program).[4] These definitions are not far from how Raul Aramendy describes the grassroots they work with in Argentina. He describes them as the "marginalized, exploited, oppressed or excluded sections of the population, … which, to use a more literary term, we might generically call 'the poor'."[5]

The 1990 CEC brochure[6] further elaborated on these to identify CEC's mission as "grassroots education for people's empowerment." In 1991, people's empowerment was defined as "popular participation in development processes, which would guarantee their own control of their country's resources."[7] The complete phrase appears as one of the recommendations of the 1990 Report to ICCO, the Dutch Interchurch Organization for Development Cooperation, the funding agency that provided the start-up funds for CEC. It states that CEC should "continue to build the pool of trainer/facilitators for grassroots environmental education for the basic sectors."[8] Subsequent documents have adopted this phrase with CEC's education program in 1992 being called PROGREEN an acronym for Program for Grassroots Environmental Education.[9]

In 1994, CEC's educational practice was further described as a pedagogy that positions itself "against the types of educational processes, which are imposed,

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[3] "Draft Concept Paper", p. 7.

[4] "CEC Narrative Report: 1989-1991" (QC: CEC, 1992), p. 7 [unpublished document].

[5] Raul Aramendy, "Learning to Fly", *Adult Education and Development*, no. 53 (1999), p. 278.

[6] "CEC Brochure" (QC: CEC, 1990), n.p. [photocopied material].

[7] MASAI, "An Evaluative Report of the CEC-Philippines" (QC: MASAI, 1991), p.6 [unpublished document].

[8] "ICCO Report" (QC: CEC, 1990), p. 28 [unpublished document].

[9] Noel Duhaylungsod, "Executive Director's mid-year report to the Board of Directors 1992" (QC: CEC, 1992), p. 3 [unpublished document].

prescribed and banked. ... [And is] aimed to sustain effective environmental action(s)."[10] Action that is situated "within the framework for the people's movement for fundamental social change. Hence, grassroots environmental education must also find its niche/roots within the said movement."[11] Furthermore, it was described "as a liberatory project. It must liberate people from the clutches of dominant structures of environmental destruction, exploitation and oppression."[12]

These characteristics of an alternative education that focuses on the basic sectors, empowerment, and action within a wider social movement that is liberatory, are all present in the description of popular education by Maria Theresa Tungpalan.[13] She described popular education in the Philippine context as education that "expounds on people's empowerment, critical thinking and collective action among the poor sectors of society."[14] She explains that it is popular because "it aims to reach the majority, the less privileged and poor sectors of society."[15] She adds that, in addition to being "partisan to the interest of the poor", popular education "is situated with the people's movement, ... [and] functions within the context of liberating education."[16]

Tungpalan acknowledges that the practice of popular education in the Philippines was influenced by experiences in Latin America, more specifically by Paulo Freire's literacy programs with peasants in Brazil.[17] Freire describes his pedagogy as one that

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[10] "People's Faculty of grassroots environmental education and studies proposal" (QC: CEC, 1994), p. 3 [unpublished document].

[11] "People's Faculty of Grassroots Environmental Education and Studies: Summary Document of the First Consultative Meeting (November 1994) and People's Faculty Launching (November 1995)" (QC: CEC, November 1996), p. 2. [unpublished document]

[12] "People's Faculty... proposal", p.1.

[13] Maria Theresa Tungpalan, "Popular Education: An Alternative Educational Approach", *Lambatlaya,* Occasional Paper No.1 (June 1991), pp.1-40.

[14] Tungpalan, p.2.

[15] Tungpalan, pp. 5-6.

[16] Tungpalan, pp. 13-14.

[17] Tungpalan, p. 6.

"makes oppression and its causes the objects of reflection by the oppressed, and from that reflection will come their necessary engagement in the struggle for liberation."[18]

Freire's practice has inspired a number of other educators to adapt similar principles to their own education work.[19] Two of the publications that resulted from these adaptations were influential in the early development of CEC's educational practice, namely, *Training for Transformation*[20] and *Educating for a Change*.[21] Both publications were in CEC's early collection of books and were influential in providing examples of different educational methods that demonstrated the characteristics of popular education described earlier.

These same characteristics are present in more recent descriptions of popular education practice from the context of other Latin American countries. John Hammond from his work in El Salvador describes, "*educacion popular* [as] education of, by, and for the people – organized by people in their own community, outside the control of the official education system."[22] Liam Kane, in the context of work with the Landless People's Movement in Brazil, described how "popular education played a significant role in grassroots struggles for change."[23]

Similarly, Rick Arnold, Deborah Barndt and Bev Burke[24], based on their experiences in Canada and Central America defined it as,

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[18] Paulo Freire *Pedagogy of the Oppressed* (New York: The Continuum Publishing Corporation, 1993), p. 30.

[19] Liam Kane, "Popular education and the landless people's movement in Brazil (MST)", *Studies in the Education of Adults,* vol. 32, no. 1(April 2000), p. 36.

[20] Anne Hope and Sally Timmel, *Training for Transformation: A Handbook for Adult Educators* (Harare, Zimbabwe: Mambo Press, 1984) Note: an updated edition was published in 1996.

[21] Rick Arnold and others, *Educating for a Change* (Toronto: Between the Lines and Doris Marshall Institute for Education and Action, 1991).

[22] John Hammond, "Popular Education as community organizing in El Salvador", *Latin American Perspectives*, issue 107, vol. 26, no. 4 (July 1999), p. 69.

[23] Kane, p. 36.

[24] Rick Arnold, Deborah Barndt and Bev Burke, *A new weave: popular education in Canada and Central America* (Ontario: CUSO and Ontario Institute for Studies in Education, 1985).

… education that serves the interest of popular classes (exploited sectors of society), that involves them in critically analyzing their social situation and in organizing to act collectively to change the oppressive conditions of their lives."[25]

In an international context, Judith Marshall defined popular education as,

> … a pedagogy that takes as its starting point a commitment to the grassroots sectors and the need for an approach to education that works effectively for the needs and aspirations of the poor and the marginal. It supports both the organizational needs of grassroots movements and their search for identity, insisting on the right to name themselves, and define their own forms of struggle, rather than accepting the categorization and space for action defined for them from above.[26]

Robert Schapiro [27] argues that despite the different definitions of popular education, the fundamental philosophy, which includes "notions of empowerment, liberation, self-determination and political action leading to structural social change," has remained the same.

These similar characteristics between grassroots environmental education and popular education were a major influence in the decision to situate the thesis within the context of popular education. There are other educational practices that this study could be situated in, such as adult education that has often been narrowly focused in the "English-speaking world … on individual learners, educational technique and course provision."[28] Or it could be studied as non-formal education, which is

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[25] Arnold, Brandt and Burke, p.5.

[26] Judith Marshall, *Training for Empowerment: a kit of materials for popular literacy workers based on the exchange among educators from Mozambique, Nicaragua and Brazil,* (Toronto: Doris Marshall Institute, International Council of Adult Education, and National Directorate of Adult Education, Mozambique, 1990).

[27] Roberto Schapiro, "Liberatory pedagogy and the development paradox", *Convergence*, vol. 28, no. 2 (1995), p. 30.

[28] Griff Foley, *Learning in Social Action: A contribution to understanding informal education* (London: Zed Books, 1999), p. 2.

"education that serves specific groups in specific situations outside the formal system."[29] Patricia Ann Wagner[30], writing from a Philippines context, distinguishes popular education from adult, non-formal or development education in that popular education has closer links with the people's movement for a democratic and sovereign nation. She explains that "it works for the empowerment of the majority, and it uses a democratic and dialogical pedagogy."[31]

Tungpalan's study identified both adult and non-formal education as major influences to the practice of popular education in the Philippines.

> From adult education, popular education derives its focus on the individuals' unique and functional experiences as basis for education. From the tradition of non-formal education, popular education is inspired by the possibility of offering education outside the formal school structure and the need to provide skills needed in order to become productive citizens.[32]

Therefore, by situating CEC's educational practice within the popular education literature, the study acknowledges the influence of adult and non-formal education, as well. In the same publication Tungpalan identified four other major influences. These were: literacy campaigns, for the emphasis on functional literacy; catechism, for its use of cultural signs and symbols; conscientization, for the focus on critical awareness and societal transformation, and the nationalist mass movement for its links to organizing and mobilizing people.[33]

The previous discussions have demonstrated why CEC's practice of grassroots environmental education can be examined within the context of popular education.

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[29] Karsten van Rizen, "Non-formal education and community development: Improving the quality", *Convergence,* vol. 29, no. 1 (1996), p.82.

[30] Patricia Ann Wagner, " Popular Education in the Philippines: To make ready to risk", *Popular Education Notebook,* vol. 4, no.1 (1998), pp.20-22.

[31] Wagner, p. 21.

[32] Tungpalan, p. 6.

[33] Tungpalan, p. 6.

This is because, like popular education, CEC's grassroots environmental education is an alternative education approach that focuses on the poorer sectors of society, in order to empower them to act collectively within the context of the wider social movement towards liberation.

The following section further examines the development of popular education in the Philippines to identify historically significant lessons or patterns that have influenced and continue to influence CEC's educational practice.

2.1.2 Popular education and the social movement in the Philippines

The 1980s and1990s were periods of dynamic growth and change in the sociopolitical context of the Philippines. Consequently, the same can be said for the development of an alternative education practice within the social movement. Roberto Francis Garcia argues that "the nationalist progressive movement has exerted the strongest influence in the development of popular education" in the Philippines. [34] This argument is supported by Tungpalan's identification of the major influences of popular education in the Philippines from 1960 – 1980. She identified that

> … from the long history of the nationalist mass movements, popular education is interwoven in the processes of organizing and mobilizing people to attain common aspiration.[35]

This section examines this argument, particularly the tensions between the progressive movement and the development of popular education. These tensions, identified from history, help to explain similar tensions that have surfaced from CEC's own educational practice, within the social movement.

The phrase, social movement, is used in the thesis as a collective term to include non-governmental organizations (NGOs) and people's organizations (POs), from a

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[34] Robert Francis Garcia, *Of maps and leapfrogs: Popular education and other disruptions* (QC: Popular Education for People's Empowerment, 1999), p. 27.

[35] Tungpalan, p. 6.

particular grassroots constituency, and the networks, coalitions and alliances they form.[36] NGOs, in the Philippine context, have been described as

> … formal non-profit organizations, which are registered as private volunteer groups with the Securities and Exchange Commission (SEC). They are often organized for specific purposes, either for advocacy or networking or for funding assistance to other NGOs and POs. [While POs] are local social organizations with a specific population base, organized to protect and advocate for the interests of their members.[37]

Different authors in the Philippines also refer to these at times as cause-oriented groups, people's movement, popular movement, and more recently has been identified as a particular section of civil society. This is not a united or homogenous group, but a wide array of organizations that may come together for short-term specific campaigns and mobilizations.[38] Note that the thesis uses the phrase people's movement and social movement interchangeably.

However, the addition of the adjectives, "progressive" and "nationalist", further describes a particular section of this social movement. "Progressive" is often used to describe the groups that are to the "left-of-center" [39] of the political spectrum. Karina Constantino-David[40] called these groups "ideological forces" and described them as

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[36] Robin Broad and John Cavanagh, *Plundering paradise: The struggle for the environment in the Philippines* (Berkley: University of California Press, 1993), p. 86.

[37] Ben Malayang III, "The changing role of government in forest protection" in Peter Utting (ed), *Forest policy and politics in the Philippines* (QC: Ateneo de Manila University Press, 2000), p. 50.

[38] Miriam Coronel Ferrer (ed), *Civil society making civil society* (QC: Third World Studies Center, 1997).

[39] Ferrer, p. 1.

[40] Karina Constatino-David, "Intra-civil society relations: An overview" in Miriam Coronel Ferrer (ed), *Civil society making civil society* (QC: Third World Studies Center, 1997), p. 26.

… organizations that articulate alternative ideological paradigms – communism, national democracy, popular democracy, socialism, democratic socialism, social democracy, Islamic nationalism and liberal democracy."[41]

While "nationalist" is often used to refer to the national democrats or NDs, which have roots in the national democratic movement, which were "under the auspices of the National Democratic Front (NDF) and the Communist Party of the Philippines (CPP)."[42] She claims that a number of NGOs and POs may be "directly or indirectly influenced by these ideological forces."[43] CEC has more often been identified with the network of national democratic NGOs and POs.

Within this diverse Philippine social movement education and organizing work in support of the programs of POs have been conducted primarily by the NGOs. Aside from referring to this educational practice as popular education, the education work conducted by NGOs was sometimes called development education.[44] Maria Luisa Doronila describes it as non-formal education that "is essentially transformational. It is designed to develop in the participants a new understanding of their own lives, and the capacity to alter these situations where necessary." [45]

Both popular and development education approaches are responses to an educational system that has been used as a "mechanism for social reproduction"[46] by both the Spanish and American colonizers, and more recently by governments that have tended to "promote only the interest of the elite, not the impoverished majority."[47]

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[41] Constatino-David, p. 26.

[42] Carmela Abao, " Dynamics among political blocs in the formation of a political party" in Miriam Coronel Ferrer (ed), *Civil society making civil society* (QC: Third World Studies Center, 1997), p.272.

[43] Constatino-David, p. 26.

[44] Maria Luisa Doronila, "Adult education research trends in the Philippines", *Adult Education and Development*, no. 45 (1995), p. 111.

[45] Maria Luisa Doronila, "A critique of development education and training among Philippine NGOs", *Edukasyon,* vol.1, no. 1 (1995), p. 38.

[46] "Education in Perspective", *Kabalikat: The Development Worker,* no. 7 (June 1990), p. 1.

[47] Maria Luisa Doronila, "Development education: A process of change", *Kabalikat: The Development Worker,* no. 7 (June 1990), p. 16.

This section examines in greater detail the influence of this socio-political context in shaping the practice of popular education within the people's movement in the Philippines, specifically from the perspective of an NGO educator.

Roy Loredo[48] suggests that a form of popular education may have existed in the Philippines as part of the resistance movement against the Spanish colonizers in the late 1800s. Tungpalan agrees with Loredo's suggestion that this early liberation movements, and even more recent peasant and worker's groups would have practiced a form of political education, but she argues that the term popular education in the Philippines "gained recognition formally only during the early 1980s." [49]

Recently, there has been a growing emphasis in the use of a dialogical or a problem-posing approach[50] in the practice of popular education. However, in the 1960s, political education, like those conducted within the Federation of Free Farmers (FFF) used a "banking method of education, which called for lecture-type training modules."[51] According to Freire, banking education is similar to "an act of depositing, in which the students are the depositories, and the teacher is the depositor."[52] The "shallowness" of this educational approach, according to Margarita Lopa can be identified as one of the reasons for the cooptation of the FFF leadership with the Marcos regime after the declaration of Martial Law. [53]

The practice called *"basa-talakay"* literally translated to mean, "read–discuss", is similar to the banking method of education. According to Loredo, this practice characterized education work in the late 1960s prior to the declaration of Martial

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[48] Roy Loredo, "A history of popular education (Or how we are evolving from being transmission belts)" in Robert Francis Garcia, *Of maps and leapfrogs: Popular education and other disruptions* (QC: Popular Education for People's Empowerment, 1999), pp.77-94.

[49] Tungpalan, p. 7.

[50] Freire, *Pedagogy of the Oppressed*, p. 74.

[51] Margarita Lopa, *Singing the same song: Reflections of two generations of NGO workers in the Philippines* (QC: Asian NGO Coalition and Philippine Partnership for the Development of Human Resources in Rural Asia, 1995), p.42.

[52] Freire, *Pedagogy of the Oppressed*, p. 53.

[53] Lopa, 42.

Law in 1972. These education efforts were "organically linked to organizing and political work" among students, farmers and workers, and within the community organizing efforts of the church.[54] Wagner described that these education sessions conducted in colleges and campuses were more popularly called "teach-ins and DGs (discussion groups) …[and] had an anti-establishment character, many were openly revolutionary."[55]

The period from the late 1960s to 1972 is often referred to as the First Quarter Storm (FQS). These were times of extreme socio-political crisis when massive student-led demonstrations were staged against President Marcos, more specifically against state repression and the worsening socio-economic situation. Loredo argues that this kind of education work was primarily propaganda, because the message - an analysis of the nature of Philippine society, based on a national democratic political line - was pre-determined.[56] Although he added that during this time, they did not "need much propaganda, much less education" to entice people into action.[57]

Two features of the national democratic political line are an analysis of Philippines society as "semicolonial and semifeudal" and the advocacy for a "national democratic revolution through protracted people's war under the auspices of the leadership of the proletariat."[58] Jose Maria Sison, founding chairperson of the re-established Communist Party of the Philippines explains this analysis.

> The Philippine political system has been semicolonial since 1946, under the
> indirect rule of U.S. imperialism through the parties and politicians of the
> local exploiting classes. The Philippine economic system has been semifeudal
> since the first decade of the 20th century, exploited by the homegrown

[54] Loredo, p. 78.

[55] Wagner, p. 21.

[56] Loredo, p. 79.

[57] Loredo, p. 79.

[58] Jose Maria Sison, "An update: Qualitatively unchanged conditions" in Jose Ma. Sison and Juliet de Lima, *Philippine economy and politics* (Philippines: Aklat ng Bayan Publishing House, 1998), p. 3.

comprador big bourgeoisie and landlord class in the service of foreign monopoly capitalism.[59]

The declaration of Martial Law in 1972 resulted in a clamp down against all activities of the progressive movement and forced much of the political work underground. Open education and organizing work came to a halt. When it re-surfaced in the mid-1970s, Loredo notes that it reverted back to a *basa-talakay* format, particularly in the rural areas and within underground sessions in the cities. According to Wagner this saw the development of the "underground 'basic mass course', political education, training in organizing, mobilizing and military skills as well as ideological studies." [60] She explains that amidst continued repression in the mid-seventies this political education found its way in the churches through pastoral formation courses and biblio-theological reflection seminars that critically examined the context of the church in society. This paved the way for the establishment of church–led NGOs like the Basic Christian Community – Community Organizations (BCC-CO). The BCC-CO was a national program that was geared toward the building of basic Christian communities among the grassroots and church people who have decided to cast their lot with the poor, which was very much influence by the ideas of liberation theology.[61]

By the late-seventies the open mass movement saw the formation and re-surfacing of POs, NGOs, and sectoral formations that brought innovation to the practice of education and community organizing work in the country. Doronila and Josefina Cortes described them as "counter-education efforts"[62] within the organized sectors of the mass movement. They discussed a wide range of issues from the neo-colonial character of the Philippines to the growth of fascism by the Marcos government.

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[59] Sison, "An update...", p. 3.

[60] Wagner, p. 21.

[61] Pete Batangan, "Popular Education on the Philippine Church Sector", *Popular Education Notebook,* vol. 4, no.1 (1998), pp. 5-8.

[62] Maria Luisa Doronila and Josefina Cortes, *The Emergence of schools of the people: Implications for education policy and research* (QC: Katha Publishing, 2000), p. 21.

Education Forum[63] conducted seminars for teachers in sectarian schools. The IBON Economic Databank developed socio-economic training courses. Unions and labor educators developed standardized courses on Genuine Trade Unionism. The Philippine Educational Theatre Association (PETA)[64] revived cultural and religious traditions masking a deeper political education. During this time, the national situationer, more popularly called *nat sit*, was becoming a standard seminar that was conducted by progressive organizations that "provided a framework for understanding the national scene and highlighted poverty, militarization and elite dominance of political, economic and cultural life."[65]

Loredo notes that a creative form of political education could be observed to be developing within the open mass movement, particularly the use of evocative and creative approaches as starting points for discussion. Educators experimented with greater participation during discussions and used the participants' own experiences as the starting point for learning. However, he continues, they eventually found themselves ascribing their own political line to the participants' experiences. This is consistent with what Wagner described about the *nat sit* seminar providing a "framework for understanding the national scene."[66]

While the evocative approach emphasized the importance of the participant's own experience as the starting point for learning, there was a tendency for creative methods to be viewed only as the use of songs and movement to lighten up the learning environment. These approaches found greater support when the activist-

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[63] Education Forum "was organized in 1979 as a task force on education of the Association of Major Religious Superiors in the Philippines. It has since evolved into a service institution … engaged in making education serve the needs of the majority." From "Education in Perspective", *Kabalikat: The Development Worker,* no. 7(June 1990), p. 5.

[64] PETA was established in 1969, but like most groups it was silenced during the first years of Martial Law but re-surfaced in the mid-1970s. It is important to mention that my initial exposure to creative and evocative approaches to education was gained through being a member of PETA from the mid-1980s to the early 1990s.

[65] Wagner, p. 21.

[66] Wagner, p. 21.

educators, like Loredo came across the works and writings of Paulo Freire. They eventually adopted Freire's term - dialogical education[67] - to describe their practice.

However, this new or more open educational approach had its critics, particularly those within the underground movement, who saw these approaches, according to Loredo as "too light," "too shallow," even "too frivolous." [68] Loredo argues that these methods, while seemingly frivolous, encouraged greater participation because it helped people become more "relaxed and uninhibited." [69] But the criticisms around the methods were only superficial. Lopa named the deeper tensions as one between "issue-based organizing and mobilizing as opposed to ideological and mass-education."[70] She explains "many of us felt that open-legal work such as community organizing should have been free of intervention from the underground."[71] Loredo insists that there should have been some distinction between the open-legal education work and the type of education conducted in recruiting people into the underground movement, which required "a more comprehensive (and a more serious) educational process."[72] However, in the end, it was observed that, "while experimentation was the trend in the open education movement, the opposite was happening in the clandestine movement."[73]

Loredo emphasized, "we were not … questioning the correctness of the political line" but "merely trying to create a sound pedagogy for the situation confronting us."[74] These attempts to respond to the changing situation is further tested by the events that followed the assassination of oppositionist Benigno Aquino in August 21 1983 upon his return from a three-year exile. The assassination resulted in the

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[67] Freire, *Pedagogy of the Oppressed*, p. 74.

[68] Loredo, p. 83.

[69] Loredo, p. 83.

[70] Lopa, p. 47.

[71] Lopa, p. 47.

[72] Loredo, p. 83.

[73] Loredo, p. 86.

[74] Loredo, p. 85.

conscientization and politicization of a wide spectrum of Philippine society. This was called the "parliament of the streets"[75]. This was not limited to individuals and groups involved in the progressive people's movement but included businessmen, housewives, young professionals and the anti-Marcos elite. A huge section of those who were part of this parliament of the streets were often referred to as "middle forces."[76] This, according to Loredo was not just a class category, like the middle class, it was more "a mode of political consciousness."[77] This conscientization was a direct result of the brutal assassination and the "painstaking work that the ideological forces, POs and NGOs had already undertaken" [78]

Loredo argued that the involvement of these "middle forces" called for a different approach to mass education, specifically a more popular form of mass education. When President Marcos called for snap elections in late 1985, Loredo's argument would have been significant in the conduct and design of voter education programs, as part of the campaign for clean elections and for support for Corazon Aquino. However, the national democratic forces decided to boycott the 1986 elections. Massive-electoral fraud and election-related violence resulted in a civil disobedience campaign that merged with an attempted coup by the military against Marcos. This resulted in the February 1986 People Power 'revolution' that threw out President Marcos and brought Corazon Aquino into power.

The mushrooming of NGOs resulted in the proliferation of education work, which Doronila described as a form of non-formal education that considers the low level of literacy and the oral nature of the people in local communities.[79] She adds that it uses games, visual aids and role-plays, and bases learning in the local and national context. It is also inclusive and democratic, and aims to provide participants with tools of analysis to critically examine their own lives. The use of creative activities

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[75] Lopa, p. 51.

[76] Lopa, p. 51.

[77] Loredo, p. 89.

[78] Constatino-David, p. 29.

[79] Doronila "Development education…", p. 17.

and the democratic and participatory approaches towards critical analysis were similar to the more open education work that was being practiced as popular education within the people's movement. However, while previous education work focused on political and human rights issues, the mid-eighties and early nineties was a time when groups were free to explore other issues and concerns. These issues included "human resource development, inner and human ecology, green issues, women's concerns, alternative and appropriate technologies, alternative trading and marketing, peace, policy advocacy and lobbying, relief and rehabilitation, and socio-economic work."[80]

The resulting educational practice, according to Loredo would have to be different given the need for "a complementary framework for open political work now that the dictatorship was gone and democratic space had to be maximized."[81] This observation is consistent with a major lesson regarding the practice of popular education identified during a consultation of popular educators conducted in 1986 and 1987. The lesson identified was that "popular education is sensitive to context, and that context, content and method should complement each other." [82] This is more popularly referred to as the Context-Content-Method (CCM) framework, which was described by Tungpalan[83] in 1991, and further elaborated on by Garcia[84] in 1999.

Tungpalan describes this framework as one of the "alternative methods, which have high appeal and creativity."[85] She explains,

> … the nature and form of popular education are defined based on the specific context, content, and methods appropriate to particular groups.

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[80] Lopa, p. 58.

[81] Loredo, p. 91.

[82] Loredo, p. 91.

[83] Tungpalan, p. 18.

[84] Garcia, pp. 60-67.

[85] Tungpalan, p. 18.

Context:	Who is the learner?
	What are his/her concerns?
	What are the learning gaps?
Content:	What are the long and short-term objectives?
	Is it appropriate to people's needs?
	Is there a gap between what trainers and participants want?
Method:	What methods are appropriate and effective? [86]

Garcia used a map as a metaphor for the CCM framework of popular education based on an analogy of the mapmaker and the map-user as the educator and the learner, respectively. In his synthesis, he described the difficulty of bringing together the complex interrelationships between the context, content and method.

> We've explained the roles of context, content and method in popular education: context dictates content and method. But it is not that simple. Content also determines the kind of method employed. More, the content of popular education can be the context itself. Meanwhile, the use of appropriate methods can reveal the context. Method, furthermore, can evoke content.[87]

Since its identification, the CCM framework has continued to develop beyond the initial focus on the learner and his/her context and concerns. The CCM framework has been used by CEC and other groups within the social movement as a guide in developing its popular education practice. In the following chapters, the CCM framework is used to thread the three educational themes identified from the literature and CEC's experience. The effectiveness of using the CCM framework is further examined in the analysis.

As the previous discussions have highlighted, it has been the broader socio-political context that has shaped the educational response of the social movement in the Philippines. More specifically, two critical changes in the broader context can be identified as pivotal in the development of popular education practice in the

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[86] Tungpalan, p. 18.

[87] Garcia, p. 67.

Philippines. The first was the assassination of Benigno Aquino, which resulted in the formation of a conscienticized sector called the middle forces. The involvement the middle forces with the wider people's movement provided a rallying point for the disparate ideological forces. This change contributed to the second critical change: the toppling of the Marcos dictatorship and the appointment of Corazon Aquino as President of the Republic of the Philippines. However, it is important to acknowledge the years of anti- Marcos efforts of the people's movement as its contribution towards achieving these major changes.

However, as the discussions have illustrated, the analysis and the reactions to these changes within the nationalist progressive movement have been diverse, as have been the educational responses. The previous events foreshadowed the eventual ideological divisions within the nationalist progressive movement. The tension between the underground and the open political work and its implications on educational practice resurfaced in CEC's own practice of grassroots environmental education. As was noted at the beginning of this section Garcia and Tungpalan correctly argue that the "the nationalist progressive movement has exerted the strongest influence in the development of popular education" in the Philippines.[88] The examination of the development of CEC as an organization and its own educational practice in the succeeding chapters further elaborate this observation of Garcia and Tungpalan.

2.2   Environmental education

The links established in section 2.1.1 between popular education and CEC's educational practice were related to its being an alternative educational approach for the basic sectors, with the goals of empowerment and wider social action, and having a liberatory character. These links could be described, based on the C-C-M Framework, to be primarily more context-based, specifically referring to the influence of the political changes and the social movement in the Philippines in the period covered by the study.

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[88] Garcia, p. 27.

However, aside from the influence of context, popular education has equally influenced CEC's educational methodology, which has been similarly described as creative and participatory. This similarity is further examined in the section on popular environmental education and in the chapter on Renewing RENEW.

On the other hand, the links and influence of the field of environmental education on CEC's practice, as this section argues could be identified to be more content-based. This section examines this argument by initially describing the basic content of CEC's education programs. This is followed by the identification of the links between the basic content of CEC's education programs with the prescribed content in the environmental education literature, both in the Philippines and from overseas.

2.2.1   Content of CEC's grassroots environmental education

The basic content of CEC grassroots environmental education workshops can be identified from the RENEW workshop, since this was CEC's basic awareness to environmental action workshop that became the model for the other workshops that followed. This section examines the content of this workshop and compares it with the prescribed content found in the literature. It is necessary to indicate early on that this examination is not meant to isolate the content from the other factors that have been identified in terms of the popular education framework of Context-Content-Method. Rather this was done to assist in studying specific aspects of CEC's educational practice and identifying possible influences, with the aim of providing a starting point for the further analysis of this practice.

In the *RENEW Manual,* I described the content of CEC's basic awareness to environmental action workshop as follows:

> We decided to equip people with a scientific understanding of our environment, the components that make up our environment, how these components function, and how they are related to each other.

The core concept we wanted to instill in our participants was *"Ang lahat ng bagay ay magkaugnay"* (All components of the environment are interdependent on each other) which is actually a restatement of the Ecosystem Concept that, "Living organisms and their non-living environment are inseparably interrelated and interact upon each other."

But we wanted to take the concept further, to be more holistic about looking at our environment and the problems that confront it. For as long as we continue to treat our environmental problems as mere technical problems, and ignore the larger context within which these problems are entrenched, we will continue to rely only on our scientists for solutions. In this way we miss out on a major fact, that environmental problems are intricately related to our socio-economic, political and cultural situation. And that we are all as much a part of the problem, as much as we should be part of the solution.

This is the reason why we included discussions on the current environmental situation at the various levels: sectoral[89], local, national and global.

Hopefully, this deeper awareness and more holistic understanding of the problem will help the participants identify more concrete environmental actions, individually and collectively.[90]

From this description it is possible to identify the basic content and the analytical framework that was employed in RENEW, and correspondingly the other workshops of CEC. Four content areas are identified below.

First, there was an emphasis on the "scientific understanding" of the environment, hence the inclusion of topics such as the structure, function and

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[89] In the context of the Philippines, particularly within the social movement, *sector* is a term that is used to refer to a particular group, such as the peasant sector or the workers sector. Hence the reference to a discussion at a sectoral level implies that each of these groups or sectors would discuss a particular environment that is shared by this group, such as agricultural land by the peasant sector and the factory environment by the workers sector.

[90] Jose Roberto Guevara, *Renewing RENEW: A Restoration Ecology Workshop Manual* (QC: CEC, 1995), p. 18.

interrelationships within the environment. This is confirmed by the identification that the core message is a "restatement of the Ecosystem Concept".

Second, the characterization of environmental problems as not "mere technical problems [that need] scientists for solutions." This introduces a "holistic" analysis, which is described through the view that "environmental problems are intricately related to our socio-economic, political and cultural situation."

Third, the first two content areas make it necessary to include a discussion of the environment at the "sectoral, local, national and global" levels.

Finally, all previous three content areas lead to the identification of individual and collective environmental action.

Each of these content areas is first examined in the light of the *Environmental Education Guide*[91] *(EE Guide)* developed in and for the Philippines in 1999. The comparative examination conducted indicates that these four content areas are similarly present in the *EE Guide*. These same content areas are further examined in the light of the literature on environmental education to broaden the study of CEC's educational practice. This examination has identified the close links between CEC's educational practice and the socially critical form of environmental education.

2.2.2 Environmental education in the Philippines

The Philippine government acknowledges "environmental education has been going on in the Philippines for many decades." [92] Its legal basis can be found in the Philippine Environment Code that mandated the Department of Education, Culture and Sports (DECS) to integrate environmental education into all levels of the school curricula and conduct special community education that emphasizes the relationship

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[91] DECS-DENR, *Environmental Education Guide* (QC: DECS and DENR, 1999).

[92] DECS and DENR, "Foreword," *EE Guide,* n.p.

of humans and nature. It also mandated the National Environmental Protection Council, now called the Environmental Management Bureau (EMB) to undertake public awareness campaigns to stimulate awareness and action on environmental protection. [93]

In October 1989, a National Strategy on Environmental Education was prepared pursuant to the adoption of the Philippine Strategy for Sustainable Development (PSSD), which identified environmental education as one of the ten strategies for sustainable development. As a precursor to developing an action plan, the Philippine government, through the assistance of the Asian Development Bank (ADB) conducted a state of the art assessment of environmental education in the Philippines, which was completed in 1991. [94] This covered all levels of the formal education system, technical and vocational education and non-formal education.

It was this report that described CEC's work as

> … unique in the Philippines in the degree of emphasis placed on the education process and the innovations being explored with creative and experientially-based learning techniques. This is participatory non-formal adult environmental education at its best. [95]

The state of the art report was followed by the launch in 1992 of the National Environmental Education Action Plan. The Plan emphasized that the government's long-term vision was for "an environmentally literate citizenry, unified in its pursuit of social justice and equity in the use of natural resources."[96] The Plan was followed in 1997 by the development of environmental education curriculum frameworks for

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[93] Section 53, Presidential Decree No. 1152, The Philippine Environment Code (1977) as cited in DENR, *A Report on: Philippine Environment and Development,* (QC: DENR, December 1991), pp.4-19 – 4-20.

[94] Elenida del Rosario Basug, "Major Headways in Environmental Education (from 1989 to date)" presentation conducted at EMB-DENR conference room (January 2001) [overhead transparency].

[95] ADB, *State of environmental education in the Philippines* (QC: ADB, 1991), p. 198.

[96] DECS and DENR, *EE Guide*, p. 4.

all levels and the finally the publication the *Environmental Education Guide* which details out this framework.

The *EE Guide* was developed by a multi-sectoral team that had representatives from

> … basic education, higher education, technical/vocational education and non-formal education … [and] intended for use by educators, teachers, curriculum developers and administrators … in schools and in communities.[97]

Despite this, an examination of the contents and the language of the *EE Guide* indicate a greater focus on teachers and students, hence an emphasis on the formal system. Although, it is important to note that there are conscious attempts to include non-formal education learners and programs, the *EE Guide* is still predominantly structured for the formal system. This observation is not as a criticism of the *EE Guide* but rather a reflection of the dominant view of environmental education in the Philippines. This in turn has implications on the development of non-formal environmental education such as the educational practice of CEC that is being examined.

First, it indicates the status (or lack of status) given to non-formal environmental education, or non-formal education itself, in the Philippines. Given that the *EE Guide* is a government publication, it is an acknowledgment of the government's minimal involvement in the area, which is not surprising, given that it is predominantly non-governmental organizations and community groups, such as CEC that conduct non-formal environmental education. Even the Philippine government's minimal involvement in the area of non-formal education has focused more in the area of literacy for out-of-school youth.[98]

Second, this emphasis on the formal system, I suggest, implies an expectation that the curriculum framework in the formal system can be easily adapted into the non-formal system. As an example, the chapter, *Implementing the EE Curriculum* begins

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[97] DECS and DENR, *EE Guide*, n.p.

[98] Doronila and Cortes, p. 57.

with the question – "How should EE be introduced in the school system and in non-formal education programs?"[99] The chapter suggests integration as an approach, and gives examples such as integrating it into existing subject areas, as a separate subject and in co-curricular and extra-curricular activities outside the school setting.

These observations are significant to the study, because they situate and explain CEC's own experience in developing the first content outline of RENEW, presented as Table 2.1. The following is my recollection[100] of this process, which is provided as evidence of the early influence of the formal system and the academic subject areas of ecology and environmental science in the development of CEC's educational practice.

> In early 1990, I was asked to prepare a content outline for what was to become the RENEW workshop. The first outline was passed around to the four other staff members, and their main comment was that it looked too academic for the grassroots groups we intended to work with. It was too much like the outline for the basic ecology and environmental management courses (Biology 150 and 151) that I used to teach at the University of the Philippines at Los Banos. I have to admit that having only taught secondary and tertiary biology and ecology, I consulted the said course outlines and the books that I used in teaching these courses, in particular G. Tyler Miller's "Living in the Environment."[101]

> I then revised the outline and tried to keep what was basic and relevant to the grassroots sectors. It was during this period that I found the storybook entitled "Hope for the Seeds" [102]that was written by Fr. Vinny Busch based on a legend of an indigenous group in Mindanao, called T'bolis. Towards the end of the book there was an activity called The Web of Life. The activity

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[99] DECS and DENR, *EE Guide*, p. 31.

[100] Personal recollection of the author.

[101] G. Tyler Miller, *Living in the environment: An Introduction to environmental science,* 6th edn. (California: Wadsworth Publishing, 1990).

[102] Vinny Busch, *Hope for the seeds* (QC: Claretian Publications, 1990).

involved assigning different parts of the environment to the workshop participants and asking them to pass a string to illustrate the different interrelationships that exist between these parts of the environment.

This activity has been influential in that it has become the core activity of all of CEC's workshops. More importantly it helped us identify the core concept of the workshop, the interrelationships between different parts of the environment - an environment that is not limited to the biophysical environment.

This experience is an example of the influence of the curriculum within the formal system, in this case university courses, on the development of a non-formal education program such as RENEW. The following sections further supports this observation, through an examination of each of the specific environmental education content areas previously identified.

(a)   A scientific understanding

The previous recollection and the resulting proposed course outline (Table 2.1) illustrate the first of the four content areas identified from the RENEW, which was "to equip people with a scientific understanding of our environment."[103] This translated into the identification of the Ecosystem Concept as the core concept of RENEW.

This focus on science is similar to what the *EE Guide* identified as the "content dimension" of the curriculum framework, which are "environmental concepts that will help the learners understand how nature works and how it affects people."[104] The *EE Guide* encouraged the use of "core messages," identified below, "as unifying themes [as it] promotes values formation applicable to any environmental problem or ecosystem."[105]

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[103] Guevara, *Renewing RENEW*, p. 18.

[104] DECS and DENR, *EE Guide*, p. 12.

[105] DECS and DENR, *EE Guide*, p. 12.

Table 2.1: Proposed RENEW Course Outline[106]

I. Acquaintance, Expectations Check and Orientation
II. Basic Ecology Concepts
    A. Ecosystem Structure
        1. Definitions
            a. Environment
            b. Ecology
            c. Ecosystem
        2. Parts of the Environment
            a. Living (Plants, Animals, Decomposers)
            b. Non-living
            (Energy, Chemicals, Events in Nature,
            and Man-made items)
        3. Levels of organization
            a. Organism
            b. Population
            c. Community
            d. Ecosystem
            e. Ecosphere
    B. Ecosystem Concept
    C. Ecosystem Function
        1. Energy Flow
            a. Food Chain
            b. Laws of Energy and the Environment
            c. Man's Effect on Energy Flow
        2. Chemical Cycling
            a. Carbon-Oxygen Cycle
            b. Water Cycle
            c. Nitrogen Cycle
            d. Man's Effect on Chemical Cycles
    D. Balance of Nature
        1. Balance at various levels of organization
        2. Basic mechanism of Balance – Feedback
        3. Man's Disruption of the Balance of Nature
III. Environmental Situation
    A. Sectoral
    B. Local/Regional
    C. National
    D. Global
IV. Vision towards Environmental Action
    A. Vision
    B. Individual Action
    C. Group or Organizational Action
V. Evaluation
VI. Celebration

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[106] Guevara, *Renewing RENEW,* pp. 6-7

The first seven of these unifying themes are similar to the basic ecology concepts identified in the proposed RENEW content outline (Table 2.1).

(1) Interdependence and interconnectedness
(2) Diversity and stability
(3) Change
(4) Balance of nature
(5) Finiteness of resources
(6) Materials cycle
(7) Population growth and carrying capacity
(8) Cooperation
(9) Stewardship
(10) Sustainable development

This on-going link between science and environmental education has been attributed in the literature to the claim that environmental education originated from science education. Martin Ashley argues, "science probably offers the strongest justification for the adoption of pro-environmental behaviour"[107] and hence an essential component of environmental education. In a more recent edition of his textbook, G. Tyler Miller attributes this view to environmental science using " basic scientific laws, principles and concepts to help us understand environmental and resource problems and the possible solutions to these problems." [108]

Robert Holsman places these arguments in perspective by stating "science has its limits in our society as a tool for decision-making, and all the rigorous science in the world will not change the fact that environmental policy decisions are inherently

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[107] Martin Ashley, "Science: An Unreliable friend to environmental education?" *Environmental Education Research*, vol. 6, no. 3 (August 2000), pp. 269+. (Academic Search Elite, Item no. 3452572) http://globalgvgw10.global.epnet.com (22 May 2001).

[108] G. Tyler Miller, Jr. *Living in the Environment.* 8th edn. (Belmont, California: Wadsworth Publishing Co, 1994). p. iii.

collective value choices.[109]   Thomas Cobb acknowledges the need for a "fundamental grounding in science" but using "these concepts in an applied, integrative, holistic approach to solve real problems in the real world.[110] Hence there is no argument regarding the inclusion of science in environmental education. The argument is for it to be a science that is holistic and integrated in approach, a science that is one of the key sources of information, but not the only one.

(b)   Holistic analysis

Similarly, the second content area identified from RENEW, a "holistic" analysis, puts this emphasis on science in perspective, specifically by broadening the view that "environmental problems are intricately related to our socio-economic, political and cultural situation."[111]

The *EE Guide* identifies holistic as one of the key features of the environmental education curriculum but identifies a broader scope. "It must deal with the natural, man made, technological, social, economic, cultural, political, moral and aesthetic aspects of the environment."[112] In addition, it also described that environmental education must be "interdisciplinary, as it must draw from all disciplines."[113]

A review of early writings in environmental education[114] reveals that this holistic characteristic of environmental problems, and consequently of the required educational response had been identified. According to Annette Greenall Gough, in

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[109] Robert Holsman, "The Politics of environmental education" *Journal of Environmental Education,* vol. 32, no. 2 (Winter 2001), pp. 4+. (Academic Search Elite, Item no. 4585810) http://ehostgvgw12.epnet.com (17 October 2001).

[110] Thomas Cobb, "On the miscibility of science and environmental education" *Journal of Environmental Education,* vol. 29, no. 4 (Summer 1998), pp.5+. (Academic Search Elite, Item no. 782051) http://ehostgvgw12.epnet.com (18 October 2001).

[111] Guevara, *Renewing RENEW*, p.18.

[112] DECS and DENR, *EE Guide*, p.8.

[113] DECS and DENR, *EE Guide*, p.8.

[114] Annette Greenall Gough, *Founders of environmental education* (Geelong: Deakin University and Griffith University, 1993).

the first issue of the *Journal of Environmental Education*, William Stapp and others[115] wrote a definition and a preamble statement of a new educational area that "looked at the total environment."[116] Stapp and others proposed that this new area be called environmental education and defined as follows,

> <u>Environmental education</u> is aimed at producing a citizenry that is <u>knowledgeable</u> concerning the biophysical environment and its associated problems, aware of <u>how</u> to solve these problems, and <u>motivated</u> to work toward their solution.[117]

Furthermore, they acknowledged that

> … biophysical environmental problems result from the interaction between man, culture and the biophysical environment. … These problems, caused by a complex set of biological, physical and social factors, affect the total environmental system.[118]

They add, that these problems are based on the utilization of natural resources, which are part of the biophysical environment. The thesis adopts Robert Roth's definition[119] of biophysical environment as "the biological and physical aspects of environment with which man interacts and from which he obtains life supporting sustenance and natural resources."[120] Responding to this situation will require an understanding of "the social, political, economic, technological processes, institutional arrangements, and aesthetic considerations" which govern the utilization

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[115] William Stapp and others, "The Concept of environmental education", *Journal of Environmental Education,* vol. 1, no. 1, 1969, pp 30-31 in Annette Greenall Gough, pp. 131-3.

[116] Greenall Gough, p.31.

[117] Stapp and others, in Greenall Gough, p. 131. [Underscore in original]

[118] Stapp and others, in Greenall Gough, p. 133.

[119] Robert Roth "Fundamental concepts for environmental management education (K-16)", *Journal of Environmental Education*, vol. 1, no. 3 (1979), pp. 65-74 in Greenall Gough, pp. 112-129.

[120] Roth in Greenall Gough, p. 113.

of these resources.[121] These aspects that have been identified by Stapp and others are very similar to those included in the RENEW content areas and the *EE Guide.*

Furthermore, holistic as a characteristic of environmental problems, according to Peter Fensham[122] was reiterated during the 1977 Inter-governmental conference on Environmental Education in Tblisi, Georgia, USSR.

> It refers to the interdependent and multifaceted nature of environmental situations. Inter-, trans-, multi-, or cross-disciplinary are the terms educators are using, as they explore how education – so long dominated by single disciplines and analytic approaches – should be shaped and carried out.[123]

Russell Linke[124] described environmental education as a "more holistic or integrative approach" as compared to other academic areas such as geography, ecology, agriculture and engineering. More recently, Stephen Sterling[125] argued, "holism is implicit in environmental education."[126]

> Many definitions of environmental education lay emphasis on interconnectedness, interdisciplinary and viewing the environment in its entirely, on taking into account local and global dimensions and the quality of the learning environment, on the importance of the ethical dimension, and on ensuring that the environmental education is a life-long process. Such characteristics are consistent with the holistic perspective.[127]

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[121] Stapp and others, in Greenall Gough, p. 132.

[122] Peter Fensham, "Stockholm to Tbilisi – the evolution of environmental education", *Prospects*, vol. 8, no. 4, 1978, pp. 446-55, in Greenall Gough, pp. 61-68.

[123] Fensham in Greenall Gough, p. 66.

[124] Russell Linke, *Environmental education in Australia* (Sydney: Allen & Unwin, 1980), pp. 24-37, 208-11 in Greenall Gough, pp. 82-96.

[125] Stephen Sterling, "A View from holistic ethics" in John Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), pp. 69-98.

[126] Sterling, p. 74.

[127] Sterling, p. 74.

From the previous discussions, the thesis refers to a holistic analysis as an acknowledgment of the complex nature of environmental problems, based on the understanding that the biophysical environment is inherently linked to the social, economic, political and cultural environments, as well. These are not discreet areas as the following attempts at investigating their definitions in the context of environmental education indicate.

Roth defines the socio-cultural environment as "social systems within which individuals and groups with different cultures participate and interact."[128] Regulla Kyburz-Graber and Lisa Rigendinger[129] wrote that the social consists of "all aspects that touch society, such as political, legal, economical, cultural and social events."[130] On the other hand, Rosalyn McKeown-Ice and Roger Dendiger[131] defined the "socio-political-cultural foundations of environmental education as the ideas or concepts from the social sciences that are prerequisites to understanding or analyzing environmental issues."[132] Their study identified 63 concepts from the social sciences necessary for understanding and responding to environmental issues, based on feedback from a panel of social scientists and educators in America. One of these concepts states, "natural-resource perception and use are shaped by culture." [133] However, they themselves caution that these concepts are "abstract and close to meaningless when taught as single concepts and/or out of context. [They] suggest that the concepts be set in real-life scenarios."[134] From CEC's experience, real life

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[128] Roth in Greenall Gough, p. 113.

[129] Regulla Kyburz-Graber and Lisa Rigendinger, "A Socio-ecological approach to interdisciplinary environmental education in senior high schools", *Environmental Education Research,* vol. 3, no.1 (February 1997), pp. 17+. (Academic Search Elite: Item no. 9704073288) http://ehostgvgw12.epnet.com (25 May 2001).

[130] Kyburz-Graber and Rigendinger, pp 17+.

[131] Rosalyn McKeown-Ice and Roger Dendiger, "Socio-political-cultural foundations of environmental education." *Journal of Environmental Education, vol*. 31, no. 4 (2000), pp. 37-45.

[132] McKeown-Ice and Dendiger, p. 38.

[133] McKeown-Ice and Dendiger, p. 40.

[134] McKeown-Ice and Dendiger, p. 44.

issues raised by the grassroots people are the basis for identifying the social, economic, political and cultural factors that affect their environment.

However, the previous discussions have tended to miss out on a particular dimension of the holistic perspective. John Fien[135] in his introduction to the book *Environmental Education: a pathway to sustainability* quotes S. Grieg, G. Pike, and D. Selby as having written:

> From a holistic perspective, change must be both inner- and outward-directed; it must address the personal as well as the political … That [holistic] worldview requires of us that we see personal and political transformation as integrated, complimentary parts of the change process.[136]

The absence of the personal, of values, morals, ethics and aesthetics, from CEC's definition of a holistic analysis, can be explained as a counter reaction to the dominance of an environmental education tradition that emphasized personal or behavior change. Ian Robottom and Paul Hart have called this a behaviorist approach, which they characterized as an example of educational practice with a purpose of "shaping of human behavior and seeks a state of prediction and control of human behavior."[137] This is contrary to CEC's emphasis on broader social change issues, which results in CEC placing greater emphasis on the more political aspects of the holistic analysis. However, making this distinction between the personal and the political results in CEC's practice characterizes it as more dualistic, rather than holistic. Sterling characterized that "holistic thinking attempts to be non-dualistic, ecological and systemic." He argues, "holism is the logical converse of

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[135] John Fien (ed), *Environmental Education: a pathway to sustainability* (Geelong: Deakin University, 1993).

[136] S. Grieg, G. Pike, D. Selby, *Greenprints for changing schools* (London: WWF-UK and Kogan Page, 1989) 26-27 in J. Fien (ed), *EE a pathway to sustainability,* p. 5.

[137] Ian Robottom and Paul Hart, "Behaviorist EE research: Environmentalism as individualism", *Environmental Education Research,* vol. 26, no. 2 (Winter 1995), pp. 5+. (Academic Search Elite: Item no. 9508031461) http://ehostvgw6.epnet.com (29 May 2001).

reductionism. It does not totally reject the reductionist worldview, but regards it as fatally incomplete and unbalanced."[138]

Debate on the nature of a holistic approach continues to be relevant. Linke in 1980 expressed it clearly when he asked "*how* holistic the approach must be to define environmental education – there seems to be no immediate or satisfactory answer to this."[139] This debate is revisited in the thesis.

(c)   Local to global context

The third content area identified from RENEW is the inclusion of "discussions on the current environmental situation at the various levels: sectoral, local, national and global."[140] The range of discussions comprises only one aspect of a holistic analysis, if we use as basis the description of a holistic analysis in the previous section. The reference to discussions at a sectoral level is based on the extensive work that CEC has had with sectoral organizations of peasants, workers, indigenous peoples, fishers, urban poor and women. This was part of the Sectoral Environmental Education Program (SEED Program) that was conducted in 1991which is further examined in the chapter on curriculum outcomes.

The *EE Guide* described this as an "issue-oriented" feature of the environmental education curriculum. It stated "the environmental education curriculum must be issue-oriented, as it must deal with local, regional, national and global perspectives."[141] The introduction to the framework clarifies this when it identified that

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[138] Sterling, p. 75.

[139] Linke in Greenall Gough, p. 84. [original emphasis by Linke]

[140] Guevara, *Renewing RENEW*, p. 18.

[141] DECS and DENR, *EE Guide*, p. 8.

… environmental problems should be seen first in their local context to appreciate their relevance, then in a global context to impress on people the magnitude and the pervasiveness of the problem."[142]

It continues by describing that environmental education must also be "globally-oriented, as it must consider the whole earth as one ecosystem."[143] This whole earth concept is similar to the *Gaia* hypothesis proposed by James Lovelock and Lynn Margulis, as a metaphor to the view of the Earth as a self-regulating living organism or a single organism. [144] The slogan "Think Globally, Act Locally." continues to be a popular slogan within the environmental movement and is related to an increased recognition and awareness of the connections between the local and the global.

Fensham reported that during the 1972 Stockholm meeting there was growing evidence that

> … the crises of the environmental situation in the world are not those of just a few countries. Some or most of the issues of population, threats to resources, over- and under-consumption, wealth and poverty, pollution and urbanization existed in all sectors of the globe and often transcended national frontiers. [145]

The *Tbilisi Declaration* identified this in two of the twelve principles, which stated

> … that environmental education should examine major environmental issues from local national, regional and international pints of view so that students receive insights into environmental conditions in different geographical conditions. [And that it should] promote the value and necessity of local,

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[142] DECS and DENR, *EE Guide*, p. 7.

[143] DECS and DENR, *EE Guide*, p. 8.

[144] James Lovelock, *Gaia; A New Look at Life on Earth* (Oxford: Oxford University Press, 1979).

[145] Fensham in Greenall Gough, p. 61.

national and international cooperation in the prevention and solution of environmental problems.[146]

This understanding of the global nature of environmental problems and the corresponding solutions, according to Linke "demands an urgent reappraisal of the current status and philosophy of environmental education."[147] Recent literature re-examines the statement "Think Globally, Act Locally." This is discussed in the chapter that examines CEC's local practice within the context of the global.

The inclusion of a regional level between the local and national levels is based on the subdivision of the Philippines into 16 administrative regions. However, to avoid confusion, the thesis situates the regional level between the national and global levels, as there is a need to discuss CEC's involvement, specifically in the Asia and Pacific regions. Hence the terminology of the spectrum from the local to the global that is adopted is as follows: the local, national, regional and global levels.

These last two content areas, namely the holistic analysis of environmental problems, to include the social, economic, political and cultural environments, within local, national, regional and global contexts is examined further as these are the main areas that considered in the examination of progressive contextualization.

(d)   Environmental action

Finally, the fourth content area from RENEW is the identification of "more concrete environmental actions, individually and collectively."[148] The *EE Guide* refers to this as being action-oriented, as [environmental education] should "involve learners in finding solutions to real environmental problems and issues."[149]

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[146] UNESCO-UNEP, "The Tbilisi Declaration" (1978) as cited in John Fien, *Education for the environment: critical curriculum theorising and environmental education* (Geelong: Deakin University and Griffith University, 1993), p. 53.

[147] Linke in Greenall Gough, p. 82.

[148] Guevara, *Renewing RENEW*, p. 18.

[149] DECS and DENR, *EE Guide*, p. 7.

Stapp et al. in 1969, when they formulated environmental education as a new approach, observed that few of the existing conservation education programs in the United States "emphasize the role of citizens in working, both individually and collectively, towards the solution of problems."[150] Despite this attempt, the internationally accepted definition in the early 1970s, proposed by the International Union for the Conservation of Nature (IUCN), according to Fien focused more on the "values and lifestyle objectives" rather than in an "action orientation."[151]

> Environmental education is a process of recognising values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness of man, his culture and his biophysical surroundings. Environmental education involves practice in decision-making and self-formulation of a code of behaviour about issues concerning environmental quality.[152]

According to Fien[153], the inclusion of an action orientation into the objectives of environmental education was added as a result of the three International Environmental Education Programme conferences in Belgrade in 1975, Tbilisi in 1977 and Moscow in 1987. As an example, the action component, identified as *Skills and Participation,* is present in the five categories of objectives of environmental education outlined in the Tbilisi Declaration.[154] These five categories, which continue to be, identified in environmental education publications, such as the *EE Guide* are:

- Awareness

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[150] Stapp and others in Greenall Gough, p. 131.

[151] Fien, *Education for the environment,* p. 50.

[152] Quoted in Annette Greenall, "A political history of environmental education in Australia: Snakes and ladders" in Ian Robottom (ed), *Environmental education: practice and possibility* (Geelong: Deakin University, 1987), p.14.

[153] Fien, *Education for the environment*, p.50.

[154] UNESCO-UNEP, "The Tbilisi Declaration" as cited in Fien, *Education for the environment*, p. 51.

- Knowledge
- Attitudes
- Skills
- Participation

Similarly, an action component is also identified as environmental action skills in the four levels of goals developed by Hungerford, Peyton and Wilke[155], which are as follows:

Level 1: Ecological Foundations Level

Level 2: Conceptual Awareness Level

Level 3: Investigation and Evaluation Level

Level 4: Environmental Actions Skills Level – Training and Application

While the *EE Guide* did not identify this particular set of environmental education goals, a textbook published in the Philippines in 2000 entitled *Environmental education for sustainable development,* identified the above Hungerford et al.'s goals "as prepared by the UNESCO-UNEP Environmental Education Program."[156]

However, the thesis further describes that there is a distinct difference in the action component of different streams of environmental education. The following sections explore the difference between environmental education that encourages individual and collective action, while the succeeding chapters examine the difference between the emphasis on local and global action.

Based on the previous discussion, it can be observed that the four content areas identified from RENEW, namely; a scientific understanding, a holistic analysis, situated within a local to global context and a focus on action, have similarities with those identified in the *EE Guide*. In addition, both the *EE Guide* and the RENEW

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[155] H. Hungerford, R. Peyton and R. Wilke, "Goals for curriculum development in environmental education", *Journal of Environmental Education*, vol. 11, no. 3 (1980), pp. 42-47 in Greenall Gough, pp. 69-81.

[156] Ruth Guzman and Roger Guzman, *Environmental education for sustainable development* (QC: Wisdom Advocates Publishing, 2000), p. 16-18.

similarly advocate that environmental education must be "experiential, as it must use a variety of learning approaches and environments."[157] RENEW, on the other hand described its methods as participatory and creative, which is based on the "goal of achieving experience-centered learning."[158]

As further evidence of these similarities, the *EE Guide* adapted two activities from the *RENEW Manual,* namely, "Can we all fit?"[159] and "Imagineering Exercise."[160] The first activity an adaptation of an old party game called the newspaper dance. It involves pairs or groups trying to stand on a page of a newspaper that is folded to become smaller and smaller.[161] This is meant to draw out the ecological concept of carrying capacity. The second activity is an adaptation of "The Envelope, please,"[162] an arts-related workshop activity that asks the participants to create a collage of their vision of their local environment on their workshop envelope. The collage at one level helps to distinguish the participants' envelopes, and is an effective way for the participants to share their vision.

2.2.3   Environmental education and the issue of neutrality

However, despite the similarity in content areas and learning methods, the emphasis of the *EE Guide* on the formal school system has pre-determined a feature of environmental education that is different from that advocated by CEC. The *EE Guide* stated that environmental education "must be neutral, as it must discuss issues from different points-of-view."[163]   However, for CEC, the focus on popular education has pre-determined an environmental education that had the interests of the grassroots

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[157] DECS and DENR, *EE Guide*, p. 8.

[158] Guevara, *Renewing RENEW*, p. 19.

[159] DECS and DENR, *EE Guide*, p. 72.

[160] DECS and DENR, *EE Guide*, p. 73.

[161] Guevara, *Renewing RENEW*, p. 56-57.

[162] Guevara, *Renewing RENEW*, p. 93.

[163] DECS and DENR, *EE Guide*, p. 8.

people in mind. More specifically it "must liberate people from the clutches of dominant structures of environmental destruction, exploitation and oppression."[164]

An example of this issue of neutrality as an on-going tension within formal, school-based environmental education is the debate between John Fien[165] and Ted Trainer[166], and Bob Jickling[167] and Helen Spork[168], in a series of articles from 1992 – 2000.[169] Jickling argued in 1992 that that environmental education "should not educate for sustainable development" but must present a balanced treatment of the different points of view.[170] Fien and Trainer described this idea of a balanced treatment as the "seeming fairmindedness"[171] of the liberal tradition of environmental education. They argue that Jickling's position "ignores fundamental questions of power and social reproduction in the formation of individual identity and personal decision making"[172], which a critical pedagogical framework acknowledges.

In a response to this criticism, Jickling and Spork state that they "have no objections to this observation" that "there is no such thing as a neutral educational activity."[173]

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[164] Duhaylungsod, "Preface...", p. 8.

[165] John Fien, "'Education for the environment: a critique' – and analysis ", *Environmental Education Research*, vol.6, no.2 (2000), pp. 179-192.

[166] John Fien and Ted Trainer, "Education for sustainability" in John Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), pp. 11-23.

[167] Bob Jickling, "Why I don't want my children to be educated for sustainable development", *Journal of Environmental Education*, vol. 23, no.4 (1992), pp. 5-8.

[168] Bob Jickling and Helen Spork, "Education for the environment: A critique", *Environmental Education Research*, vol.4, no. 3 (August 1998), pp. 309+. (Academic Search Elite, Item no.1047525) http://globalgvgw10.global.epnet.com (25 May 2001).

[169] It is hard to capture briefly the debate, but for the purposes of the thesis I have attempted to summarize what, for me, are the key issues. It is recommended that the reader examine the specific articles mentioned and those identified within the articles themselves on the issues of neutrality in education.

[170] Jickling, p. 8.

[171] Fien and Trainer, p. 16.

[172] Fien and Trainer, p. 16.

[173] Jickling and Spork, pp. 309+.

However, one of Jickling and Spork's main contentions seem to be that Fien in another publication forwarded a preferred view of the future, which he described as a " 'red-green' future, which lies at the heart of education for the environment." [174] Jickling and Spork argue that by acknowledging this vision, education for the environment has become "deterministic", whether it conducts this through "outright proselyting or more gentle steering." They stress that they strongly believe that "educators are not value neutral, nor should they be. [But that] they should also strive to know when their values get in the way of their teaching."[175]

Fien's strongly disagreed with the description of indoctrination and argued that it was based on a very narrow and selective reading of the philosophy and practices of education for the environment. He suggested that a broader examination of the literature by Jickling and Spork would have helped them identify the "important safeguards against indoctrination when adopting a committed approach to teaching"[176], that have been described previously. As an example, Fien identified a number of "professionally-ethical, but committed teaching approaches, including enquiry learning, logical and critical thinking, political literacy and action research: community problem solving."[177]

Based on the brief overview of the debate above, the form of environmental education that is advocated by the *EE Guide*, although similar in content with that of CEC, leans more to the liberal approach that emphasizes neutrality and a balanced treatment. After all, this is a publication of the Philippine government. However, as the previous debates illustrate, this idea of neutrality and balance in education is a myth. By trying to appear neutral, this form of environmental education promotes a particular view of development that the government advocates. Based on CEC's experience, the Philippines government's development paradigm has been detrimental to the grassroots sectors and their immediate environments. However,

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[174] Fien, *Education for the environment*, p. 12.

[175] Jickling and Spork, pp. 309+.

[176] Fien, " 'Education for the environment: a critique' – and analysis ", p. 187.

[177] Fien, " 'Education for the environment: a critique' – and analysis ", p. 187.

from CEC's experience its commitment to being pro-people and pro-environment has changed through time. This commitment continues to be shaped, and continues to shape, both CEC and its educational practice throughout the period under study.

The other consideration is that CEC's education work has mostly worked with adults in organized groups within the progressive movement. These adults are considered to be a less vulnerable group of learners, as compared to younger students. While indoctrination is still possible, as Loredo has earlier argued, it is more difficult because these ideas are filtered through real life experiences. Even within the context of education within a social movement, indoctrination is not a long-term educational solution, as the experience of the FFF described by Lopa earlier indicated.

The following section examines the different streams or forms of environmental education, to further clarify the descriptions of liberal and critical environmental education as it applies to CEC's educational practice.

2.2.4   Approaches to environmental education

There have been a number of attempts to classify or categorize environmental education. The most popular one continues to be the Arthur Lucas' basic classes of environmental education: education *about, for* (the preservation of) and *in* the environment.[178]

> 'Environmental education' may refer to anyone of, or a combination of, education *about, for (*the preservation of) or *in* the environment. The first two primary classes are distinguished by their goals: education *about* the environment aims to producing a knowledgeable individual; education *for* the environment is intended to enhance or maintain the environment of the entity, usually human, being considered. Education *in* the environment, by contrast, is a description of a pedagogic technique. In most cases where environmental

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[178] Arthur Lucas, *Environment and environmental education: Conceptual issues and curriculum implications* (Melbourne: Australian International press & Publications, 1979), pp. 50-65 in Greenall Gough, pp. 97-111.

education refers to 'education *in* the environment', 'environment' is intended to mean 'outside the classroom'.[179]

This classification has been written about and related to other theoretical frameworks. Robottom and Hart describe three images of environmental education based on these basic classes and linked each to a particular paradigm.[180] Education that promoted knowledge *about* the environment was linked to a positivist paradigm with an educational purpose that is vocational. Educational activities *in* the environment were linked to an interpretivist paradigm, with an educational purpose that is liberal/progressive. And education that focuses on action *for* the environment was linked to as socially critical paradigm with a critical educational purpose. This paper was developed in an attempt to examine the dominant paradigms that have influenced environmental education research.

Fien examined these educational and environmental paradigms.[181] But he also developed a more definitive ideological orientation for the practice of education *for* the environment, which he refers to as education for sustainability.[182] He identified five common features through the combination of environmental and educational paradigms that characterize critical environmental education as follows:

1. Critical environmental education emphasises the development of a critical environmental consciousness based upon:
   (a) a holistic view of the environment as a totality of the interdependent relationship between natural; and social systems;
   (b) a historical perspective on current and future environmental issues; and
   (c) the study of the causes and effects of environmental problems, and alternative solutions to them through and examination of:
      (i)   the relationship between ideology, economy and technology; and

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[179] Lucas in Greenall Gough, p. 109.

[180] Ian Robottom and Paul Hart, *Research in environmental education: engaging the debate* (Geelong: Deakin University and Griffith University, 1993).

[181] Fien, *Education for the environment*, p. 55.

[182] Fien and Trainer, pp. 11-23.

> (ii)   linkages between local, regional, national and global economies and governments.

2. Critical environmental education emphasises the development of critical thinking and problem-solving skills through a variety of practical and inter-disciplinary learning experiences, which focus on real-world problems and involve the study of a wider range of sources and types of information.

3. Critical environmental education emphasises the development of an environmental ethic based upon sensitivity and concern for environmental quality.

4. Critical environmental education emphasises the development of the understandings, attitudes and skills of political literacy, which promote participation in a variety of forms of social action to help improve and maintain environmental quality.

5. Critical environmental education requires teaching strategies that are consistent with its goals. These strategies have been called 'critical praxis'.[183]

The first and the fourth features resemble three of the four content areas identified from RENEW earlier, namely, a holistic analysis, a local to global context and a focus on action. While the fourth RENEW content area of developing a scientific understanding of environmental problems is not explicitly mentioned in the five features identified above, Fien in *Environmental education: A Pathway to sustainability*, listed "scientific" as one of the three requirements of a critical theory of environmental education. The other two were "critical and practical."

The second feature identified by Fien resembles the emphasis of popular education, identified as a key influence in CEC' practice in the previous section, on developing critical thinking. The fifth feature is very similar to the development of the practice of progressive contextualization, which this thesis examines.

However, the fourth feature, "the development of an environmental ethic", does not resemble any of the previous descriptions of CEC's educational practice. This observation was identified earlier, specifically in terms of the lack of a focus on

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[183] Fien, *Education for the environment*, p. 55.

personal, moral and ethical issues associated with the holistic analysis discussion. Despite this difference, there are still more similarities between CEC's educational practice to a socially critical form of environmental education, not just in number of shared features, but more importantly in the environmental and educational paradigms.

On the other hand, the form of environmental education being advocated by the government, as analyzed from the *Environmental Education Guide,* is more closely associated with the conservative or liberal approach. Similar to CEC's educational practice, the *EE Guide* acknowledges the need for scientific understanding, a holistic analysis, the local to global context and the need for action. However, all these similarities are in essence lost because of its determination to provide environmental education that is neutral. Like Jickling and Spork, this idea of neutrality and balance brings it closer to the philosophy and practice of liberal environmental education.

However, I agree with Sterling's argument that classification or categorization should not be conducted to exclude, but rather to "seek to transform them by balancing and broadening their perspectives."[184] This holds true for both CEC's educational practice and the predominantly school-based and formal education experience of environmental education. It is important to acknowledge the influence of school-based environmental education on CEC's educational practice. The previous discussion has illustrated how CEC's educational practice has drawn heavily (at least initially) from this formal education practice. However, there is a growing complimentary relationship between the formal and the non-formal environmental education that needs to be acknowledged. John Huckle[185] identified that the formal educators "need to recognize that there is a rich body of theory and practice relating to community education and development on which they can

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[184] Sterling, p. 91.

[185] John Huckle, 'Environmental education and sustainability: A view from critical theory" in John Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), pp. 43-68.

draw."[186] The thesis contributes to continuing this dialogue and to this growing body of theory and practice.

To achieve this the thesis proposes to situate CEC's grassroots environmental education practice within the field of popular environmental education. The following section examines this growing field, which is more than just as a combination of the previous discussions on popular education and environmental education. It identifies the unique traits of this growing field of practice and the influences of other fields such as adult and community education.

2.3   Popular environmental education

By situating the thesis within the field of popular environmental education, it is acknowledged that CEC's practice of grassroots environmental education has drawn from a number of disciplines. Primarily these are the disciplines described earlier in this chapter of popular education and environmental education, but within the specific context of the Philippines. Therefore, its association to popular education is primarily determined by its being an alternative form of education. An alternative education that works with people within the poorer sectors, focused on people's empowerment, and action within a social movement, and liberative. As identified earlier, this is CEC's primary context, which has become the major influence in shaping both its education content and the methodology.

As the previous section described, the educational content of different environmental education practices is basically similar. However, the context of working with youth and adults, within a social movement instead of a school, changes the nature of the way the content is imparted. Thus, in an attempt to situate the thesis as close as possible to the nature of CEC's grassroots environmental education, I have decided to examine it as popular environmental education. The following discussion identifies the practices that have been examined in attempting to characterize popular environmental education. These related areas have used different combinations of the

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[186] Huckle, p. 65.

words 'popular', 'environmental', 'adult', 'critical', and 'education'. Hence there are writings on popular environmental education, environmental popular education, environmental adult education, adult environmental education, and critical environmental adult education that are examined.

The book entitled *The Nature of Transformation: Environmental Adult and Popular Education* by Darlene Clover, Shirley Follen and Budd Hall[187] describes the broad rationale and basic characteristics for these developing fields of educational practice. They acknowledge that the environmental literature continues to identify the contribution of education in achieving a just and sustainable future, but recognize the need to shift from the

> … more conventional educational practices which they believe to be, at least in part, responsible for contemporary social and environmental decline. They call for a more critical, integrative, nature-based and action-oriented education that extends beyond the classroom and into the community.[188]

The challenge they identify is for environmental adult educators to develop and refine their experiences in using community-based educational principles and approaches from an ecological perspective. They described this "re-framed and re-shaped" practice to be a "more holistic ecologically focused education, with, by, for and about adults."[189]

The following discussion illustrates how these different fields of educational practice have been described in the literature. However, it should be noted that despite some differences, which are identified later, there is a general unity within these fields of educational practice. This is evident from the observation that at times authors tend to refer to these related practices in their publications.

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[187] Darlene Clover, Shirley Follen and Budd Hall, *The Nature of Transformation: Environmental adult and popular education* (Toronto: Transformative Learning Centre, 1998).

[188] Clover and others, p.1.

[189] Clover and others, p.1.

Moema Viezzer[190] in her article entitled "Learning for environmental action" used the phrase popular environmental education as one of her section headings. However, this particular section identified the environmental challenges that should have confronted people who participated in the 1992 Earth Summit and did not forward or propose a definition or description of popular environmental education. However, we can extrapolate some meaning behind her use of the phrase based on the opening line of her article:

> Everyday it becomes clearer that we need to cooperate with all the possibilities, needs and contradictions presented by our world. As adult educators we must move towards an educational vision and practice which is less fragmented- more holistic.[191]

Her succeeding sections illustrate specific aspects of this practice. She specifically emphasized the importance of learning for environmental action in relation to literacy work, established a clear link between peace and human rights education and environmental education, and argued for the need of a new social gender relationship with regards to environmental action.

The Tambuyog Development Center, another environmental NGO in the Philippines, calls their work with fisherfolk as popular environmental education. Ma. Linnea Villarosa Tanchuling[192] described it as an innovative approach to environmental education because

> … the study of the environment was a combination of environmental studies and popular education, which sought to create a strong link between the physical and chemical environments and humankind."[193]

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[190] Moema Viezzer, "Learning for environmental action", *Convergence*, vol. 25, no. 2 (1992), pp. 3-8.

[191] Viezzer, p. 3.

[192] Ma. Linnea Villarosa-Tanchuling, "The Fisherfolk Environmental Education Program: A timely innovation in popular environmental education" in Werner Mauch and Uta Papen (eds), Making *a difference: Innovations in adult education* (Frankfurt: GmBH, 1997) pp. 157-171.

[193] Villarosa-Tanchuling, p. 161.

Beatriz Oliver[194] quotes Deborah Barndt as stating that

> … popular environmental education challenges the power relations underlying the dominant system of development and seeks to reframe and reestablish the nature-culture connection in the way we think and act with each other and the planet.[195]

Oliver, on the other hand, uses the phrase environmental popular education in writing about her experience in Mexico. She identifies that

> … the principle behind *environmental* popular education remains the valorization of local knowledge and power, though as the basis for organizing for sustainable communities. … Environmental popular education accords with critiques of current development models and affirms the importance of community-based decision making and local management of resources. The focus is on both environmental issues and mobilizing for political action in defense of rights.[196]

In writing about work with indigenous groups in India, Dip Kapoor[197] cites critical adult environmental education and popular education as main influences in the theory and practice of what he called environmental popular education.

> Popular education and the unveiling of power through critical dialogue not only offers a powerful method but also provides an opportunity for placing adult environmental education and environmental discourse in a socio-

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[194] Beatriz Oliver, "Participation in environmental popular education workshops: An example from Mexico", *Convergence*, vol. 33, no. 4 (2000), pp. 44- 53.

[195] Deborah Barndt, "Critical education for social change in the context of sustainable development" in Naresh Singh and Vanguke Titi (eds), *Empowerment towards sustainable development,* (Winnipeg: Winnipeg International Institute for Sustainable Development, 1995), p. 26 as cited by Oliver, p. 45.

[196] Oliver, p. 45. [italics in original]

[197] Dip Kapoor, " Environmental popular education and indigenous activism in India", *Convergence*, vol. 33. No. 4 (2000), pp. 32-43.

political context, effectively linking questions of power to social relations and to human relationship with nature.[198]

Heino Apel and Anne Camozzi[199] use the phrase non-formal adult environmental education to mean

> … learning activities, which occur outside the formal learning institutions. The philosophy, method, and processes are based on learning through action. Environmental education as presented here does not consist of the reciting of environmental facts in the form of a lecture. In environmental education, which is true to the principles of adult education, participants should be given the opportunity to re-interpret afresh, and even learn to change the environment out of the actual experiential context.[200]

They clarify that this context refers not to the particular learning context alone but the larger context. They argue for the need for environmental education to go beyond the goals of nature conservation and instead place "political, economic, legal, social, cultural and technological questions [as] the central themes of EE."[201]

UNESCO,[202] during the 1997 Fifth International Conference on Adult Education (CONFINTEA V) identified environmental education as one of the key areas that pose as a challenge to adult education in the future. The conference proceedings distinguish adult environmental education by describing how environmental education can be more relevant to adults.

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[198] Kapoor, p. 35.

[199] Heino Apel and Anne Camozzi, *Adult Environmental Education: A Handbook on context and methods* Supplement to Adult Education and Development no. 47 (1996).

[200] Apel and Camozzi, pp. 11-12.

[201] Apel and Camozzi, p. 25.

[202] UNESCO, *Fifth International Conference on Adult Education* (Hamburg: UNESCO Institute for Education, 1999).

Environmental education, if it is to be meaningful to adults in their daily lives, needs to address ecological questions in terms of the social, political and economic factors involved.[203]

Darlene Clover proposed an initial theoretical foundation of critical environmental adult education in Canada.[204] She acknowledges that her proposal is based on the coming together of a number of educational fields of theory and practice, not merely of adult education and environmental education.

> The philosophical framework of critical adult environmental education is the weaving together of adult, environmental, feminist, indigenous and popular education in order to transform communities. By drawing on the strengths of these types of transformation-based education, we attempt to develop an educational practice with, by, and for adults that is more holistic, critical, comprehensive, challenging, flexible, action-oriented and nature-focused.[205]

Based on a wider and more global set of case studies, Clover and Rene Karottiki[206], described how environmental issues are being incorporated into adult education theory and practice and vice versa.

> Environmental adult education is about learning to see the whole picture surrounding a separate problem such as air pollution and deforestation – the history, values, perceptions, emotions, structures, and processes that cause the problem. It is also about helping people develop solutions to these problems. Therefore, learning within an environmental context must be both a vision and a process.[207]

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[203] UNESCO, 6.

[204] Darlene Clover, "Theoretical foundations and practice of critical environmental adult education n Canada", *Convergence*, vol. 28, no. 4 (1995), pp. 44-54.

[205] Clover, "Theoretical foundations…", p. 48.

[206] Darlene Clover and Rene Karottki, *Case studies in environmental adult and popular education: An introduction* (Toronto: LEAP/INFORSE, 1997), pp.2-3.

[207] Clover and Karottki, p.2.

Despite her on-going contribution to developing a theoretical framework on environmental adult education, Clover in her PhD dissertation[208] argued, "at the present time, environmental adult education has no definition or comprehensive framework but rather includes a number of characteristics, forms and practices."[209] She has proposed that instead of attempting to define a tighter theoretical framework, she recommended that it be kept open because "more dialogue and debate will come from keeping it deliberately broad at this stage."[210]

The above descriptions come from a range of contexts, ranging from local experiences in the Philippines, India, Mexico, Germany and Canada, and a broader attempt at a global synthesis. Despite the varied contexts, there is an obvious similarity in that these practices advocate for the expansion of the scope of environmental education, specifically in its analysis. The suggestion is to include the social, economic, political, cultural, technological and historical contexts of environmental problems, often within a development context. This has been described as holistic, less fragmented, and comprehensive.

This holistic analysis has included, to varying degrees, the identification of the interdependence between humans and nature. This is a shift away from the emphasis on nature and conservation education. It therefore establishes a closer connection between nature and culture. Furthermore, there are different degrees in which the application of a holistic analysis questions the links between power and environmental problems.

The second similarity is the focus on a specific group of learners, in particular adults within a local community setting. Apel and Camozzi further qualify that this is outside the formal system of education, hence describing it as non-formal. Kapoor makes a further distinction when he establishes a connection between environmental

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[208] Darlene Clover, "Learning patterns of landscape and life: Towards a learning framework for environmental adult education" (Toronto: University of Toronto, 1999) [unpublished dissertation].

[209] Clover, "Learning patterns…", pp.304-305.

[210] Clover, "Learning patterns…", pp.305.

popular education and indigenous activism, in particular within what he called new social movements. He described new social movements as

> … new learning sites where local autonomy and environmental movements engage in a praxis that challenges and democratizes power that has become concentrated in the "system world" – a world that increasingly dominates the "life world".[211]

It is these links to adults in general, or to a particular sector of adults in communities or social movements, where the distinctions between these fields of educational practice begin to emerge. It is therefore the context that primarily determines the differences between the levels of the resulting political action.

Action is the third similarity. There is a distinct absence of the behaviorist tendencies that have been identified earlier within environmental education. Instead there is a greater focus on community or collective action. Despite these similarities, the above descriptions reveal inherent tensions between the different educational practices. At times, the definition or description of one practice is based on what it is not relative to another. On example is the perception that environmental education has "a narrow idea of environmental protection, involving only the conservation of species and nature preserves"[212] rather than "addressing environmental and social issues in an integrated way."[213]

Similarly, Clover distinguishes environmental adult education from adult environmental education, which she described as

> … the concept of 'adult environmental education' [focuses] on self –growth that uses established environmental education theories and practices with adults, in order to articulate a framework for and a process of socio-

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[211] Kapoor, p.34.

[212] Apel and Camozzi, p.15.

[213] UNESCO, p. 4.

environmental transformation based on a reconceptualization of the theory and practice of adult learning through an ecological lens.[214]

Hence, the above descriptions focus on the limitations of environmental education in terms of its scientific and behaviorist tendencies. Clover raises a critical concern. She argues that it takes more than the adaptation of school-based environmental education theories and practice to suit adult learners in dealing with the current environmental situation. Similarly, one cannot merely apply adult education theories to environmental education for adults, because, there are streams of adult education that are contradictory to some of the principles of environmental education. An example of this is the liberal tradition, which is very individualist in focus. Another example is the adult and vocational education tradition, which, as the next chapter argues, merely supplies the human resource needed of the dominant economic paradigm.

Therefore that based on the previous discussions, defining popular environmental education is not about combining or adapting one set of educational theories and practice with another. Instead, as the previous authors have described, it is about identifying the specific influences of each set of educational theories and practices that will be applied within a particular context. In this way, instead of being limited by a particular field, it broadens the assumptions of each of the fields of practice that are identified.

The decision to use popular environmental education to study CEC's educational practice applies the conclusion drawn from the previous discussion. By situating CEC's grassroots environmental education as popular environmental education, the thesis acknowledges the characteristics of popular and environmental education, within the specific context of the social movement in the Philippines. I therefore define popular environmental education not limit it, but to identify the shared characteristics it has with CEC's educational practice. I use the three similarities identified previously, namely, a holistic analysis, the learners being adults within the context of the social movement, and a focus on action.

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[214] Darlene Clover, "Editorial", *Convergence,* vol. 33, no. 4(2000), pp. 3-5.

Popular environmental education is an alternative form of education that works with people within the poorer sectors of Philippine society, often described as the grassroots. Its goal is the empowerment of people to respond to environmental problems, individually and collectively, within the framework of a wider social movement for change. Hence it has a liberative dimension to its goals. It is holistic because it acknowledges the importance of situating environmental problems and solutions within socioeconomic, political, cultural and scientific contexts and recognizing the issues of power relationships within these contexts.

However, this decision to examine CEC's educational practice as popular environmental education offers tensions that are inherent to both popular and environmental education. Barndt identified one such tension. She observed, "environmental education *offers* this tension to popular education, which has been charged (often justifiably) as being anthropocentric."[215] Other tensions inherent to the CEC's educational practice were identified during the 1993 evaluation of RENEW.[216] Examples of these tensions are between scientific and local knowledge, the environment and the social contexts, 'banking' and participatory learning methods, being creative and scientific, Manila and the provinces, environment and development work, and general and particular.

While most of these tensions are explored in the thesis, three main tensions have been identified from the preliminary analysis of CEC's experience and from the literature examined. These tensions are described using the CCM framework identified earlier in this chapter. The main tension that the thesis focuses on is the tension of context, between the local and the global. In addition, a tension of content, between the biophysical and the political and a tension of methods, between being participatory and prescriptive are also examined.

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[215] Deborah Barndt, "Tracing the trail of Tomasita the Tomato: Popular education around globalization", *Alternatives Journal* (January/February 1996), p. 25 [italics added].

[216] "Renewing RENEW: National Evaluation Workshop" (Silang, Cavite: CEC, March 1993) [unpublished document].

2.4   Chapter summary

The major theoretical guides in the fields of popular and environmental education that shaped CEC's practice of grassroots environmental education were identified and reviewed in this chapter. This review was conducted to support the argument for situating CEC's educational practice of grassroots environmental education within the theory and practice of popular environmental education.

In the area of popular education, the chapter identified a major theoretical framework, the Context-Content-Method framework that was developed and continues to guide the practice of popular education in the Philippines. Based on this framework, the chapter identified the context, in particular the development of progressive social movement within a very dynamic national sociopolitical situation, as a major influence in the development of popular education in the Philippines. This historical examination provides the thesis with a potential approach in analyzing the key contextual issues that have shaped the organizational and educational development of CEC. Aside from context, it was identified that the popular education practice in the Philippines equally influenced the development of CEC's educational methodology, specifically its emphasis on a participatory and creative methodology. The historical context of popular education in the Philippines and the Context-Content-Method framework are critical to the examination of CEC's educational practice in the succeeding chapters.

In terms of environmental education, the chapter argued that it was the area of content that was greatly influenced by the experience of environmental education in schools or within the formal system. It identified four content areas: a scientific understanding, a holistic analysis, a local to global context and a focus on environmental action, that were present in the basic awareness to environmental action workshop of CEC, the RENEW. These same content areas were also present in the formal environmental education literature examined, in the Philippines and in other countries. Furthermore, the chapter identified that in terms of the different streams of formal environmental education; CEC's practice would be closest to the

socially critical approach to environmental education. This is primarily due to its analytical framework and its clear political stance.

The chapter also examined related educational practices that have used varying combinations of the words adult, popular and environmental education, in order to argue for the use of the phrase popular environmental education within which to situate the thesis. It was observed that there were more similarities than differences between these fields of adult environmental education, environmental adult education, popular environmental education, environmental popular education and critical environmental adult education. Three similarities were identified, namely; a more holistic approach to examining environmental problems; a focus on adults in a community or social movement context, and on action that is not limited to individual behavior change but broader social and political action.

The previous discussions have provided a review of the key theoretical guides that allows the thesis to situate CEC's educational practice within popular environmental education. This is based on the argument that popular environmental education reflects the philosophy and practice of CEC's grassroots environmental education and that it provides a wider literature to refer to for the purposes of the study. In addition to similarities, the chapter also identified tensions, inherent within the educational practices studied, which serve as important guides in examining CEC's educational practice within a context of a globalizing world. The following chapter examines the theoretical guides that help to describe this context of a globalizing world.

Chapter 3

A globalizing world:

Descriptions and theoretical guides

There are numerous definitions and descriptions of globalization. David Held and others[1] warn that this proliferation of definitions and descriptions has resulted in globalization now being

> … in danger of becoming, if it has not already become, the cliché of our times; the big idea that encompasses everything from global financial markets to the Internet but which delivers little substantive insight into the contemporary human condition.[2]

Similarly, Ulrich Beck[3] observes that globalization has become

> … the most widely used- and misused- keyword in disputes of recent years and will be of the coming years too; but it is also one of the most rarely defined, the most nebulous and misunderstood as well as the most politically effective.[4]

This chapter examines the concept of a globalizing world as a theoretical guide, in particular the influence of economic globalization and global civil societies on environment and education work. Through this discussion the chapter identifies key areas that serve as guides in the examination of CEC's environmental education practice. These key areas were earlier identified as some of the tensions inherent to

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[1] David Held and others, *Global Transformations: Politics, economics and culture* (Cambridge: Polity Press, 1999).

[2] Held and others, p. 1.

[3] Ulrich Beck, *What is globalization?* (Cambridge: Polity Press, 2000).

[4] Beck, p. 19.

the practice and theory of popular environmental education, which in this chapter is situated within the context of a globalizing world.

Three tensions that have emerged to be significant in the development of CEC' educational practice are the tension between the biophysical and the political, the local and the global, and the participatory and the prescriptive. It is important to emphasize that these are not isolated areas, but as the CCM framework has identified earlier, they all weave and influence each other in practice.

The first section examines some of the literature on globalization, more specifically on economic globalization as an introduction to the identification of its impact on the environment and education. The second section examines the development of a global civil society as a response to economic globalization, focused on non-governmental organizations, the environmental movement and the educational challenges that accompany such a response.

3.1   A globalizing world

A globalizing world is a world that is becoming smaller, a world that is in some ways "becoming more intimate with itself."[5] This statement illustrates one distinct kind of globalizing force, which Beck called "globality". He defined globality as the condition that

> … *we have been living for a long time in a world society*, in the sense that the notion of closed spaces has become illusory. No country or group can shut itself off from others. Various economic, cultural and political forms therefore collide with one another, and things that used to be taken for granted (including in the Western model) will have to be justified anew.[6]

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[5] Allan Patience, " Warming to a global society", *AQ Journal of Contemporary Analysis*, vol. 70, no. 5 (September –October 1998). pp. 6-13.

[6] Beck, p. 10. [italics in original]

He distinguishes it from "globalization", which for him

> … denotes the *processes* through which sovereign national states are criss-crossed and undermined by transnational actors with carrying prospects of power, orientations, identities and networks.[7]

Dimensions of globalization include, but are not limited to "communications technology, ecology, economics, work organization, culture and civil society."[8]

Beck further describes a third force, which he called "globalism" as

> … the view that the world market eliminates or supplants political action – that is, the ideology of rule by the world market, the ideology of neoliberalism. It proceeds monocausally and economistically, reducing the multi-dimensionality of globalization to a single, economic dimension that is itself conceived in a linear fashion. If it mentions at all the other dimensions of globalization – ecology culture, politics, civil society – it does so only by placing them under the sway of the world-market system.[9]

Globalism is very similar to what Richard Falk described as "predatory globalization"

> … the discipline of global capital in a manner that promotes economistic policymaking in national arenas of decision, subjugating the outlook of governments, political parties, leaders and elites and often accentuating distress to vulnerable and disadvantaged regions and peoples. [10]

Falk previously described this as "globalization from above', which reflects

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[7] Beck, p. 11. [italics in original]

[8] Beck, p.19.

[9] Beck, p. 9.

[10] Richard Falk, *Predatory Globalization: A Critique* (Cambridge: Polity Press, 1999), p.127.

… the collaboration between leading states and the main agents of capital formation. This type of globalization disseminates a consumerist ethos and draws into its domain transnational business and political elites.[11]

It is the last two definitions that dominate the present thinking in the literature. David Held and others support this observation when they note that

… the tendency in much of the existing literature is to conflate globalization with the expansionary imperatives of markets or capitalism thus has drawn substantial criticism on the grounds that such an explanation is far too reductionist.[12]

The thesis acknowledges the multi-dimensional causes, effects, and nature of this process of globalization, but has decided to limit the focus on two aspects of globalization, economic globalization and the growth of a global civil society. Each of these aspects is explored in the context of environment and education.

3.1.1   Economic globalization

There are many different attempts to identify when economic globalization began. Some argue that it can be traced as far back as when the first voyages of 'discovery' sailed across the seas to colonize and develop trade.[13] For Thomas Friedman it was the fall of the Berlin wall or the end of the Cold War that enabled the world "to come together as a single, integrated, open plain." [14] Beck summarized a number of these accounts as stating that

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[11] Richard Falk, "The making of global citizenship" in Jeremy Brecher, John Brown Childs, and Jill Cutler (eds), *Global visions: beyond the new world order* (Montreal: Black Rose, 1993), p.39.

[12] Held and others, p. 12.

[13] Danilo Anton, *Diversity, globalization and the ways of nature* (Ottawa: International Development Research Centre, 1995), p. 2.

[14] Thomas Friedman, *The Lexus and the olive tree* (London: Harper Collins, 2000), p. 46.

… many date the 'capitalist world-system' (Immanuel Wallerstien) back to the beginning of colonialism in the sixteenth century; others to the emergence of international corporations. Still others consider that globalization started with the ending of the fixed exchange rates or the Eastern bloc.[15]

Vandana Shiva, on the other hand identified three waves of globalization.

The first wave was the colonization of the Americas, Africa, Asia and Australia by European powers over a period of five hundred years. The second wave was the imposition of the West's idea of 'development' on non-Western cultures in the post-colonial era of the past five decades. The third wave of globalization was unleashed approximately five years ago as the era of 'free trade', which for some commentators an end to history but for us in the Third World is a repeat of history through recolonization.[16]

This debate only further confirms the complex multi-causal nature and the even more contextual impact of economic globalization; however there seems to be some greater agreement with regards to the factors that have contributed to this contemporary phenomenon. Friedman identified three fundamental changes, namely "changes in how we communicate, how we invest and how we learn about the world."[17] He described these changes as having resulted in

… the inexorable integration of markets, nation-states and technologies to a degree never witnessed before – in a way that is enabling individual, corporations and nation-states to reach around the world farther, faster, deeper, cheaper than ever before, and in a way that is enabling the world to reach into individuals, corporation and nation-states farther, faster, deeper, cheaper than ever before.[18]

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[15] Beck, p. 20.

[16] Vanda Shiva, "Ecological balance in an era of globalization" in Nicholas Low (ed), *Global Ethics and Environment* (London: Routledge, 1999), p. 48.

[17] Friedman, p. 5.

[18] Friedman, p. 9.

This rapid spread of economic globalization has been possible due to other globalizing forces, such as the development of technology, in particular communications technology. The monumental growth of information technology and telecommunications has facilitated the storage and instantaneous transfer of huge amounts of information across the globe. More specifically, it has also facilitated the creation of a round-the-clock global financial market where defined national or state boundaries are blurred and integrated into a new system through international process and transactions. This situation has made it more difficult for national governments to regulate their own currencies and has encouraged the growth of the practice of trade liberalization.

Friedman called these two developments as the "democratization of technology"[19] and the "democratization of information."[20] These democratizations were to be facilitated by the Internet, which has managed to help establish links across the world. However, according to the 1999 United Nations Human Development Report, access to the Internet in 1998 was is limited to only 19 percent of the world's population, 91 percent of whom live in OECD countries.[21] Lalage Bown further highlights this discrepancy.

> What information and communication technology access can you have if you do not have a telephone? … The African Development Bank has calculated that of all the people living in the world today half have never made a telephone call – and never will.[22]

Furthermore, Friedman in 2000 noted` that 80 percent of the Web sites are in English, which is part of the growing concern of the dominance of a single culture, a

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[19] Friedman, p. 46.

[20] Friedman, p. 60.

[21] Friedman, p. 319.

[22] Lalage Bown, "Dialogue across frontiers: Perspectives from the developing world", *Adult Education and Development*, no. 52 (1999), pp. 153-54.

North American culture, on the information superhighway.[23] Danilo Anton supports the notion that

> … the complex processes of globalization have promoted the development of a mainstream standardized culture that includes not only wide-spread homogenization of production and consumption systems and patterns but also greater cultural uniformity.[24]

But in the same token he argues that within this mainstream culture will be micro-, meso- and even subcultures, hence people will be "more homogenous on one level, but increasingly heterogeneous on another."[25]

In the Philippines, globalization is often described as a mere continuation of the country's colonial history, only that it is "a more potent form of neo-colonialism."[26] This colonial link, specifically to America, is evident from Satur Ocampo's definition of globalization as

> … world-wide economic integration under capitalism or market economy dominated by transnational corporations and political elites, is a scheme evolved and pushed by American imperialism since the mid-1970s.[27]

Nicanor Perlas calls it "elite globalization"[28], which he described as

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[23] Friedman, p. 319

[24] Anton, p. 7.

[25] Anton, p. 8.

[26] Nicanor Perlas, "Associative Economics: Responding to the challenge of economic globalization", *CADI Monograph* (March 1996), p. 1.

[27] Satur Ocampo, *Globalization: Its implications to the people's struggle* (QC: Initiatives for International Dialogue, July 1996), p. 4.

[28] Nicanor Perlas, *Shaping globalization: Civil society, cultural power and threefolding* (QC: CADI, 1999), p.21.

> … a distorted form of global economic integration, powered by and benefiting only a few, [that] is unleashing a dangerous blend of economic, ecological, cultural and political crises. [It is] facilitated by radical, one-sided and often imposed economic 'liberalization' policies [and] is moving very rapidly. [29]

Former President Fidel Ramos' vision called *Philippines 2000* is closely associated with elite globalization. Perlas criticized *Philippines 2000*, saying that "for all its good intentions, [it] feeds Filipinos and the Philippines spirit directly into the globalization machine."[30] The globalization machine is often associated in the Philippines with the General Agreement on Tariff and Trade (GATT) and the World Trade Organization (WTO) as the "institutional base for the promotion of globalization."[31]

Other programs that have been closely identified with elite globalization in the Philippines are the structural adjustment programmes (SAPs) of the International Monetary Fund (IMF) and the World Bank (WB) or the Bretton Woods institutions. These programmes were formulated in response to the inability of developing countries to repay foreign debts, hence involved austerity measures that were supposed to help generate foreign exchange to assist them in paying and specified conditionalities had to be followed before further financial assistance was provided.

> Their objective is to improve a country's foreign investment climate by eliminating trade and investment regulations, boosting foreign exchange earnings through the promotion of exports, and reducing deficits by cutting spending. This has meant cutbacks and the gradual dismantling of health, education and social programmes; massive layoffs in the public sector and wage suppression; promotion of exports and reduction of imports; currency

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[29] Perlas, *Shaping globalization...*, p. 21.

[30] Perlas, *CADI Monograph*, p. 4.

[31] Ocampo, p.9.

devaluation; privatization of government held enterprises; high interest rates; and trade liberalization.[32]

The Philippines' foreign debt in 2000 was US $57 billion.[33] The country's main source of foreign currency comes from the export not of raw materials but of its people. Millions of Filipinos working overseas sending money home to their families continue to be the main source of foreign currency needed to repay this foreign debt. This debt often was the result of loans for projects that were supposed to bring development, such as the Bataan Nuclear Power Plant (BNPP), which was constructed by Westinghouse Corporation, built during the Marcos regime near an earthquake fault.

> This insane project cost $2.2 billion, double the normal price. … Although this white elephant has never generated one watt of electricity and probably never will, the government will be paying $326,000 per day on interest alone until the year 2004.[34]

Liberalization, on the other hand, forces a country to open its markets to the entry of foreign investments, companies and products. A recent example of liberalization was the enactment of the Philippine Mining Act of 1995 (Republic Act No. 7942) that was "formulated to regulate and revitalize the mining industry, by providing a positive and competitive climate for mining investments."[35]

The Environmental Science for Social Change (ESSC), publication described the Mining Act as "difficult to fault … from a technical point of view…. [and] sets out to promote sustainable mining"[36] However, the ESSC also identified some of the issues

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[32] Janet Bruin, "Root causes of the global crisis", *Institute of Political Economy Journals,* no. 2 (March 1996), p. 8.

[33] "Philippines, Economic Indicators", [http://www.financeasia.com/countryhomepage/philippines.cfm] (14 February 2002).

[34] Bruin, p. 25.

[35] ESSC, *Mining revisited: Can an understanding of perspectives help?* (QC: ESSC, 1999), p. 23.

[36] ESSC, p. 24.

of concern, such as the provision to the contractors of auxiliary mining rights. These auxiliary rights included timber rights, water rights, easement rights (relocation of indigenous peoples), the right to poses explosives, arbitration rights and arbitration methods to settle disputes, and upon payment of just compensation, entry into private lands and concession areas. The ESSC noted that

> … these auxiliary rights have serious implications for land and water use, agriculture and agroforestry programs, national parks, other reserve areas, and biodiversity in general. These implications have to be clarified in great detail to ensure that the rights of the people and other national policy efforts are not being surreptitiously eroded.[37]

However, the more controversial provision of the Mining Act was that it allowed, through a Financial or Technical Assistance Agreement (FTAA), 100 percent foreign ownership for large-scale exploration, development and utilization of mineral resources. Calling it a financial or technical assistance was seen as an attempt to circumvent the 60-40 ratio of foreign to Filipino investment stipulated in the Philippine Constitution and the Foreign Investments Act.[38]

While the Philippine government creates policies that favor trade liberalization to attract investments to help repay its foreign debt, the developed nations continue to ignore the rules they have formulated.

> There was an agreement for the elimination of subsidies for agricultural exports in 1995, but the US, Britain and Europe spent $18 billion dollars in supporting their farm exports, (even as) they warned the Philippines against giving incentives to exporters because that violates world trade rules.[39]

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[37] ESSC, p. 79.

[38] Tina Urag, "Globalization, Philippines 2000 and the Philippine Mining Industry", *Watershed: Ideas on environment and society,* vol. 2 (1996), p. 22.

[39] Ocampo, p.10.

At the grassroots level Perlas gives an example of how under GATT the cheaper products, which externalize the social and environmental costs, undermine products that are grown based on sustainable agriculture principles that fully internalize these costs.

> This can be clearly seen in the case of a corn farmer in Mindanao who produces corn at a cost of P6.00 per kilo in contrast to imported corn, which can cost only less than P5.00 per kilo including freight and handling charges.[40]

Clearly, the promises of economic globalization have not been equitably distributed. Friedman identifies a complex host of reasons that have contributed to the widening income gap between the "have and have-nots" in developed countries.

> These include massive demographic shifts from rural to urban areas, rapid technological changes that increasingly reward the knowledge workers over the less skilled, the decline of unions, rising immigration into developed countries which drives down certain wages and the shift in manufacturing from high- to low-wage countries, which also holds down salaries.[41]

All these have helped him conclude that a major reason behind this widening gap is that the current global market place is all about the phenomenon of "winners take all".[42]

Colin Hines[43] cites a study that concluded that the WTO's operations have in fact

> … undermined health, safety and environmental standards, human rights advocacy efforts and democratic accountability in policy making worldwide.

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[40] Perlas, *CADI Monograph*, p. 6.

[41] Friedman, p. 307.

[42] Friedman, p. 306.

[43] Colin Hines, *Localization: A global manifesto* (London: Earthscan Publications, 2000).

At the same time the vaunted economic benefits have failed to materialize for the majority.[44]

As the international economic disparities widen within this economic paradigm, Anton observes that the resulting poverty continues to place pressure on the environment. However, he argues that

… not all environmental problems are the result of poverty. Many (perhaps the most acute and wide-ranging problems) result from economic affluence and indiscriminate consumption.[45]

The previous discussions have highlighted the emphasis of economic globalization on trade liberalization and how liberalization has not resulted in the promised development. Instead it has widened the income gap between the rich and the poor in both the developed and developing worlds. The following section examines further the impact of economic globalization on the environment.

3.1.2 Globalization and the environment

The environment continues to be one of the victims of the economic globalization policies identified in the previous section. Shiva is very explicit about her views on globalization and its impact on the environment.

Globalization therefore creates poverty instead of removing it. The new globalization policies have accelerated and expanded environmental degradation and displaced millions of people from their homes and their sustenance base.[46]

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[44] Hines, p. 169.

[45] Anton, p. 18.

[46] Shiva, "Ecological balance...", p.55.

Janet Bruin observed that

> … for years, scientists have been warning of the harmful consequences of unlimited economic growth on the earth, the seas, the air, our water and food supply, and the fragile ecosystem that nurtures our planet and its inhabitants. Some believe that a point of no return has been reached. If policies continue with their dictate to produce, export in ways that strain the earth's capacity to recover, privatize, liberalize and deregulate, environmental deterioration will accelerate.[47]

Aside from the direct environmental effects of the poor people being forced to make a living – "often simply to survive"[48] – at the expense of the environment, Anton cites how liberalization and deregulation have resulted in a "global restructuring of production."[49] In particular he illustrates the growing contribution of the transfer to developing countries of industries or processes with a greater potential for environmental degradation. This transfer is done primarily to access cheaper labor and to escape tougher environmental laws in more developed nations. Michael Doyle and Rachel Massey[50] agree that these restructuring may result in sacrificing environmental standards, in particular for firms that have the option to relocate their operations.

An example of this is the establishment through Japanese Official Development Aid (ODA) of the necessary infrastructure, such as first-class roads, a geothermal power station, a large-capacity port, for the establishment of the Philippine Associated Smelting and Refining Corporation (PASAR), a copper smelter in Leyte.[51] PASAR

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[47] Bruin, p. 11.

[48] Anton, p. 17.

[49] Anton, p. 27.

[50] Michael Doyle and Rachel Massey, " Intergovernmental organizations and the environment: Looking towards the future" in Pamela Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), pp. 411-426.

[51] "Aid for profit: Japanese ODA in Leyte", *Kabalikat*, no. 8 (September 1990), pp 8-10.

features in one of the cases involved in the development of CEC's grassroots environmental education curriculum.

Not only are toxic and polluting industries being moved to developing countries, but also this economic paradigm has made toxic waste a commodity. According to Shiva, trade in toxic waste has grown in countries like India where both the processing and disposal costs, and the economic and political clout to resist, are the lowest.

Furthermore, specific GATT-WTO agreements such as the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIP) provide an example of how biopiracy has become legitimate. Biopiracy is

> … the process through which the rights of indigenous cultures to these resources and knowledge are erased and replaced by monopoly rights for those who have exploited indigenous knowledge and biodiversity.[52]

Shiva explains how TRIP protects the "formal innovators" (scientists, plant breeders and technologists) who modify the traditional knowledge of the "informal innovators" (farmers, indigenous medical practitioners and forest dwellers) and seek patents for these minor modifications and claim this knowledge as their private property. This situation is an example of how economic globalization policies have contributed to not just to making local people materially poor but has intellectually and culturally deprived them as well.

In the Philippines, Perlas gives another example of the extent of the power of the GATT-WTO policies over local sustainable agriculture programs that aim to stop using pesticides. He described how under GATT new standards on the allowable amount of pesticide residues in imported agricultural products indicate an increase from 300 – 5000 percent over the current US Standard. Furthermore, an agreement called

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[52] Shiva, "Ecological balance...", p.62.

… the Technical Barriers to Trade construes pesticide-free labeling as discriminatory and a technical barrier to trade. [And] the Agreement on Agriculture rewards agricultural intensification that is based on massive pesticide and chemical inputs.[53]

To further examine the impact of economic globalization on the Philippine environment, one only needs to study the policies designed under the Medium Term Philippine Development Plan (MTPDP), which set into motion President Ramos' vision of *Philippine 2000.* Specifically for agriculture, the Medium Term Agricultural Development Plan (MTADP) provided the policy framework needed to accelerate the deregulation of the agricultural sector by

… reducing by more than half the land currently used to cultivate corn and rice, and converting freed-up land for diversification to livestock and commercial crops.[54]

Urag describes how this resulted in the government converting large tracts of agricultural land previously committed to rice and corn production to cut flowers, cash crops and livestock production. These areas were designated as key production areas, which will produce these high value crops for exports.[55]

However, the government-led land conversion has unfortunately also resulted in the indiscriminate conversion of large tracts of prime agricultural land to export products, further threatening food security. There has been massive conversion of agricultural lands into non-agricultural purposes such as golf courses, residential subdivisions and industrial zones, which themselves have their own associated environmental problems. Golf courses damage the local ecology and consume

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[53] Perlas, *CADI Monograph*, p. 5.

[54] Angelina Briones and Charmaine Ramos, "Market forces and food security: The case of developing Asia" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), p. 238.

[55] Urag, p. 8.

massive amounts of water for the benefit of a few; mostly foreign players who can afford to enter these facilities.

The reduction in rice production, the staple food in the Philippines, will be made up through the importation of a predetermined quantity that increases annually until such time when the quantitative trade restrictions are removed. In addition to rice importation, the government has developed policies that have allowed the importation of agricultural products, which previously were sufficiently produced in the country such as onion, potato, garlic and cabbage. Urag concludes that three years after the launch of *Philippines 2000*, the supposed beneficiaries of the MTPDP, such as the farmers, have yet to see a substantive improvement in their lives. However, what is clear is that "the exploitation and destruction of the Philippine environment in pursuit of more profit continues."[56]

Despite the concerns regarding the detrimental impact of economic globalization on the environment, these are not considered to be global environmental problems as defined by the global institutions like the World Bank. The four global environmental problems identified by the Global Environmental Facility (GEF) confirm this observation. The GEF was established by the World Bank, the United Nations Development Program (UNDP) and UNEP in 1991

> … as a financial mechanism that provides grant and concessionary funding to recipient countries for projects and activities that address climate change, biological diversity, international waters, and depletion of the ozone layer.[57]

Three of the four environmental problems identified, except biological diversity, can be considered to be within the realm of what is often referred to as the global commons or

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[56] Urag, p. 13.

[57] Mikiyasu Nakayama, "The World Bank's environmental agenda" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation,* (Tokyo: United Nations University, 2000), p. 403.

> … those elements of the global ecosystem that are simultaneously used, experienced and shared by all and are under the effective jurisdiction or sovereignty of no one.[58]

On the other hand, the loss of biological diversity although often localized to specific areas is global because "extinction can be argued to have a moral, aesthetic and economic consequence for the entire planet."[59] Held and others further argue that within international law, "species diversity and biodiversity constitute part of the 'common heritage of mankind'."[60]

While these four global problems are significant environmental problems, Sussana Davies and Melissa Leach[61] observe that seldom are these problems discussed in the context of local livelihoods. They note that in contrast, "global environmental concerns are often discussed in terms of interdependence and the need for north/south cooperation to resolve common threats."[62] These discussions create the notion that only global environmental problems exist, and therefore, the solutions also need to be global, often at the expense of the interests of the local people.

The tendency to construct the global from the perspective alone of global institutions, according to Shiva[63] greatly narrows the scope of the global environmental agenda. She argues that this construction of the global has resulted in the local being marginalized from environmental concerns. She specifically identified as examples the nuclear and chemical industries, which operate globally. While the problems they generate may seem locally confined, such as the use of pesticides in agriculture, she

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[58] Held and others, p. 378.

[59] Held and others, p. 379.

[60] Held and others, p. 379.

[61] Sussana Davies and Melissa Leach, "Globalism versus villagism: National and international issues in food security and the environment", *IDS Bulletin*, vol. 22, no. 3 (1991), pp. 43-50.

[62] Davies and Leach, p. 43.

[63] Vandana Shiva "The Greening of the Global Reach" in Jeremy Brecher, John Brown Childs, and Jill Cutler (eds), *Global visions: beyond the new world order* (Montreal: Black Rose Books, 1993), pp. 53 - 60.

argues that these environmental problems are very much related to the global scope and reach of these companies.

These chemicals, such as pesticides may not qualify as examples of transboundary pollution because they are not technically pollutants that are transmitted

> … through the media of air, soil and water from their point of generation or creation across political borders so that their environmentally degrading impact occurs in other legal jurisdictions.[64]

The most often cited examples of transboundary pollution are acid rain and the risks of nuclear accidents, such as Chernobyl. However, Held and others argue, "there is a need to examine transboundary movement of pollutants that are the immediate, intended and often legal result of economic exchange and production." [65]They give as an example the trade of hazardous wastes and the relocation of pollutive industries, which are examples of what have been facilitated by deregulation and liberalization of trade.

However, despite the intentions of the GEF to address these global environmental problems, Mikiyasu Nakayama concludes, based on his study of the environmental projects funded by the World Bank in 1997 that "issues which can only be solved with a regional collaborative initiative have not yet been adequately addressed."[66] His observation comes from the absence of a mechanism to deal with loans involving more than one country. This mechanism is what is required in dealing with global or at least transboundary environmental problems. Clearly, while global institutions are attempting to identify and address these global problems, there is an absence of an effective mechanism to do so.

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[64] Held and others, p. 379.

[65] Held and others, p. 380.

[66] Nakayama, p. 403.

Shiva calls for the democratization of these global institutions, not by letting locals sit in global institutions but by these institutions bending down to the locals.[67] She identified five implications of this construction of global environmental problems to local communities, particularly in the less developed countries. These are,

(i)   the cooption of the language of dissent;

(ii)   perpetuation of a false causality, such as poverty causes environmental problems;

(iii)   a view that environmental problems are technical problems needing technical solutions and foreign aid;

(iv)   that the local needs to sacrifice for the benefit of the global; and

(v)   that relationships between the powerful 'global' and the local are not reflexive, the powerful can demand from the locals but the reverse is not acceptable.[68]

The implications that are relevant to the thesis are examined in the course of analyzing CEC's own construction of the local and the global in its practice of grassroots environmental education.

3.1.3   Globalization and the educational implications

This pursuit of profit has similarly influenced the broader educational practice in this period of globalization. This section examines the impact of economic globalization on education programs, more specifically on adult and community education, that are most closely related to CEC's educational programs. Alternative educational responses to this dominant economic paradigm, such as popular education, are examined in a succeeding section.

Within this dynamic globalizing context, Ann Hodgson and Maria Kambouri[69] write that the knowledge and skills acquired through compulsory education continue to be

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[67] Shiva, "The Greening…", p. 59.

[68] Shiva, "The Greening…", p. 53-60.

relevant but are no longer sufficient to equip adults to deal with this context. They observe that the major policy response in the United Kingdom has been the development of strategies for lifelong learning, particularly to address the needs of the labor market. This understanding of lifelong learning, according to Ove Korsgaard[70] is based on a neo-liberal concept that regards education as "an investment in 'human capital' and 'human development'."[71]

Research conducted by Alfred Telhaug is cited by Korsgaard[72] on the educational system of different countries has revealed that economic globalization has already established its influence. Telhaug's study shows a common tendency to shift from child-centered to economy-centered motivation. An example of this is the marked change in the use of the language of the market instead of language concerned with quality of life and community in formulating educational objectives.

The field of adult and popular education is not far behind. International bodies, like UNESCO, introduced in the late 1960s the concept of lifelong learning in relation to a humanistic tradition of democracy and human development. UNESCO has since allowed its educational policies to be strongly influenced by the Organization for Economic Cooperation and Development (OECD), which views adult education as an investment for economic development.[73]

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[69] Ann Hodgson and Maria Kambouri, "Adults as lifelong learners: The role of pedagogy in the new policy context" in Peter Mortimore (ed), *Understanding pedagogy and its impact on learning* (London: Paul Chapman Publishing, 1999), pp. 175-194,

[70] Ove Korsgaard, "Internationalization and globalization", *Adult Education and Development, Special issue: CONFINTEA V: Background papers* (July 1997), pp. 9-28.

[71] Korsgaard, 'Internationalization…" p. 16.

[72] Ove Korsgaard, "The impact of globalization on adult education" in Shirley Walters (ed), *Globalization, adult education and training: Impact and issues* (London: Zed Books, 1997), p.18.

[73] Korsgaard, "The impact of…", p. 18.

Paul Belanger[74] identifies that that the "critical issue in the lifelong learning debate has to do with the way in which societies will deal with rising general uncertainties."[75] This dynamic global situation is resulting to countries now adopting

> … new continuing education policies, and introducing new measures for the training and retraining of the active population, including the organization of open learning and distance education schemes.[76]

However, Matthias Finger and Jose Manual Asun observed that this new emphasis on retraining

> … has become 'privatized' in both senses of the word – become simultaneously a more private activity, and an activity which is increasingly run by the private sector for the benefit of private corporations.[77]

This condition is true even in developing countries where, according to Finger and Asun,

> … since World War II, and especially since decolonisation, education in general, and adult education in particular, have accompanied development projects and practices. Whether it is conceived as adult literacy, as extension, as training, or as a post-literacy program, the main goals of such adult education were – and to some extent still are – poverty alleviation and economic development.[78]

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[74] Paul Belanger, "The threat and the promise of a 'reflexive society': The new policy environment of adult learning", *Adult Education and Development,* no. 52 (1999), pp. 179-195.

[75] Belanger, p. 193.

[76] Belanger, p. 187.

[77] Matthias Finger and Jose Manual Asun, *Adult education at the crossroads* (London: Zed Books, 2001), p. 104.

[78] Finger and Asun, p. 100.

Given the prevailing context of "turbo-capitalism"[79] that has transformed adult education into a privatized and an intrumentalized activity, Finger and Asun describe three probable scenarios for adult education practice, which according to them are not mutually exclusive.

> The *business school scenario* is…a situation where adult education principles and practices are being incorporated into business training and development efforts…. The newly emerging concept of the learning organization, for example, allows these various adult education efforts to be integrated into a singe coherent framework, so that adult education is now being intrumentalized for the purpose of corporate development and growth.

> The *risk group scenario* is … [where] adult education would be assigned special risk groups of the current turbo-capitalism – those who are unable to fit into the accelerating industrial development process, such as the growing numbers of the unemployed, immigrants, young people, and perhaps women. All these and other risk groups would have to be 'up-skilled' and made fit for turbo- capitalism.

> The *leisure society scenario*… was quite prominent in the 1970s, and gave rise to a whole field of continuing education, might well persist. There are particular groups of people in today's society, even in the current economic crisis, who define learning in terms of leisure – particularly the elderly.[80]

All three scenarios share a similar role for adult learning, "as a mere tool that either promotes turbo-capitalism or repairing its most blatant negative effects."[81]   It is within this context that they ask "whether adult education as awareness-raising on social and environmental issues is still enough, given the perspective of a 'dead-end

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[79] Edward Luttwak coined turbo-capitalism in 1999 cited by Finger and Asun, p. 3.

[80] Finger and Asun, p. 134-136.

[81] Finger and Asun, p. 136.

industrial civilization'?"[82] These same questions are asked in examining CEC's educational practice in the context of a globalizing world.

The previous discussion has focused on the negative impacts of economic globalization on the economy, the environment and on education. But there are others who identify the benefits of economic globalization. Jose Antonio Alonso[83], in an OXFAM book described how the broadening of the international markets, a major feature of globalization, has "laid the foundations for one of the fastest periods of growth in the world economy between 1950 and 1973."[84] He noted that the broadening of markets has benefited not just the developed countries but also some countries in the Pacific Rim and Latin America. However, from the perspective of grassroots groups in the Philippines and of an NGO like CEC that has committed itself to working with these groups, it is difficult to get excited by economic globalization programs like *Philippines 2000*.

The other benefit that Alonso identified was the growing awareness at the global level for the need to develop structures and policies that address a globalizing world. He specifically identified the series of international UN summits as evidence of this growing awareness. The growth of this global awareness is examined in the following section, not from the point of view of the global institutions or corporations that have been the force behind "globalization-from-above", but from the counterforce which Richard Falk has called "globalization-from-below"[85] or a global civil society.

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[82] Finger and Asun, p. 5.

[83] Jose Antonio Alonso, " Globalisation, civil society and the multilateral system" in Deborah Eade and Ernst Ligteringen (eds), *Debating development: NGOs and the future* (Oxford: OXFAM GB, 2001) pp. 86-103.

[84] Alonso, p. 88.

[85] Falk, "The making of…", p.39.

3.2   Globalization-from-below

Friedman observed that globalization has produced "a powerful backlash from those brutalized or left behind by this new system."[86] Falk described this backlash as an example of globalization-from-below,

> … an array of transnational social forces animated by environmental concerns, human rights, hostility to patriarchy, and a vision of human community based on the unity of diverse cultures seeking an end to poverty, oppression, humiliation, and collective violence.[87]

In 1998, Falk clarified that in making a distinction between the globalization-from-above as the global market forces, and globalization-from-below as the response to the dominance of these market forces "may seem unduly polarizing and hierarchical, …[and] dualistic."[88] His intention is not to be moralistic or to simplistically characterize one as good and the other as evil. Instead he emphasizes, "the historic role of globalization-from-below is to challenge and transform the negative features of globalization-from-above."[89]

This section reviews the literature that documents and studies this powerful backlash, specifically, the response of what has been referred to as the global civil society. This is followed by an examination of the role of environmental NGOs and the educational challenges within global civil society.

3.2.1   Global civil society

Global civil society is often described as a response to the dominance and the too often detrimental impact of economic globalization to people's lives. However, in the

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[86] Friedman, p. 9.

[87] Falk, "The making of…", p.39.

[88] Richard Falk, "Global civil society: Perspectives, initiatives, movements", *Oxford Development Studies,* vol.26, no. 1 (February 1998), p. 100.

[89] Falk, "Global civil society...", p. 100.

same way that globalization itself has diverse meanings, the idea of a global civil society is equally diverse and complex. The following section examines the different descriptions of global civil society, with a particular focus on the environment and learning.

Falk earlier identified the environment and human rights movements as examples of transnational social forces that have managed to establish links between local action and global campaigns as examples of globalization-from-below. He later established his preference to refer to these forces as "global civil society" rather than "transnational civil society", because he argued that transnational situates and limits the action involved to crossing national boundaries. On the other hand,

> … global civil society refers to the field of action and thought occupied by individual and collective citizen initiatives of a voluntary, non-profit character both within states and transnationally.[90]

Similarly, Goran Hyden identified the global environment and human rights movements, such as Greenpeace and Amnesty International, as examples of a global civil society. He defined civil society as,

> … the arena of social engagement which exists above the individual yet below the state, encompassing a complex network of economic, social, and cultural practices based on friendship, family, the market and voluntary affiliation.[91]

He argued that the growth of these global associations and networks indicate that they no longer exist merely between the individual and the state but have crossed national borders in both scope and influence.

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[90] Falk, "Global civil society…", p. 100.

[91] Goran Hyden, "Building civil society at the turn of the millennium" in John Burbidge (ed), *Beyond prince and merchant: Citizen participation and the rise of civil society* (New York: Pact Publications, 1997), pp. 33.

Budd Hall[92] identified the actors who occupy the space he referred to as global civil society, which is for him

> … the place where social movement organizations, international research and advocacy networks, global policy bodies as well as a wide variety of non-governmental (NGO) and international non-governmental organizations interact with states, United Nations and other intergovernmental bodies and the private sector itself.[93]

He identified two inter-related phenomena with regards to an emerging global civil society. "First, it is the sum-total of local, national or regional civil society structures, [and second,] is the proliferation of specifically global forms of civil society."[94]

Karen Mundy and Lynn Murphy[95] identify that these same groups, identified as the building blocks of global civil society, have been called either "transnational advocacy networks" or "transnational social movements". Their activism targets global institutions and issues and use global visibility to advocate for changes at the national level. Some writers refer to these very same groups or actors, such as the environment, women's and peace movements as examples of "new social movements". One reason for the distinction is that unlike the (old) social movements, such as organized labor, which struggled for national democracy,

> … these new social movements are playing a crucial role in global democratization [through] mobilizing transnational communities of resistance and solidarity against impending global ecological, economic and security crises.[96]

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[92] Budd Hall, "Global civil society: Theorizing a changing world", *Convergence,* vol.33, no.1/2 (2000), pp. 10-31.

[93] Hall, p.11.

[94] Hall, p.12.

[95] Karen Mundy and Lynn Murphy, "Transnational advocacy, global civil society? Emerging evidence in the field of education", *Comparative Education Review,* vol. 45, no. 1 (2001), pp. 85-126.

[96] Held and others, p. 449.

In the Philippines, Robin Broad and John Cavanagh[97] observe that in addition to local and national work, organizations have become active in the international level developing partnerships with environment, development and religious groups overseas.

> Part of the motivation for expanding international links has been Filipinos' growing realization that transnational connections are the only way to fight international impediments to sustainable development.[98]

The previous descriptions of global civil society have focused on three areas. First, is its rationale, that of responding to the forces of economic globalization. Second, is its structure, which is often composed of multi-tiered and diverse networks around the world. And third, is its composition, which is an array of different individual and groups that work on a wide range of issues at different levels.

Aside from the motivation to respond to economic globalization, Held and others argue that the growth of the technology for communication has greatly facilitated the formation of this global civil society. In fact, environmental NGOs have been identified by Howard Frederick to be one of the first transnational payers that have exploited the rapid changes in global telecommunications.[99] The advancement of communication technology has contributed to the increase in the potential for public participation and the generation and use of new knowledge at the grassroots level. Grassroots activists have used this very technology to make others more aware and coordinate these local struggles.

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[97] Robin Broad and John Cavanagh, *Plundering Paradise: The Struggle for the environment in the Philippines* (Berkley: University of California Press, 1993).

[98] Broad and Cavanagh, p. 152.

[99] Howard Frederick, *Global Communication and International Relations* (Belmont: Wadsworth, 1993)

Naomi Klein quotes a *Financial Times'* description of the tools that contributed to the victory of this grassroots movement against the Multi-lateral Agreement on Investment (MAI) in April 1988.

> The opponents' decisive weapon is the Internet. Operating from around the world via Web sites, they have condemned the proposed agreement as a secret conspiracy to ensure global domination by multinational companies, and mobilized an international movement of grassroots resistance."[100]

And there continues to be more examples, of protests against economic globalization such as the farmers who challenged McDonald's in France, the massive protests during the WTO meetings in Seattle, and the M1 global protest rallies. According to Amartya Sen,

> The protesters often describe themselves as anti-globalisation. Are they really? The so-called anti-globalisation protesters can hardly be, in general, anti-globalisation since these protests are among the most globalised events in the contemporary world.[101]

However, despite the growing use of the technology to advance the cause of global civil society, it is important to acknowledge that access to these technologies is highly concentrated in the developed world. Furthermore, the languages that dominate the Internet and the ones used in global civil society networks is either English, and at times French. Both these circumstances effectively "excludes many important voices".[102]

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[100] Guy de Jobquieres, "Network guerrillas," *Financial Times* 30 April 1998 cited by Naomi Klein, *No Logo* (London: Flamingo, 2000), p. 443.

[101] Amartya Sen, "All players on a global stage" *The Australian* 16 May 2001, p. 11 [edited version of Alfred Deakin Lecture in Melbourne].

[102] Kumi Naidoo " The new civic globalism", Nation, vol. 270, no.18 (5 August 2000), pp. 34+. (Academic Search Elite: Item no. 3061787) http://ehostvgw6.epnet.com (04 October 2001).

Within the context of environmental problems and action, Ronnie Lipschutz[103] outlined his reasons for using the term global civil society.

> First, the term provides a convenient sort of shorthand. Second, it underlines the grounding of this sector in societal processes as opposed to state-centered, institutionalized political ones. And third, it suggests a form of social action somewhat parallel to the holism that one finds in some ecological models, without suggesting the indivisibility of the planet so characteristic of much environmental analysis.[104]

Helmut Breitmeier and Volker Rittberger[105] identify two developments, related to the global nature of environmental problems, that have contributed to the emergence of a global civil society, namely; the need for international collective management and for an international policy-making system. Aside from describing global civil society as a "set of actors who are able to act spontaneously and organize themselves freely without states imposing their wills on them", he identified that for such to exist "presupposes that the same states respect fundamental human rights, especially political and civil rights."[106]

However, Lipschutz acknowledges that global civil society is by no means a unity; in fact, Hall identified examples of contradictions within and between NGOs that see themselves as part of this emerging global civil society. One such contradiction involves NGOs, who continue to seek new funding sources, becoming subcontractors for global institutions, such as the World Bank. The same is true for NGOs that act as subcontractors for national governments in poverty alleviation programs in the Philippines. This arrangement, in effect, limits their ability to be critical of these institutions that provide these contracts.

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[103] Ronnie Lipschutz, *Global civil society and global environmental governance; the politics of nature from place to planet* (New York: State University of New York, 1996).

[104] Lipschutz, p. 1-2.

[105] Helmut Breitmeier and Volker Rittberger, "Environmental NGOs in an emerging global civil society" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), pp.130-163.

[106] Breitmeier and Rittberger, p.140.

It is therefore important to identify that amidst these contradictions there are segments of global civil society that continue to be "oriented in ways that specifically promote social and political change."[107] This is one reason why CEC prefers to be identified as part of the progressive people's movement in the Philippines rather than with civil society. Chapter 5 further describes the progressive people's movement in the Philippines and identifies similar contradictions brought about by these globalizing forces it is fighting against.

Lipschutz identified four modes of action that global civil society has been engaged with in the area of environmental protection. These include:

> … ecosystems management and restoration; fostering of localized environmental/development projects, environmental education; and participation in national and transnational networks and alliances.[108]

CEC has been involved, in varying degrees in the conduct of all four modes of action identified by Lipschutz. Each of these is discussed in chapters 5 and 6, with a more in-depth discussion on environmental education in the succeeding chapters.

3.2.2 Environmental NGOs

One of the examples often given in the literature for a global civil society is the environmental movement, specifically international, national and local environmental NGOs. Lin Gan[109] argues that aside from the liberalization and the integration of the global markets, and their effects on people, the democratization of political systems in Asia has equally contributed to the growth of civil society, particularly of environmental NGOs.

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[107] Lipschutz, p. 2.

[108] Lipschutz, p. 57.

[109] Lin Gan, "Energy development and environmental NGOs: The Asian perspective" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), pp.109-192.

Hilary French[110] described how the numbers of NGOs, specifically environmental groups have continued to increase, in particular since the 1980s. She cited statistics that document the percentage of environmental groups within all transnational social change NGOs, from two percent in 1953 to 14 percent in 1994.[111]

NGOs are often defined by acknowledging what they are not - that they are not organized by the state or the government. Paul Wapner[112] defined NGOs as "political organizations that arise and operate outside the formal offices of the state, and are devoted to addressing public issues."[113] He attempts an "ideal-type formulation" that describes environmental NGOs as "groups dedicated to protecting the quality of air, land, and water throughout the world, and the continued existence of the non-human species."[114] However he admits that this is a very narrow and limiting description because "protecting the environment is often a by-product of efforts to protect a community's economic base or resist social dislocations." He emphasized though that the complexity of issues that environmental NGOs deal with requires that "NGOs engage multiple levels of collective life and enlist numerous forms of political power to alter widespread practices."[115] This practice of multiple engagements of NGOs supports the idea of NGOs as intermediary organizations. From CEC's experience, this intermediary role was critical in the progressive contextualization of its educational practice, as the thesis argues.

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[110] Hilary French, *Vanishing borders: Protecting the planet in the age of globalization* (London: Earthscan, 2000).

[111] French, p. 164.

[112] Paul Wapner, "The transnational politics of environmental NGOs: Governmental, economic and social activism" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), pp.87-108.

[113] Wapner, p. 89.

[114] Wapner, p. 91.

[115] Wapner, p. 88.

Based on a study of Asian NGOs involved in energy issues and environmental protection, Gan identified three types of NGOs: research-oriented NGOs, lobbying NGOs and mediating NGOs.[116] He described them as follows:

> Research-oriented NGOs are those with informational and advisory characteristics. They are motivated by the value of their service accomplished through scientific knowledge development, consultation and policy advice.
>
> Lobbying NGOs are those with critical, sometimes radical attitudes toward development projects with major environmental impacts. … This type of NGO focuses on advocacy when they conduct lobbying activities against policies of governments and international aid agencies.
>
> Mediating NGOs are those providing network services. … Their main interest lies in making connections and providing information on important issues to concerned interest groups and individuals.[117]

David Korten identified four types of NGOs, namely, volunteer organizations, public service contractors, people's organizations and governmental nongovernmental organizations.[118] However, of more practical significance to this study is what Korten's classification of NGOs based on the their organizational strategies.

> First generation strategies (Relief and Welfare) involve the NGO in the direct delivery of services to meet an immediate deficiency or shortage experiences by the beneficiary population, such as needs for food, health care or shelter.
>
> Second generation strategies (Community Development) focus the energies of the NGO on developing the capacities of the people to better meet their own needs through self-reliant local action.

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[116] Gan, p. 113.

[117] Gan, pp. 113-117.

[118] David Korten, *Getting to the 21st century: Voluntary action and the global agenda* (Connecticut: Kumarin Press, 1990), p. 2.

Third generation strategies (Sustainable Systems Development) look beyond the individual community and seek changes in specific policies and institutions at local, national and global levels.

Fourth generation strategies (People's Movement) look beyond focused initiatives aimed at specific policies and institutional subsystems. Their goal is to energize a critical mass of independent, decentralized initiative in support of a social vision.[119]

Breitmeier and Rittberger, [120] on the other hand identify two types of NGOs these are advocacy and service organizations. They described advocacy NGOs as often involved in educating, mobilizing and organizing the general public around certain issues often to act as a pressure group to lobby politicians and decision-makers. Service NGOs, on the other hand, assist other organizations by providing a specific service or in implementing public policies.

In particular for environmental NGOs, Breitmeier and Rittberger present another scheme of describing NGOs based on their relationship with economic actors.

'Pragmatic' environmental NGOs believe that environmental protection can be achieved within a market economy and that openness to discussing even divisive issues with political adversaries will promote the goals of environmental NGOs in the long term even accept donations from private firms.

'Fundamentalist' NGOs are more opposed to a political approach accepting the rules of the market economy [and] argue that these contributions will make environmentalists dependent on their adversaries and will thwart environmental goals.[121]

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[119] Korten, pp. 114–127.

[120] Breitmeier and Rittberger, p. 135.

[121] Breitmeier and Rittberger, p. 152.

Attempting to classify CEC using the above categories is rather difficult. Based on Gan's typology CEC would qualify with all three of the types of NGOs, namely research, lobby and mediating. Using Korten's classification, CEC would primarily employ a second generation strategy, but would be also involved in third and fourth generation strategies, particularly with its networks. The same is true for Breitmeier and Rittberger's general classification of NGOs where CEC qualifies as both an advocacy and a service NGO. However applying Breitmeier and Rittberger's classification of environmental NGOs, CEC is more the fundamentalist type given its critical stance against private corporations and the government. Clearly, in the real world, these descriptions and typologies tend to blur, and more importantly are very context specific. The classification of CEC as an NGO is further examined in relation to the development of NGOs in the Philippines in chapters 5 and 6.

Many of the authors examined acknowledge that the Earth Summit was a watershed for the "democratization of global environmental governance"[122], particularly in terms of the participation of civil society before and the during official conference. Naidoo[123] described that there were some 2,400 NGO representatives who attended the main conference together with their respective official government delegates, not to mention the 17,000 delegates who attended the simultaneous International NGO Forum (INGOF). This level of participation of NGOs, according to Breitmeier and Rittberger[124] has continued even in the post-Rio period, specifically in the political processes of the UN system, World Bank, and a large number of international conventions,

But despite this democratization, Thomas Princen, Matthias Finger and Jack Manno point out "many NGOs invested in strengthening the UNCED process, but neglected

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[122] French, p. 170.

[123] Naidoo, pp.34+.

[124] Breitmeier and Rittberger, p. 133-134.

the positions of NGOs operating at the grassroots level." [125] This observation is consistent with the role that Filipino NGOs played during the INGOF. Hector Soliman reported the following during a round table discussion after the Earth Summit.

> I am happy to note that the Philippine NGO delegation was very active both in the preparation, conduct and follow-up of the International NGO Forum. In fact, one of our NGO personalities, Mr. Junie Kalaw, was a co-chairperson of the Forum. The principal design of the process was also delegated to the Philippine NGOs. The participation of the Philippine NGOs at the Forum consisted of both being part of the Secretariat, which was handling the day-to-day activities of the Forum, and at the same time, of involvement in what we now call the alternative treaty making process. [126]

However, some Filipinos who attended UNCED claim that the involvement of the Filipinos in facilitating the conference process took time and energy away from advocating for the local issues that were identified in extensive series of pre-UNCED workshops in the Philippines. Isagani Serrano describes this situation as the reality of lobby campaigns, whether,

> … during the Earth Summit in Rio or during annual meetings of the IMF and the World Bank, we have seen how ideas and people get swamped or "coopted" in an arena that pits the powerful against the less powerful. [127]

But Serrano emphasizes that these situations are valuable learning opportunities.

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[125] Thomas Princen, Matthias Finger and Jack Manno, " Transnational linkages" in T. Princen and M. Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 222.

[126] Hector Soliman, "Reaction" in Joseph Sedfrey Santiago and Edna May Grecia (eds), *The United Nations Conference on Environment and Development: Myths and Realities (A Round Table Discussion)* (QC: University of the Philippines Institute of International Legal Studies, 1992) p. 70.

[127] Isagani Serrano, "Learning sustainability from crisis", *Convergence*, vol.33, nos. 1/2 (2000), p. 98.

Breitmeier and Rittberger[128] claim that NGOs representing local civil societies in international negotiations are often haunted by the question regarding whom they represent, given that they do not have the legitimacy that governments, who are voted in periodically have. Wapner agrees with this observation and is explicit that NGOs are "ultimately accountable to their funders, and yet, those funders do not necessarily represent the public interest."[129] They emphasized that environmental NGOs, despite their emphasis on working for the betterment of the environment are not above the influence of political loyalties. These are clearly additional contradictions that need to be examined in the context of the experience of CEC.

In particular, this thesis focuses on the class of environmental NGOs that are locally based, compared to international NGOs like Friends of the Earth and Greenpeace. This focus is due to the fact that CEC is a national NGO that is based in Manila, but works, within and outside the Philippines, particularly through its network of groups that share a similar focus on social change.

Princen and Finger are explicit that they "do not assume that NGOs are the solution to the global environmental crisis."[130] Given the global context that we face, they stress that we cannot be "doing more of the same … societies must *learn* their way out of the environmental crisis."[131] This situation, they emphasize, calls for a new form of politics, where NGOs play a role that goes beyond the usual lobbying at the national level. They argue that this new form of politics challenges the reliance of the state on science to solve what are strictly not solely scientific and technical problems. This form of politics is consistent with their argument that,

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[128] Breitmeier and Rittberger, p. 135.

[129] Wapner, p. 94.

[130] Thomas Princen and Matthias Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 11.

[131] Princen and Finger, p. 10.

> … traditional, state-centered political and scientific problem-solving mechanisms have been atomistic – single-species, single- chemical, single-medium – not systemic and holistic in their approaches.[132]

They identify a critical feature of NGO intervention that provides a succinct summary of the role and tensions experienced by environmental NGOs as mediators through their ability

> … to link the essential knowledge base (scientific and earth-centered) to the world of politics, to translate biophysical needs into choices a wide range of actors can make at many levels of decision making.[133]

Therefore they are more than just a lobby group, in fact, they are "agents of social learning"[134] that manage to link the biophysical with the political, while simultaneously acting at various levels along the spectrum of the local and the global. NGOs can achieve this, they continue, because of their ability to form coalitions and networks as part of their work.

This ability of NGOs to network and form coalitions supports the previous observation of Wapner[135] regarding the multiple levels of engagement of NGOs and the argument of the thesis regarding the intermediary role of NGOs, like CEC. However, this intermediary role includes not just mediating between different forms and levels of organizations, but equally between different knowledge bases, such as the scientific and the political. Both intermediary roles contribute to the identification of NGOs by Princen and Finger as "agents of social learning."[136] Similarly, both these types of intermediary roles are identified by the thesis to have facilitated the progressive contextualization of CEC's educational practice.

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[132] Princen, Finger and Manno, p. 220.

[133] Princen, Finger and Manno, p. 223.

[134] Princen, Finger and Manno, p. 228.

[135] Wapner, p. 88.

[136] Princen, Finger and Manno, p. 228.

The following section examines further the challenges of facilitating social learning that responds to the impacts of economic globalization.

3.2.3   Learning and the environment within global civil society

Similar to Princen and Finger, the notion of global civil society, specifically NGOs, as sites for learning was identified by a number of other authors reviewed, such as Falk, Hall and Lipschutz. Falk[137] as early as in 1982 described what he saw as "enlightenment from below" as part of the struggle of the oppressed in the context of the current world order. Hall on the other hand suggested, "global NGOs and networks would be more effective if they were to be re-conceptualized as learning networks."[138]   However, while he identified these as part of the global learning strategies of a global civil society, he described that the "emphasis needed [was] on interactive starting-where-one lives learning."[139]

Lipschutz specifically identified social learning in the context of addressing local and global environmental problems within the context of a global civil society, which he described as "networks of knowledge and practice".[140] He argued that education must not only be

> … a method of communicating knowledge but also a means for changing the social structures through which global and local environmental change- both degradation and restoration- are taking place.[141]

Korsgaard suggests that to achieve this adult and popular education needs to develop new concepts and methods that address the reality of a world where the global and

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[137] Richard Falk, "An Invisible Oppression and World Order" in Richard Falk, Samuel Kim and Saul Medlovitz (eds), *Toward a just world order* (Boulder: Westview Press, 1982), p.46.

[138] Hall, p. 28.

[139] Hall, p. 28.

[140] Lipschutz, p. 49.

[141] Lipschutz, p. 50.

the local are "interconnected and interdependent in ways that humanity has not experienced before". [142]

Finger and Asun propose an alternative to the three probable scenarios (business school, risk group and leisure society) described earlier and call it the *social ecological responsibility scenario.* In this scenario adult education has to

> … redefine its identity in light of today's new societal challenges without abandoning its commitment to social change and social action…[This] will be a scenario of participatory democracy, citizen's reassumption of responsibility, community building and empowerment. [143]

In terms of developing new concepts, the limitations of scientific concepts is clearly illustrated by Astrid von Kotze[144] who described a situation when the South African Government warned the public about the *El Nino* weather disturbance, which previously resulted in the failure of cereal crops, malnutrition, starvation, and increased unemployment. She criticized how awareness campaigns focused on popularizing scientific information about *El Nino*, but was silent on "the political, socio-environmental and economic problems that cause the real risk."[145] She described that majority of training programs on disaster mitigation are predominantly based on

> … disseminating specialist scientific information and technical skills, rather than improving conceptual understanding and community-based participation.[146]

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[142] Korsgaard, "The impact of …", p. 24.

[143] Finger and Asun, p. 136.

[144] Astrid von Kotze, "Changing perceptions of risk: Participatory training for development practitioners", *Adult Education and Development*, no. 53 (1999), pp. 231-237.

[145] Von Kotze, p. 232.

[146] Von Kotze, p. 233.

She related how based on the above-mentioned criticism they have developed a training that involves the participatory approach.

Similarly, Angelina Briones and Charmaine Ramos[147] in an article that examines the impact of the GATT-WTO on food security in the Philippines identify the limitations of scientific and technological advances in responding to the problems of food insecurity. In addition to the required social and institutional reforms, they conclude that there is a need to develop the knowledge, skills and productive capacities of the farmers. They recommend that the

> … educational process should explore creative, stimulating, and dynamic approaches; it should explore innovative strategies. The methodology should be participatory and evolutionary. Build-up of knowledge and skills should be relevant to prevailing resources and conditions in the locality; biophysical, social, cultural and economic.[148]

However, the conduct of participatory approaches is not as simple as it is made to be. Jorge Osorio Vargas[149] identifies that popular education is facing a crisis of pedagogy in the context of the dynamic global context. He stresses that there is a need to break away from the idea that

> … there is a single methodology in the complex process of educational intervention with the popular sectors. There is not 'one' method or 'one' focus. In a world of changing political and social conditions, it is clear that educational measures cannot be successful unless they are decentralized and make 'the value of local education' their focus. This refers not only to practice, but also to the development of theory. It calls for a redefinition of the relation between local projects and the global perspective and the revision

[147] Angelina Briones and Charmaine Ramos, "Market forces and food security: The Case of developing Asia" in P. Chasek (ed), *The global environment in the twenty-first century: prospects for international cooperation* (Tokyo: United Nations University, 2000), pp. 223-252.

[148] Briones and Ramos, p. 247.

[149] Jorge Osorio Vargas, "Rethinking popular education – An interim balance", *Adult Education and Development*, no. 48 (1997), pp. 9-18.

of our thinking on the connection between local actors and the major social movements.[150]

Linzi Manicom and Shirley Walters[151] identified "transnational exchange of experiences" through networks as an important method of linking what may seem to be diverse local issues together into a broader global picture. However, she warned that their experiences with feminist popular education have made them aware of the danger of homogenizing, diluting and decontextualizing grassroots women's concerns for more globalized uniform issues and solutions.

It is therefore important that education work as a response to the impact of economic globalization continue to be grassroots based or locally contextualized. Raul Aramendy[152] based on the work of the *Centro Ecumenico de Educacion Popular* in Argentina emphasized that

> … work at the grassroots is a basic requirement, not only so that our educational activities can truly bring about change, but also so that we can build up a system of thinking, and educational and political theory that is based on real life and runs through all we do, through our social practice, is hence at the service of this and other similar practices, is relevant to the transformation of reality, and is interpretative and operational, appropriate to liberationist pedagogy and superior to thinking that is interpretative and speculative.[153]

An example of how these contradictions and tensions translate to the context of the Philippines is described by Perlas in relation to the example of the corn farmer in Mindanao described earlier.

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[150] Vargas, p. 11.

[151] Linzi Manicom and Shirley Walters, "Feminist popular education in the light of globalization" in S. Walters (ed), *Globalization, adult education and training: Impact and issues* (London: Zed Books, 1997), pp. 69-78.

[152] Raul Aramendy, "Learning to fly", *Adult Education and Development*, no. 53 (1999), pp. 265-285.

[153] Aramendy, p. 277-278.

NGOs and POs may conduct their normal training, technical support, community organizing, gender sensitive work, and the like. But then their 'alternative' efforts will ultimately still feed into the conventional market which not only created the problems in the first place but which undermines most conventional NGO efforts directed to address these problems. … If they engage in micro-enterprises without a reconceptualization of what 'business' and the 'market' means in today's reality, NGOs will be developing among themselves and POs the cultural and economic basis for de facto, albeit unintended, indoctrination in neo-liberal economics even if NGOs consciously know that this is part of the problem they are trying to solve.[154]

Ocampo similarly identifies that the challenge is to

… re-educate more and more of our people about the realities, the harsh facts of globalization so that we know and define where we stand, and also work hard to find ways to save ourselves, our country and our future generations, from the very destructive impact of globalization and if possible to prevent the very rapid implementation of the Ramos government of the programs of globalization under the Philippines 2000.[155]

Korsgaard brings the threads of the context and the education together when he concludes his paper by stating that

People's participation in the economic, social, political and cultural transformation of the world is the central issue of our time. This can only be achieved through adult learning: of the people for the people and by the people.[156]

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[154] Perlas, *CADI Monograph*, p. 6.

[155] Ocampo, p.20.

[156] Korsgaard, "The impact of …", p.27.

This form of learning, as Princen and Finger remind us involves more than just education. In fact they stress that

> … 'education' is not enough, especially if it is carried out by defenders of the status quo. Rather politically active actors, those who can publicize, expose, and monitor environmental trends with little fear of offending constituencies or losing customers, are necessary to promote fundamental change.[157]

They conclude that the distinctive role of NGOs is more than educational, which often is associated with raising environmental awareness. They identify this role to be "politicizing the biophysical and linking the local and the global."[158]

3.3   Chapter summary

The chapter has identified different descriptions and dimensions of globalization, but is focused on economic globalization and a global civil society and its impact on the environment and education work. It acknowledged the multi-dimensional causes, effects, and nature of this process of globalization. It identified the critical role of the development of communications technology in rapid spread of economic globalization, in particular. Economic globalization, which has tended to dominate the debates and discussions on globalization, in the Philippines, is often identified with trade liberalization and the GATT-WTO. Together with the government, these global institutions have passed policies that favor foreign investments to help repay its foreign debt. However, as the experiences of the Philippines and other developing nations have shown, the promises of economic globalization have not been equitably distributed. In fact, the resulting poverty has continued to place pressure on the environment in both developed and developing nations. The thesis situates its study of CEC's educational practice within this dynamic globalizing context and, in particular its impact on the Philippine environment.

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[157] Princen and Finger, p. 11.

[158] Princen, Finger and Manno, p. 226.

Despite the wider spread negative impact of economic policies on the environment, the chapter identified that these are not considered to be global environmental problems. The four global environmental problems identified by the GEF are climate change, biological diversity, international waters, and depletion of the ozone layer. The thesis examines the influence of this construction of the global on the development of CEC's environmental education practice.

Economic globalization, as the chapter has identified, has similarly influenced the educational practice. There is a growing emphasis of the concept of lifelong learning and of adult education as investments for economic development. However, there is equally a move to reassert the original links of adult education with social movements and people's empowerment. The thesis examines CEC's educational practice within these debates between educators within a globalizing world.

The chapter has identified the growth of a global civil society as a response to the dominance and the detrimental impact of economic globalization. The environment and human rights movements were identified as examples of global civil society that have successfully established links between local action and global campaigns. Environmental NGOs were specifically identified and described in the chapter. A review of NGO typologies, however, confirmed the difficulty of classifying most NGOs, like CEC. This is partly due to the ability of NGOs to be intermediary organizations that are capable of playing different roles at multiple levels. The thesis examines this intermediary role of CEC and its contribution to its own organizational development.

The chapter identified the importance of facilitating social learning in responding to economic globalization. It described how the intermediary nature of NGOs was critical in developing these alternative learning strategies. Educational strategies, specifically in environmental education, that are capable of linking the local and the global, the biophysical and the political. The thesis examines the role of CEC, as an intermediary organization, in the development of its educational practice. It also examines the development of this educational practice, in particular, the effect of negotiating between the local and the global, and the biophysical and the political.

Finally, the chapter identified the wider expectations from NGOs in terms of their role in contributing to social learning, beyond the educational challenge of awareness raising. The thesis acknowledges that CEC's grassroots environmental education work is only one of the many environmental activities that were conducted by CEC during the period under study. It also acknowledges that this educational practice developed not in isolation but together with these other environmental activities and responses. Therefore it is important for the thesis to situate the development of CEC's educational practice in the context of its broader environmental work, which is described in chapter 6. However, as identified earlier, the thesis limits the examination of CEC's environmental work to the progressive contextualization of its educational practice.

Chapter 4

Educational themes and tensions

Progressive contextualization and tensions between the local and the global, the biophysical and the political, and the participatory and prescriptive can be described as the educational themes that thread and bind this thesis. Duhaylungsod identified the idea of progressive contextualization in 1991 and recorded it in 1995. This idea was based on his own reflections on CEC's experience and his knowledge of Vayda's description of a human ecology research methodology. Similarly, the three tensions were identified during the course of the examination of CEC's experience, which was informed by a review of the relevant theoretical guides of the research. Clearly, it has been through this dialogue between the experience and the theory that these major themes have surfaced. In the language of grounded theory, these educational themes are the "overarching explanatory schemes"[1] that have been identified from conceptual ordering of the experience being studied.

This chapter examines each of these themes in the context of the literature and CEC's educational practice. It begins with an analysis of educational practices from the relevant literature that are similar to the practice of progressive contextualization. This discussion is followed by a synthesis of the three educational tensions using the Context-Content-Method framework. Finally, the chapter summary revisits the thesis research questions in the light of the educational tensions identified.

4.1   Progressive contextualization

Progressive contextualization has been identified earlier as an approach conducted by CEC whereby its grassroots environmental education practice was adapted to the local context. The thesis examines this local practice and situates it within the

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[1] Anselm Strauss and Juliet Corbin, *Basics of qualitative research: Techniques and procedures for developing grounded theory* (California: SAGE, 1998), p. 25.

context of a globalizing world. I described the educational approach of progressive contextualization in 1996 as,

> … the on-going process of adjusting learning objectives and training modules, revising frameworks and approaches, and reflecting on practice and experience in response to the particular context of the learners.[2]

It was again described in a 1997 draft CEC publication.

> Progressive connotes an action that is on-going or dynamic and that becomes better after each action. Together, progressive contextualization indicates a positive dynamism of the education module in terms of changing with the times or the broader context.[3]

Chapter 1 recognized that this description was formulated prior to the identification of Andrew Vayda's research methodology as the original source of the concept of progressive contextualization. Vayda described it as a methodology in human ecology research that

> … involves focusing on significant human activities or people-environment interactions and then explaining these interactions by placing them within progressively wider or denser contexts. … [It is based on a] holistic premise that adequate understanding of problems can be gained only if they are seen as part of a complex of interacting causes and effects.[4]

From the education literature reviewed, it can be observed that there is a growing recognition of the importance of context in educational practice. While the phrase

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[2] Jose Roberto Guevara, "Facilitating community environmental adult education in the Philippines: Transformation in Action" (1996) [unpublished material].

[3] Noel Duhaylungsod and J. Roberto Guevara, "Purposive Education: An Examination of Context, Content and Process of Grassroots Environmental Education Experience in the Philippines" (QC: CEC, December 1997), Chapter 3, p.6 [unpublished manuscript].

[4] Andrew Vayda. "Progressive contextualization: Methods for Research in Human Ecology", *Human Ecology: An Interdisciplinary Journal,* vol.11, no.3, (1983), pp. 265-266.

progressive contextualization may have been absent in the education literature surveyed, the practice of contextualization of educational programs was present. The following educators describe the role of context in their own educational practice.

Sharan Merriam and Rosemary Caffarella[5] argue that context has always been a key consideration in adult and popular education work. They note that the strands of adult education linked to community-based and social action programs, have "always incorporated the concept of context in their work."[6] Although, they add, that this awareness, of the importance of context has received much more attention in the 1990s. This recognition is due to the observation that education programs are context specific. Based on the practice of adult environmental education, Apel and Camozzi argue that one "cannot simply transfer the concepts shaped in industrial, democratic contexts gained from Western cultural patterns."[7] Robottom and Hart, writing on socially critical environmental education, observe that when context is taking into consideration,

> … environmental education is doubly idiosyncratic: not only are the environmental issues that form the substance of environmental education curriculum usually specific in time and space, but the educational problems associated with developing and implementing such a curriculum are rarely susceptible to universal solutions.[8]

Different contextual factors that shape different streams of popular and environmental education were identified from the literature. Merriam and Caffarella highlight two dimensions of context significant to adult and popular education, namely, the interactive and structural dimensions.

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[5] Sharan Merriam and Rosemary Caffarella, *Learning in adulthood: A comprehensive guide*, 2nd edn. (San Francisco: Jossey-Bass, 1999).

[6] Merriam and Caffarella, p. 392.

[7] Heino Apel and Anne Camozzi, *Adult Environmental Education: A Handbook on context and methods* Supplement to Adult Education and Development no. 47 (1996), p. 26.

[8] Ian Robottom and Paul Hart, *Research in environmental education: engaging the debate* (Geelong: Deakin University and Griffith University, 1993), p. 24-5.

The interactive dimension acknowledges that learning is a product of the individual interacting with the context. The structural dimension includes consideration of factors such as race, class, gender, cultural diversity, and power and oppression.[9]

While the thesis acknowledges both of these dimensions, CEC's practice has been focused more on the structural dimension. The focus on the structural dimension is consistent with Merriam and Caffarella's observation that adult educators are "shifting from a primarily psychological orientation to a broader contextual view."[10]

This shift to a broader context is consistent with Vayda's progressively wider contexts. The following are examples of a number of environmental education programs addresses wider contexts. Fensham[11] in 1978 described a model of teaching environmental education in schools that was presented in Tbilisi. This teaching process is very similar to Vayda's description, except that it involves a longer time frame, specifically, the entire duration of a student's years in school.

In it, learners throughout their schooling explore a succession of widening environments. In the first years pupils would learn about their homes and the range of possibilities home environments can take. Then they study the village or part if the town in which their school is set, the its countryside, then a region of which it is a part, then the nation and finally other related or more distant countries. This concentric approach is attractive because it makes it easier to decide what environments are, or can be made meaningful at what stages of schooling, and how the skills of choosing can be steadily developed.[12]

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[9] Merriam and Caffarella, p. 393.

[10] Merriam and Caffarella, p. 404.

[11] Peter Fensham, "Stockholm to Tbilisi – the evolution of environmental education", *Prospects*, vol. 8, no. 4, 1978, pp. 446-55 in Greenall Gough, pp. 61-68.

[12] Fensham in Greenall Gough, p. 66.

Fien[13] describes another example. This approach is conducted in schools using the approach of critical education *for* the environment. The program begins

> … with the study of environmental issues and problems on a local scale. This is to provide opportunities for students to develop concepts, procedural values and skills of political literacy so that the may learn how to participate actively in seeking solutions to the problems that concern them. The analysis of local concerns is then extended to consider national and global implications. The global perspective, especially on local issues, that education for the environment seeks to develop is often summed up under the rubric of 'think globally – act locally'.[14]

Finally, Oliver describes a similar approach based on her research work on environmental popular education in Mexico.

> This research supports pedagogical approaches, which begin with local problems and extend outward to an exploration of regional, national and international linkages (and then back again to local action). Ideally people's critical knowledge about the links between local problems and root causes can support more effective grassroots action at different levels of power. However the focus on the local is also of foremost importance in workshops since it is at this level that people may feel they can take immediate and collective action, which may be the most inspiring facet of environmental popular education.[15]

All three examples have managed to deal with progressively wider contexts, by linking the local, whether school or community, with the regional, national and global contexts. However, Jorge Osorio Vargas identifies a larger task beyond

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[13] John Fien, *Education for the environment: critical curriculum theorising and environmental education* (Geelong: Deakin University and Griffith University, 1993).

[14] Fien, *Education for the environment*, p. 43.

[15] Beatriz Oliver, "Participation in environmental popular education workshops: An example from Mexico", *Convergence*, vol. 33, no. 4 (2000), p. 50.

merely addressing wider contexts. Vargas argues that the challenge requires "more than just the revision of concepts [but] involves our capacity to adjust our practice to *new* contexts."[16]   Understanding this new context, Vargas continues is essential in order to rebuild the theory and practice of popular education in Latin America. He agrees that educational practice needs to be adjusted to include the ability to establish a dialectical relationship between the local and the global. However, he adds to this the following factors: educational methodologies; alliance building across institutions, social movements, professional organizations, school and universities; and incorporating the themes of gender and sustainable development. However, he identifies that the major context is global, in particular the impact of neo-liberal economic policies on the State and its relationship with the market and new social policy frameworks. [17]

Merriam and Caffarella agree with Vargas' observations. In fact they identify that this broader context includes three major forces, which currently affects society and adult learning. These forces are demographics, the global economy and technology. These three forces represent aspects of a globalizing world, the main context of progressive contextualization that the thesis examines.[18]

Given the previous discussions, it can be argued that progressive contextualization is not merely about wider and denser contexts, but about addressing new contexts, as well. This aspect of progressive contextualization requires that it be an on-going process. As Apel and Camozzi observe, "environmental education should be planned as a *contextual process* structured through a conscientious incorporation of the culture and living world of those involved in the learning experience."[19]

Based on the previous descriptions of progressive contextualization from CEC's experience and from the literature reviewed the following observations can be put

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[16] Jorge Osorio Vargas, "Rethinking popular education – An interim balance", *Adult Education and Development*, no. 48 (1997), p. 11[emphasis added].

[17] Vargas, p. 12-18.

[18] Merriam and Caffarella, p. 404.

[19] Apel and Camozzi, p. 11 [emphasis added].

forward. First, context is recognized as an essential aspect in the practice of popular and environmental education. Second, there has been a shift in emphasis in popular and environmental education from the context of individual learner, or the learning context, to the broader or structural context. Third, most popular and environmental education programs recognize the need to address the relationship between the local and the global context, or as Vayda put it, denser and wider contexts. Fourth, there is a need to acknowledge and address that the major contextual factors, such as globalization are dynamic contexts. And therefore, fifth, progressive contextualization needs to be an on-going process. These observations are re-examined in the light of CEC's practice of progressive contextualization.

4.2   Educational tensions

The preliminary review of literature involved a general survey of the areas of popular environmental education, progressive contextualization, and a globalizing world. The examination of CEC's experience and the writing of the main research narrative, which involved processes of reflection and analysis, followed this initial literature survey. A number of educational tensions were identified from both the literature and CEC's field experience during the process of writing, reflection and analysis. These tensions were the basis for the re-examination of the previously reviewed literature and the examination of additional recent publications in the areas identified.

Three educational tensions were identified. These three tensions serve a number of purposes. First, they provide a way to synthesize the theoretical guides based on the examination of the literature in the areas of popular and environmental education and a globalizing world. Second, they provide an analytical tool for narrating and examining the educational practice and process of progressive contextualization. Third, it provides a framework for reporting the outcomes of the research.

These three tensions use the CCM framework identified in chapter 2 based on the experience of popular education in the Philippines. The three tensions were not the only ones identified, but they are considered to be the main tensions that are relevant to the examination of the progressive contextualization of CEC's educational

practice. The three tensions appear as dualities, but they are not seen as either or situations. In fact, the practice of progressive contextualization made possible negotiating between these tensions. Initially they are identified as educational tensions, because they were identified based on the progressive contextualization of CEC's educational practice. However, as the thesis argues, these same tensions were organizational tensions as well. Therefore, these tensions shaped both CEC's organizational policies and its educational practices.

The three tensions are, the local and the global for context, the biophysical and the political for content, and the participatory and prescriptive for method. All three are interrelated but due to the focus of the thesis, more emphasis is placed on the context and how it also affects the other two areas. Furthermore, the thesis treats each of these tensions separately; these three tensions are by nature not isolated from each other. Princen, Finger and Manno describe that the challenges of a new form of social learning involve "linking the biophysical conditions with political concerns while simultaneously acting locally and globally."[20]

4.2.1   Context: local and global

The context of the local and the global was a key tension in most if not all of the literature examined. Situating the research within a globalizing world has in some way pre-determined this first tension between the local and the global. However, as the research developed the multiple meanings of the local and the global as applied to educational practice grew beyond Vayda's description of denser and wider contexts.

The review indicates that there seems to be some agreement with Beck's idea of globality, which means

> … that from now on nothing which happens to our planet is only a limited
> local event; all inventions, victories and catastrophes affect the whole world,

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[20] Thomas Princen, Matthias Finger and Jack Manno, " Transnational linkages" in T. Princen and M. Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 228.

and we must reorient and reorganize our lives and actions, our organizations, and institutions, along a 'local-global' axis.[21]

However, there is less unity in terms of what constitute the local and the global within a globalizing context, and more specifically its implications to popular environmental education practice.

Examining the definitions of the local and the global has often focused on the dualities of extremes in terms of both space and scale. Nireka Weeratunge in her anthropological work of human and environment relationships writes that she uses the terms local and global not as a dichotomy but as two ends of a spectrum across both geographical and cultural spaces. This approach, she argues is based on the recognition of the "lack of definitional stability and the problems of boundaries" in using these terms.[22]

Michael Peter Smith[23] agrees that there is a need to move beyond the global-local duality. This relationship, according to him, is a

> … false opposition that equates the local with a cultural space of stasis, ontological meaning, and personal identify and the global as the source of dynamic change, the decentring of meaningfulness, and the fragmentation / homogenization of culture.[24]

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[21] Ulrich Beck, *What is globalization?* (Cambridge: Polity Press, 2000), p. 11.

[22] Nireka Weeratunge, "Nature, harmony and the Kaliyugaya: Global/local discourses on the human-environment relationship", *Current Anthropology*, vol. 41, no.2 (April 2000), pp. 249+. (Expanded Academic ASAP Int'l Ed: Item no. A62022729) http://web5.infotrac.galegroup.com (30 May 2001).

[23] Michael Peter Smith, "The disappearance of world cities and the globalization of local politics" in Paul Knox and Peter Taylor (eds), *World cities in a world-system* (Cambridge: Cambridge University Press, 1995), pp. 249-266.

[24] Michael Peter Smith, p. 257-58.

The notion of spatial scales, according to Robert Beauregard[25] often appears not just as a series of two-dimensional 'nested' spatial scales, where the local is within the regional, within the national, and within the global. Often it appears as a three-dimensional one, where the 'larger' scale appears as higher and more dominant to the 'smaller' scale. Beauregard identifies a second approach[26] to spatial scales that helps to broaden it into a "socio-spatial process" by incorporating the "geographical reach of actors", which is often not limited to either purely local or global. He concludes that

> … once we recognize that major actors frequently operate at numerous spatial scales, then we must abandon a simple geographical nesting of scales and a rigid categorization of actors in terms of spatial reach.[27]

This reconfiguration, according to Beauregard, results in spatial scales existing only temporarily as 'purely' local, national, or global, because it has in essence incorporated the interest and actors from other scales. The reconfiguration of spatial scales into socio-spatial processes is significant in terms of the dominant construction of the local and the global in environmental education, which is often limited to the biophysical space within a particular geographic scale.

This narrow view of the local and the global is equally evident from the popular slogan of the environmental movement "Think Globally, Act Locally". The slogan aims to promote a global awareness to the scope and scale of environmental problems while focusing on localized environmental action. However, the slogan tends to maintain the dichotomy, the false opposition and dominance of the global over the local. Activists and authors, like Vanda Shiva[28] write that limiting action to the local playing field frees up the global playing field to those who possess the more

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[25] Robert Beauregard, "Theorizing the global-local connection" in P. Knox and P. Taylor (eds), *World cities in a world-system* (Cambridge: Cambridge University Press, 1995), pp. 232-248.

[26] Beauregard, p. 239.

[27] Beauregard, p. 240.

[28] Vandana Shiva, "The Greening of the Global Reach" in Jeremy Brecher, John Brown Childs, and Jill Cutler (eds), *Global visions: beyond the new world order* (Montreal: Black Rose Books, 1993), pp. 53 - 60.

powerful knowledge and the technology. Often therefore, its is the transnational corporations and the global institutions that end up defining the global and what are considered as global priorities.

This critique of the popular slogan does not suggest, according to Princen, Finger and Manno that "every environmental NGO with international pretensions must deal simultaneously with village leaders and the United Nations."[29] They emphasize that these biophysical-political linkages and global-local linkages can be multi-tiered, and can be addressed by the coalitions and networks of NGOs that exist at different levels.

In attempting to address the dichotomy of the local and the global, there are authors who have proposed words that combine the global and the local, as both space and process. An example of this combination is "glocalization".[30] Roland Robertson, a key exponent of cultural globalization theory, argues that

> … the distinction between the global and the local is becoming more complex and problematic, to the extent that we should perhaps speak in such terms as the global institutionalization of the life-world and the localization of globality.[31]

He later proposed the term glocalization, based on the recognition that the local and the global are not mutually exclusive and that the process of globalization and localization are essentially "complementary and interpenetrating."[32]

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[29] Princen, Finger and Manno, p. 229.

[30] Ronald Robertson, "Glocalization: Time-space and homogeneity-heterogeneity" in Mike Featherstone, Scott Lash and Ronald Robertson (eds), *Global modernities* (London: Sage, 1995), pp. 25-44.

[31] Roland Robertson, *Globalization, Social Theory and Global Culture* (London: SAGE, 1992), pp.52-53.

[32] Robertson in Featherstone and others, p. 38.

Friedman defined healthy glocalization as

> … the ability of a culture, when it encounters other stronger cultures, to absorb influences that naturally fit into and can enrich that culture, to resist those things that are truly alien and to compartmentalize those things that, while different, can nevertheless be enjoyed and celebrated as different.[33]

These same concepts have filtered into the literature on education. Apel observed that glocalization,

> … a kind of globalization that also has local implications, … in the future will no longer be an abstract concept somehow remote from adult education, but a word with concrete implications for our everyday reality, demanding new types of competence and judgment skills, and requiring us to assume new responsibilities.[34]

For CEC, the discussion of the global has always been two-pronged. First, it involves studying particular global environmental issues like climate change, ozone layer depletion, loss of biodiversity and transboundary pollution. Second, it involves the critical examination of environmental issues in the context of globalization, specifically, the dominant global development paradigm, global economic policies like GATT, and global institutions like the IMF and the World Bank.

Based on these discussions, the following research questions are proposed. First, the thesis examines CEC's constructions of the local and the global. Second, it studies CEC's attempts to link the local to the global. Third, it analyzes the findings from the first two questions and examines its implications on progressive contextualization of its educational practice.

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[33] Friedman, p. 295.

[34] Heino Apel, "Development, environment and sustainability – Changing perspectives in development-oriented adult education", *Adult Education and Development,* no. 46 (1996), pp. 125-142.

4.2.2   Content: biophysical and political

From the literature reviewed it can be observed that there was a predominance of both science and the biophysical environment in the early literature on the environment and environmental education. However, there has been a shift towards a more holistic approach. This approach incorporates the political, to include the social and the cultural, not just in the content of educational programs, but also in the analytical frameworks used in examining environmental issues.

The predominance of science and the biophysical is characteristic of what Piers Blaikie described as the classic or colonial approach to studying the environment. He described the classic or colonial approach as

> … a purely technocratic and physical study of the processes … without any analysis of other political economic relationships at the local, regional and international scales.[35]

Gibbon, Lake and Stocking call it "scientism"[36], which they describe as an approach that gives scientific knowledge the status of being the irrefutable truth and results in a reductionist approach to understanding nature and the bio-physical world. This approach predominantly involves thinking as a linear process. Linear thinking, however, tends to go against the way ecosystems function, which is dynamically in a non-linear fashion, characterized by cycles and fluctuations.

Eugene Odum[37], one of the pioneers of the ecosystems approach to ecology criticized this tendency of scientific research to be reductionist. He argued, using the hierarchy of levels of organization of living systems, that "we know more about

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[35] Piers Blaikie, *The political economy of soil conservation in developing countries* (New York: Longman, 1985), p. 79.

[36] David Gibbon, Alex Lake and Michael Stocking, "Sustainable development: A challenge for agriculture" in Stephen Morse and Michael Stocking (eds), *People and environment* (London: UCL Press, 1995), pp. 69-108.

[37] Eugene Odum, *Ecological vignettes: Ecological approaches to dealing with human predicaments* (Amsterdam: Harwood Academic Publishers, 1998).

genes, cells, organs and organisms than we know about populations, ecosystems, landscapes and the ecosphere."[38] He used this argument to support his claim that

> … we cannot understand and deal with these higher levels by just studying the parts; we also need to study these higher levels as wholes, and this is what the science of ecology is all about.[39]

However, despite this holistic and integrated view of the environment, Odum's focus was on the science of ecology and more broadly on ecosystem management. A systems approach allows for the integration of the ecological and the social systems. Gibbon, Lake and Stocking argue that a systems approach promotes different approaches to analyzing the real world. They describe it as

> … thinking that views the world in terms analogous to ecosystems; that is, the pre-eminence of the interrelations and connections between elements within systems.[40]

According to Blaikie one of the advantages of using a systems approach to analyzing studying environmental problems is that

> … it can handle both complex biophysical relationships and can include the effects of policy instruments and other hitherto exogenous social and economic variables.[41]

Blaikie and Harold Brookfield applied this systems approach to their study of land degradation. They called it regional political ecology, and described it as a combination of the concerns of ecology and "a broadly defined political economy."[42]

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[38] Odum, *Ecological vignettes...* p. 24.

[39] Odum, *Ecological vignettes...* p. 24.

[40] Gibbon and others, p. 57.

[41] Blaikie, p. 75.

[42] Piers Blaikie and Harold Brookfield, *Land degradation and society* (London: Metheum, 1987), p. 17.

Robert Cramb, in a study of upland soil degradation in the Philippines described Blaikie and Brookfield's approach as a "framework for multi-level and interdisciplinary analysis of land degradation."[43] Richard Peet and Michael Watts[44] have criticized Blaikie and Brookfield's political ecology as having

> … very little politics – there is no serious attempt at treating the means by which control and access of resources or property rights are defined, negotiated, and contested within the political arenas of the household, the workplace and the state.[45]

From the previous discussion, it can be observed that the development of environmental thought has continued to become more holistic, beginning from a purely scientific view of the environment, to a more holistic and integrated systems approach, to one that has a sharper political analysis. This developmental process is significant in the progressive contextualization experience of CEC's grassroots environmental education practice. This is one of the tensions that examined in the thesis. Specifically, how CEC negotiated between the biophysical or the science and the politics of the environment in its grassroots environmental education work.

4.2.3   Method: participatory and prescriptive

Beck argues that the meaning of learning changes within the context of globalization. "It is part of the exciting dialectic of globalization that it replaces traditional 'lecture societies' with dialogic attentiveness and the courage to disagree."[46] In this statement Beck establishes a relationship between the context and the learning process. Princen and Finger are more explicit in saying that within this globalization context

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[43] Robert Cramb, "Agricultural degradation in the Philippines uplands: An overview" in R. Cramb (ed), *Soil conservation technologies for small farming systems in the Philippine upland: a socioeconomic evaluation* (Canberra: ACIAR, 2000), p. 25.

[44] Richard Peet and Michael Watts, "Introduction: development theory and environment in an age of market triumphalism", Economic *Geography*, vol. 69, no.3, pp. 227+. (Expanded Academic ASAP Int'l Ed: Item no. A14795763) http://web5.infotrac.galegroup.com (08 June 2001).

[45] Peet and Watts, pp. 227+.

[46] Beck, p. 138.

that "teaching and preaching ready-made solutions to individuals must be replaced by collective, vertical, horizontal and cross-disciplinary learning."

The thesis examines the influence of a globalizing world, and the tension that results from such a world, on the development of learning methods. More particularly, the tension that is examined is one between an educational methodology that is participatory and one that is prescriptive.

The tension between participatory and prescriptive methods was first identified by Ramiro Plopino, one of the external consultants contracted to evaluate the RENEW in 1993. He described that "participatory training has become fashionable among progressive popular or adult educators [and] is considered as an educational process where people are at the center."[47] He described RENEW as

> … participatory in the sense that the trainers of facilitators promote participation through stimulating the minds of the participants and encouraging them to feel free to ask questions and contribute and participate in the discussion.[48]

The quotation from the *RENEW Manual* describes CEC's educational approach participatory. However, this participatory nature is closely linked to the educational approach being creative and scientific, as well.

> We chose to use a PARTICIPATORY approach to education, because we believed that out environment, while currently being treated like a technical subject, is something we all encounter daily. Therefore, we wanted a learning process that recognized everyone's own experiences about the environment. … In short, we wanted a process that was both evocative and experiential, where the experiences of the participants began the entire learning process.

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[47] Ramiro Plopino, "The Contexts of RENEW" (QC: CEC document, 1993), p. 11 [unpublished report].

[48] Plopino, p.13.

To further enhance the process of sharing and learning, we decided to use CREATIVE approaches. Although this was initially done to add variety to what may be a very technical workshop, we eventually appreciated how these creative approaches helped the participants overcome their inhibitions about sharing. … Hence, RENEW experimented with and developed a wide variety of approaches… such as group discussions, songs, games, visual arts activities, dramatization, outdoor activities and simulations.

During the comprehensive evaluation of RENEW in 1993, we realized that in addition to being participatory and creative, there was a need for RENEW to be SCIENTIFIC both in content and process. This further strengthened our goal of achieving experience-centered learning, since to be scientific meant that the discussions had to be based on verifiable observations or based on reality.[49]

According to Kamla Bhasin in participatory training programs the "participants should be involved in decision-making about most, if not all, aspects of the training program."[50] Based on this criteria, Plopino concluded that some aspects of RENEW were prescriptive because the curriculum

…was predetermined. … [And] how these would be delivered was ready-made or developed by the staff without the benefit of consultation with the intended trainees.[51]

He continued that this prescriptive character "is considered by some educators as opposed to the ideal participatory approach."[52] John Oxenham, who is cited by Plopino, wrote in an earlier article,

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[49] Guevara, *Renewing RENEW*, 18-19 [emphasis in original].

[50] Kamla Bhasin, "Participation development requires participatory training", *Convergence*, vol. 34, no. 4 (1991), p.10.

[51] Plopino, p. 13.

[52] Plopino, p. 13.

… prescription is not necessarily bad for learning or to be wholly avoided. … They reflect the development of the learners from complete novice to self-directing trainee. [Therefore], participatory training really indicates an orientation to trying to increase the participation by the trainees.[53]

Bhasin agrees that

… no training can be totally participatory. You need someone who thinks of organizing the training, who decides the duration, location, size and nature of training.[54]

To resolve this tension Plopino proposed that a

… jargonistic term PRESCRIPATORY [be] offered [as] a concept which essentially accepts the necessity of both prescription and participation as vital approaches in any educational undertaking.[55]

In addition to examining CEC's educational methodology, it is important to examine CEC's organizational processes that are significant to its curriculum and organizational development. Princen, Finger and Manno observe that the "global transition to sustainable economy and broad-based social learning has its counterpart in organizational transition and organizational learning."[56] Hence the organizational development of CEC is examined and its relationship to its curriculum development.

In addition the thesis also examines the nature of participation involved in the broader context of environment and development work within civil society

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[53] John Oxenham, "Trade-offs in participatory training", *Adult Education and Development*, no.22 (1984), p. 132.

[54] Bhasin, p.13.

[55] Plopino, p. 13.

[56] Princen, Finger and Manno, p. 232.

organizations. John Burbidge[57] in the introduction of *Beyond prince and merchant* identify two key elements of civil society that are relevant to this aspect of the study, namely, "the need for inclusive participation to enhance civil society and the primacy of the grassroots as the locus of long-term social change."[58] The previous chapters were clear about CEC's the links with and bias towards the grassroots sectors. However, a number of authors cited in the literature review have raised the need for broader participation across interest groups, organizations, and sectors at different levels. Therefore, despite CEC having established the grassroots sectors as its priority participants, the thesis examines this choice within the context of a globalizing world.

4.3 Chapter summary: Revisiting the research objectives

The literature review and the preliminary analysis confirm the significance of the identified research objective. The thesis examines the progressive contextualization of the popular environmental education practice of the Center for Environmental Concerns – Philippines, within the context of a globalizing world.

Three educational tensions, in the areas of context, content and methodology have been identified from the review and the preliminary analysis of the research narrative. These are the local and the global, context; the biophysical and the political, content; and being participatory and prescriptive, methods. It is important to emphasize that while these tensions are classified into context, content and method, all these tensions are interrelated with each other.

These tensions inform the examination of the following issues:

(a) The progressive contextualization of the popular environmental education practice of CEC.

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[57] John Burbidge (ed), *Beyond prince and merchant: Citizen participation and the rise of civil society* (New York: Pact Publications, 1997).

[58] Burbidge, p. 12.

(b) The factors, structures, and processes that contributed to the progressive contextualization of CEC's educational practice.

(c) CEC's construction of, and the links between, the local and the global in its practice of popular environmental education

(d) The theories and practices of popular and environmental education, and progressive contextualization in a globalizing world.

(e) The literature on a globalizing world, specifically, economic globalization and a global civil society, and its implications on environment and education work.

(f) The constructions of, and links between, the local and the global in the areas of popular and environmental education

The thesis concludes with a contribution to the development a theory of progressive contextualization that facilitates the grounding of popular environmental education within the spectrum of the local and the global, in a globalizing world.

Chapter 5

CEC: Growing within a dynamic social movement

The Center for Environmental Concerns - Philippines was officially established in 1989 to fulfill

> … the need for strategic non-government environmental organization strongly committed to environmental protection, conservation and enhancement. It's aim is to provide the broad framework for all environment efforts that will seek to not only eliminate human practices that are harmful to the environment but also lead to alternative activities that are ecologically sound and at the same time more economically beneficial to the population.[1]

CEC's establishment was initiated and actively supported by the sectoral federations of peasants, fishers, women, indigenous peoples, students and NGOs. These groups were identified with the progressive social movement in the Philippines, particularly organizations closely associated with the national democrats. However, Noel Duhaylungsod, its first Executive Director, noted that

> … the essence of the task had to be evolved primarily because environmentalism had little attention from the workers of the social movement for change and development.[2]

This chapter describes the development of this task by CEC within such a social movement from 1989-1999. It argues that the major shifts in the Philippine social movement, the worsening environmental situation, and the changes in the practice of

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[1] "Draft Concept Paper" (QC: CEC, October 1988), pp. 3-4 [unpublished document]. The concept paper was prepared by representatives of the sectoral federation of peasants, *Kilusang Magbubukid ng Pilipinas* (KMP), and NGOs that were then closely associated with the national democrats, such as Partners in Rural Development (PARUD), *Sibol ng Agham at Teknolohiya* (SIBAT) and the Council for People's Development (CPD).

[2] Duhaylungsod, "Preface…", p. 6.

environment and development work were critical in shaping CEC as an institution, and consequently the progressive contextualization of its educational practice. It identifies that CEC's decision to be a support organization and service center and later on as a non-governmental development organization (NGDO), positioned itself as an intermediary organization within a broader social and environmental context. This decision, this thesis further argues, was one of the key elements that drove the process of progressive contextualization under study.

The main source of data for this chapter comes from the documents gathered, presented and discussed during the ten-year review of the CEC conducted in 1999. The objectives of the review were:

1. To case document the CEC approach as a prototype in political ecology work, particularly on: resource rehabilitation, environmental advocacy and campaign, environmental education and organizing and networking.
2. To determine the basis for another cycle of CEC's existence, specifically defining the environment-development context, priority issues and strategies and mode of organization.[3]

The participants of the review included past and present CEC staff members, representation from the different local organizations, sectoral groups and individuals that have worked in partnership with CEC. The review involved a range of activities, including one-on-one interviews, focus group discussions, survey questionnaires and a series of workshops that culminated in the CEC@10: National Workshop Conference in September 1999. The researcher was involved in the team that synthesized the results of the interviews, discussion and surveys and co-facilitated the National Workshop.

5.1   A dynamic social movement

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[3] "Identifying Take-off Points for Pro-active Environmentalism" (QC: CEC, March 1999), p. 1 [unpublished document].

CEC was established amidst one of the most dynamic contexts for the social movements in the Philippines in recent times. The 1986 People Power that forced Marcos to flee the country introduced a new context to the rapidly growing anti-Marcos movement, suddenly the symbol and reason that motivated almost two decades of protests was gone. Furthermore, a "democratic space" was established by the Aquino administration that encouraged the proliferation of NGOs with a wide range of development frameworks and approaches further complicated the scenario. Add to these events the ideological split within the progressive people's movement that forced many organizations and individuals into periods of deep reflection and consolidation, which was called the "Second Great Rectification Movement" [4] that started in 1992. It is this dynamic political context that this section describes, and argues was responsible for shaping the nature of CEC as an environmental NGDO and consequently its educational practice.

5.1.1 NGOs in a Post-Marcos political context

CEC is often identified with the progressive people's movement according to Yasmin Arquiza, because of CEC's focus on grassroots sectors, more specifically the mass-based groups of fishers and peasants. [5] The progressive people's movement as described in chapter 2 refers to the sectoral organizations of workers, women, fishers, peasants, indigenous peoples, professionals and the NGOs identified with a particular ideological block within the Philippine political left. However, even these groups, often referred to as the Philippine political left, have been divided along ideological and political lines into the "national democrats (split into several groupings), popular democrats, democratic socialists, and socialist." [6] In particular,

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[4] Jose Maria Sison, "An update: Qualitatively unchanged conditions" in Jose Ma. Sison and Juliet de Lima, *Philippine economy and politics* (Philippines: Aklat ng Bayan Publishing House, 1998), p. 16.

[5] Yasmin Arquiza, "Green evolution: Nature groups fight over funds, principles," *Philippine Daily Inquirer* 1 November 1993, p. 6.

[6] Miriam Coronel Ferrer (ed), *Civil society making civil society* (QC: Third World Studies Center, 1997), p. 5.

CEC was established and continues to be identified with the network of organizations and federations closely associated with the national democrats.

The rapid growth of an NGO sector within the Philippine progressive block may seem like a new phenomenon, however, Constantino-David argues, "proto-NGOs existed – through cooperatives, local reactions to colonialism, and the trade union movement – during the period of Spanish colonialization."[7] She adds that it was the American colonial government that introduced the idea of welfare agencies in the early 1900s. Jorge Tigno, on the other hand, explains that historically NGOs in the Philippines were closely associated with religious organizations with most of their activities being mainly in the area of philanthropy and relief, due to the nature of their organizations and the current political situation. However, he added that the NGOs that emerged during the 1970s were

> … more involved in development work and community organizing and were consequently seen as subversive organizations out to undermine state authority. Much of the NGO/PO activities during this time took place clandestinely or at least informally. [8]

After Marcos fled in February 1986, the Aquino administration created what it called a "democratic space" and encouraged the formation of more NGOs and POs to assist in the reconstruction of the country. It became policy of the state, as enshrined in the 1987 Philippine Constitution to "encourage non-governmental organizations that promote the welfare of the nation."[9] By 1991 similar provisions were included in the country's Local Government Code (Republic Act 7160).

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[7] Karina Constantino-David, "Intra-Civil Society Relations: An Overview" in Merriam Coronel-Ferrer (ed), *Civil society making civil society* (QC: Third World Studies Center, 1997), p.26.

[8] Jorge Tigno, "People Empowerment: Looking Into NGOs, POs and Selected Organizations" in Felipe Miranda (ed), *Democratization: Philippine perspectives* (QC: University of the Philippines Press, 1997), pp. 118-119.

[9] "Article II, Section 23", *1987 Philippine Constitution* (Manila: Government of the Philippines, 1987).

But despite the democratic space and the rhetoric of participation that opened the gates for the political left, David observed that the Aquino government soon "veered sharply to the right."[10] Miranda added to this observation that

> … despite the restoration of formal democratic institutions in the Aquino administration, the oligarchic structure of Philippine politics persists. Intra-elite competition has re-surfaced even more aggressively and the legislature, as well as the executive, serves as an arena for the various elite groups, the networked power centers of society, to compete in. … One is tempted to describe the present system as not significantly different from per-martial law Philippines. At the time, most Filipinos were politically and economically marginalized.[11]

Barely a year after Marcos' departure, the progressive people's groups were back on the streets and sections of the military that were themselves dissatisfied with the Administration staged seven failed coup attempts. Both of these situations were used by the Administration to justify shrinking this democratic space.

Constantino-David observed that despite these setbacks, the number of NGOs and POs continued to increase nationwide encouraged by an avalanche of foreign funding, and government linkage and support. One example is the Canadian International Development Agency (CIDA), which "designated the Philippines as a priority country for development assistance in 1986, following the restoration of democratic institutions under the Aquino Administration."[12] However, Margarita

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[10] Constantino-David, p. 30.

[11] Felipe Miranda, "Political Economy in a Democratizing Philippines: A People's Perspective" in F. Miranda (ed), *Democratization: Philippine perspectives* (QC: University of the Philippines Press, 1997), p. 166.

[12] "CIDA in the Philippines", http://www.dfait-maeci.gc.ca/manila/english/devcoop/cida.asp (14 December 2001).

Lopa warned that the concept of NGOs was now being claimed by all sorts of organizations many of whom were not associated with the people's movement.[13]

These same trends in increased funding and NGO numbers were reflected within the young environment movement in the country. Marvic Leonen defined the environment movement as "all groups that have within their avowed statement of goals, missions or objectives some aspect related to the themes of environmental concern or ecological sustainability."[14] Arquiza cites DENR data, that from 1986 to 1992, the Philippines received more than US $1 billion, having been declared to be one of the world's "biological hot spots".[15] In terms of numbers, DENR statistics show that since "the martial law years, the environmental movement has grown from a single federation to more than 1,500 different groups."[16] She attributed this growth partly to Aquino's then-DENR Secretary Fulgencio Factoran who gave strong support for NGOs.

However, government officials, business corporations and some funding agencies themselves formed many of these new NGOs. Tigno notes how some of these new NGOs were referred to,

> … (rather pejoratively) into BINGOs (business-initiated or influenced NGOs), GRINGOs (government-initiated or influenced NGOs), COMENGOS (the fly-by-night initiatives), and FUNDANGO (funding agency dependent or initiated NGOs).[17]

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[13] Margarita Lopa, *Singing the same song: Reflections of two generations of NGO workers in the Philippines* (QC: ANGOC and PhilDRRA, 1995), p. 55.

[14] Marvic Leonen, "NGO influence on environmental policy" in Peter Utting (ed), *Forest policy and politics in the Philippines: the dynamics of participatory conservation* (QC: Ateneo de Manila University Press, 2000), p. 69.

[15] Yasmin Arquiza, "Green evolution: Funding agencies shape RP agenda," *Philippine Daily Inquirer* 2 November 1993, p. 1.

[16] Arquiza, "Green evolution: Nature groups fight over funds, principles*",* p. 6.

[17] Tigno, p. 120.

Constantino-David adds to this list other acronyms that include " DJANGO (development, justice and advocacy NGOs), TANGOs (traditional NGOs) and MUNGOs (mutant NGOs)."[18]

Arquiza reflects on this development and its implications to the nature of NGOs noting that the

> … wide disparity of groups have spurred debate over questions like the identity and character of 'real' NGOs, as opposed to groups which have sprouted mainly to take advantage of available funding for environmental projects. One researcher separates public service contractors (organizations driven primarily by market opportunities) from voluntary organizations (non-profit NGOs driven by a sense of values and mission) the more accepted NGOs.[19]

Most of these new NGOs therefore started as development NGOs that merely filled the gaps in government services in terms of poverty alleviation programs. However, Arquiza argues that, as the links between poverty, development and environment became clearer, and as the environment became a major concern of government and international funding bodies, many of these NGOs started integrating environmental work into their programs.

This trend ties in with Duhaylungsod's observation regarding the context of the social movement that CEC was to be a part of. While it was a highly politicized and organized progressive people's movement, it was new to the arena of environment work. But as discussed earlier, it was not just the progressive organizations that were getting into environment work. Arquiza observed that in fact, the "green movement has attracted a broad spectrum of groups which cut across social classes, religions

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[18] Constantino-David, p. 25.

[19] Arquiza, "Green evolution: Nature groups fight over funds, principles", p. 1.

and ideologies."[20] It was during this period of the expansion of the number and spectrum of groups that identify as part of the environment movement that CEC was carving its niche within the Philippines.

5.1.2   The ideological rift

It was also during this critical period when an ideological rift racked the organizations closely associated with the progressive block of the people's movement. This block was often described as "left-of-center" [21] in the political spectrum. This particular block, Constantino-David identified as ideological forces, because they advocate their respective ideological alternatives, such as "communism, national democracy, popular democracy, socialism, democratic socialism, social democracy, Islamic nationalism and liberal democracy."[22]

The expression of this internal split to the wider social movement, particularly within development NGOs, was described in a document called the Peasant Update Philippines (PUP) as a "development divergence" within the people's movement.[23] It was this growth in numbers and of development approaches within the NGO community, which according to the PUP document gave rise to a phenomenon it called NGOism, "a state of being engrossed in unholistic developmentalism leading to bureaucratic tendencies in dealing with people NGOs have sworn to serve."[24]

The document described some manifestations of NGOism as involving a greater loyalty to the funding agency instead of the people's movement; a focus on socio-economic work outside the context of class struggle and social change, and a loss of its service orientation. It added to these manifestations an increased bureaucracy and

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[20] Arquiza, "Green evolution: Nature groups fight over funds, principles*", p. 1.

[21] Ferrer, p. 1.

[22] Constantino-David, 26.

[23] PUP, "Development divergence: Reformism in the Philippine NGO community", http://www.etext.org/Politics/MIM/fil/ngo.html (10 May 2000).

[24] PUP, n.p.

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adoption of top-down corporate practices in the guise of professionalism, and the development of rivalries amongst NGOs, particularly for beneficiary communities or sectors.[25] In some instances, the PUP publication described a situation where some funding agencies

> … began to discourage NGO involvement in political activities and pushed for more socio-economic and environmental projects that followed the dictum of self-help and sustainability for local communities.[26]

From CEC's experience, it was not the funding agencies that were pushing for more socio-economic projects. It was CEC's own development as an environmental NGDO, in particular the influence of the other NGOs that helped to establish CEC that resulted in the broadening of environmental concerns to include socio-economic projects.

Similarly, Contreras noted, "some NGOs are forced to compromise their ideals in exchange for winning DENR contracts."[27] To avoid having to compromise, CEC only accesses funds not directly controlled and managed by the Philippine government. However, CEC has accessed local funding but through local mechanisms developed by foreign aid agencies. An example is the Philippines-Canada Human Resources Development Program (PCHRD), a CIDA NGO Support Project that funded CEC's Sectoral Environmental Education Program (SEED Program) in 1991-1992.

Two major foreign funding agencies that have assisted in the development of CEC's grassroots environmental education program are explicit about their position in working in partnership with local groups. ICCO, the Dutch Interchurch organization

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[25] PUP, n.p.

[26] PUP, n.p.

[27] Antonio Contreras, "Rethinking participation and empowerment in the uplands" in P. Utting (ed), *Forest policy and politics in the Philippines: the dynamics of participatory conservation* (QC: Ateneo de Manila University Press, 2000), p. 155.

for development cooperation, that is rooted in the Dutch Protestant-Christian tradition and is partner in various national and international ecumenical networks, provided the seed fund that helped to establish CEC in 1989.

> ICCO works together with ecclesiastical and non-ecclesiastical organizations that are directly involved with the people from the target groups. ICCO respects the culture, history, and social role of the organizations involved. In the process of working together with other organizations, ICCO considers it essential to listen and think along actively.[28]

It has been the Institute for International Cooperation of the German Adult Education Association (IIZ/DVV) that has made the most significant contribution to sustaining CEC, particularly its grassroots environmental education program. IIZ-DVV is explicit about the kind of relationship they form with their partners.

> We do not see ourselves as a donor organization but as professional partners sharing our experiences and resources for common purposes and constantly learning from our partners. … [They described that] environment and women's education are the most important areas of activity for the organizations with which we have been cooperating since 1992 in the Philippines."[29]

CEC was the first NGO that received funding assistance in the Philippines from IIZ-DVV in 1992. The partnership grew out of CEC's involvement in convening the environmental education thematic workshop during the First General Assembly of the Asian-South Pacific Bureau of Adult Education (ASPBAE) in the Philippines in December 1991, which was also assisted by IIZ-DVV. It began in June 1992 as a 6-

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[28] "ICCO's mission", http://www.icco.nl/english/information/mission.shtml (14 December 2001).

[29] "Development-oriented adult education and international cooperation – Lifelong and global learning in one world", http://www.iiz-dvv.de/englisch/default.htm (14 December 2001).

month project, a one-year project in 1993, and since 1994 there have been three, three-year project cycles until 2002.[30]

The other funding agencies that have contributed to the development of CEC's grassroots environmental education program are the following:

- Inter Pares (Canada) from 1992-1996
- Unitarial Universalist Service Committee (UUSC) in the United States from 1992 – 1996, and
- Grassroots, International (US) in 1993.

On the other hand, most of CEC's research-related programs, such as the Environmental Investigations Missions (EIM), were primarily assisted by the Canadian Catholic Organization for DEVELOPMENT AND PEACE (CCODP), which funds projects that concern people's right to better education and job opportunities, or issues related to the environment, women's rights, agrarian reform, housing and co-operative movements. Launched by Canada's Catholic bishops, laity and clergy, CCODP's aims are to educate Canadians about North-South issues, and support initiatives by Third World people to take control of their lives.[31]

However, underlying this expression of a development divergence was a deeper political debate regarding the analysis of the nature of Philippine society and correspondingly a difference in the appropriate response to this analysis. Jose Maria Sison, founding chair of the Communist Party of the Philippines (CPP), in a speech in 1993, upheld the character of Philippine society as semi-colonial and semi-feudal, which is "ruled by the comprador big bourgeoisie and the landlord class in service of

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[30] "History of Cooperation: CEC and the Institute for International Cooperation of the German Adult Education Association (IIZ-DVV) 1992-2002", (QC: CEC, October 2001), p. 1 [unpublished document].

[31] "Development and Peace", http://www.devp.org/anglais/intro.html (14 December 2001).

foreign monopoly capitalism."[32] He strongly argued against the analysis of an industrialized and urbanized society where the need for a "protracted people's war had become outdated and needed refinement, adjustments and innovations." [33]

In support of Sison's analysis of Philippines society, Rivera describes that the leadership of the National Democratic Front " reaffirmed the basic strategy of protracted people's war by building its main force in the countryside preparatory to seizing power in the city centers." [34] Constantino-David explains that

> … although NGOs which are identified with the national democratic movement are not necessarily members of the Communist Party of the Philippines – New People's Army – National Democratic Front (CPP-NPA-NDF), the split resulted in dissension within and among a significant number of networks/coalitions and base NGOs.[35]

As early as 1992, CEC could perceive the impact of the split on the NGOs and POs it worked with. However, CEC decided to maintain an earlier decision that it would "come up with a posture (not a stand) in working with groups or sectors in the National Capital Region." [36] For CEC, coming up with a posture meant that CEC would continue working in the same manner with its local partners. This was not a stand because CEC did not take sides, either to reaffirm or reject Sison's analysis and proposed basic strategy. The decision was based on the conviction that environmental degradation did not affect communities of varying ideological persuasions differently. However, in late 1995, CEC could no longer ignore the implications of the ideological rift to its programs, particularly in the rural areas.

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[32] Jose Maria Sison, "The Critical and Creative Tasks of the- Rectification Movement in the Communist Party of the Philippines" (19 December 1993) http://www.etext.org/Politics/MIM/fil/rect.html (10 May 2000) [speech].

[33] Sison, "The Critical and Creative Tasks…" , n.p.

[34] Rivera, p.232.

[35] Constantino-David, p.44.

[36] "Documentation of 1993 CEC Evaluation" (QC: CEC, 1993), n.p. [unpublished document].

From late 1995 to 1997 CEC conducted an intensive consolidation process. The consolidation process involved an examination of its understanding of the nature of Philippine society, within the context of its development work and the people's struggle for social transformation.[37]

It is within these two critical contexts, the dynamic political context that resulted in the growth of the number of NGOs and POs in the Philippines and the ideological rift within the progressive block of this growing movement, that CEC and its practice of environmental work were shaped. The following section further examines these organizational changes using the Vision, Mission and Goal statements of CEC within the period under study.

5.2   Organizational change and growth

Four periods of organizational change and growth can be identified within the first 10 years of CEC. A tabulation (See Table 5.1) of the major organizational events identified in the study accompanies the following brief description of the four organizational stages to provide an overview of CEC's organizational history.

The first period, from 1988 to mid-1991 can be described as *formative years* when the CEC was identifying and carving out a niche for itself within the social movement in the Philippines. Grassroots environmental education was identified as a key approach to promoting an understanding of the nature and urgency of environmental work. The major achievements of the period were the establishment of the Philippine Environmental Action Network (PEAN), the design and testing of the Restoration Ecology Workshop (RENEW), and the development of the Environmental Investigation Mission (EIM). Both RENEW and EIM would become the prototype of CEC's education and research work, respectively.

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[37] "Documentation of Internal Review" (QC: CEC, July 1999), n.p. [unpublished document].

The second period, from late 1991 until 1995, can be described as a period of *active engagement, experimentation and growth.* This was a period when there was an on-going flow of requests for CEC's education and research services, mostly through the newly established network, PEAN. These requests resulted in the development and testing of a wide range of education and research tools with local community partners. The eruption of Mount Pinatubo in 1991 provided the opportunity to implement a long-term socio-ecological rehabilitation project that integrated CEC's environmental education and research skills and experiences in a community setting.

From late 1995 until 1997, CEC went through a period of *internal review and organizational consolidation.* This period was a result of the political debate that was dividing the social movement in the Philippines in the mid-1990s. This process resulted in a reduction in the number of activities with all of its local and sectoral partners, which allowed CEC to extend its services to schools and other institutions that were previously not priority partners. The legislation of the Mining Act of 1995 became a major concern and provided an opportunity to develop issue-based or problem-specific education and research tools.

Surfacing from this period of consolidation, CEC from 1998-1999 tried to re-focus its core mission to *environmental advocacy* work guided by a nationalist environmental perspective. The re-focused mission acknowledged CEC's strength in the areas of education, research and ecological systems management and rehabilitation, but placed these strengths within a larger context of advocating for social transformation. This period saw the growth of CEC's education and research work within specific areas, such as Southern Negros and Mindoro Occidental.

One factor that helped to identify the four periods described above was the number and nature of activities conducted within a particular year. However, the more helpful factor was the changes in the documented Vision, Mission and Goal (VMG) statements of the Center. The VMG framework was a strategic planning tool that was very popular in the NGO movement in the Philippines from late 1980s and was formally introduced by another NGO, the Management Advancement Systems

Association Inc. (MASAI) during a strategic planning workshop conducted with CEC in 1991.

The following sections examine these changes in the VMG statements to further illustrate the organizational shifts within CEC from 1989 – 1999. It is important to note that official organizational documents of CEC are written in English, therefore the quotes that follow, unless otherwise specified were not translated.

Table 5.1: CHRONOLOGY OF SIGNIFICANT EVENTS (1989-1999)			
Date	**Significant Events**	**Organizational Events**	**Major CEC Education Events**
1986	People Power uprising Marcos flees, Aquino becomes President		
1988 – 1991 FORMATIVE YEARS			
1988		Proposed CEC Concept Paper Drafted	
1989		CEC begins operation in June Research Framework proposed (Fig. 5.1) 11 case study sites identified (Table 5.3) First VMG Statement (CEC as support organization and service center)	Grassroots Environmental Education adopted as approach in December
1990	Bataan Oil Spill (January) Philippine Environmental Action Network (PEAN) launched on Earth Day (April)	Environmental Investigation Mission conducted for Bataan Oil Spill (January) CEC serves as PEAN Secretariat	First RENEW (April) First RENEW Trainers Training (May)
1991	Mount Pinatubo erupts (June)		Sectoral Environmental Education Program (SEED Program) starts with First Multi-sectoral RENEW Trainers Training (July) CBEM workshop series launched in Leyte

Continuation of Table 5.1: CHRONOLOGY OF SIGNIFICANT EVENTS (1989-1999)			
Date	**Significant Events**	**Organizational Events**	**Major CEC Education Events**
1991 – 1995 ACTIVE ENGAGEMENT, EXPERIMENTATION AND GROWTH			
1991	Flashflood in Ormoc, Leyte killing more than 4000 people (November)	Strategic Planning with MASAI (November) Second VMG Statement prepared (CEC as non-profit, non-stock NGO) CEC assists in ASPBAE General Assembly and meets IIZ-DVV	Development of Sector-based RENEW Plus and Integration modules
1992	Earth Summit (June)	Initial funding from IIZ-DVV approved	CORETECH workshops on the Golden Apple Snail, Agro forestry and Coral Reef Rehabilitation
1993	Fidel Ramos become president and launches his vision of Philippines 2000 (1993-1998) Ideological rift in the progressive movement surfaces	CEC decides to come up with a posture and not a stand regarding the ideological rift.	RENEW National Participatory Evaluation that recommended the localization of RENEW First Advanced Trainers Training (ATT) where idea of People's Faculty was raised
1994		CEC hosts ASPBAE Regional EE Workshop (January) and ICAE International EE Workshop (December)	IKSER area-based researches conducted ATT (Gen San) Peoples Faculty Concept Paper discussed
1995		CEC Five-year Summing-up Third VMG Statement (CEC as NGDO)	RENEW Manual published IKSER Validation Conference ATT (Bohol) People's Faculty launched

Continuation of Table 5.1: CHRONOLOGY OF SIGNIFICANT EVENTS (1989-1999)			
Date	**Significant Events**	**Organizational Events**	**Major CEC Education Events**
1995 – 1997 INTERNAL REVIEW AND ORGANIZATIONAL CONSOLIDATION			
1995	Mining Act of 1995 passed	CEC acknowledges that the previous mission was not in tune with the political realities. Internal Organizational Review and Consolidation Process initiated	Major reduction in the number of workshops, particularly in the provinces, increased focus on school-based workshops (e.g. Youth Ecological Society, Quezon)
1996	Marcopper mine spill in Marinduque (March) PEAN officially closes	CEC becomes ASPBAE Lead Agency for EE (until 1998)	Issue-based education module (Mining) People's Faculty Re-orientation Workshop PF Planning Workshop (December)
1997			Area-based education modules (Southern Negros) both RENEW and CBEM EduCATOR Training workshop
1997 – 1999 ENVIRONMENTAL ADVOCACY			
1997	KALIKASAN – Environment Network established.	Fourth VMG Statement (CEC as NGDO on environmental advocacy)	National People's Faculty workshop (December) (1) Discussed the draft text of "Purposive Education" (2) Recommended that Faculty be localized.
1998	Joseph Estrada elected as president		Speakers Training workshops
1999		CEC@10 National Evaluation Workshop (September)	

5.2.1   Formulating CEC's Vision

The Center's vision statement has essentially been maintained, except for very minor changes in the language and a more specific vision for the environment. Vision is about long-term ideals. It "is the hoped-for 'reality to be'. It serves as a guiding start, or an expression of the organization's ideals and dreams."[38] For CEC this meant formulating the ideal societal and environmental conditions the organization wanted to achieve.

The first vision, which was formulated in 1989, prior to the MASAI strategic planning workshop is quoted below.

> We envision a liberated, progressive and sovereign society. We believe in a nation free from foreign domination or any form of external intervention in our socio-political-economic-cultural life. We subscribe to the tenets of self-determination of the different ethnolinguistic groups. We look forward to a democratic, just, independent and egalitarian society, where each citizen has equal access to resources, services and opportunities. And finally, we aim for genuine industrialization grounded on a people-based science and technology.[39]

The quote that follows is the current vision statement that was one of the outcomes of the strategic planning workshop conducted by MASAI in September 1991.

> An environmentally restored, liberated, progressive and sovereign Philippine society which is egalitarian and just, ecologically stable, culturally responsive and productive to support a dignified and independent society; industrially developed from a people-based science and technology; free from foreign

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[38] MASAI, "Helvetas Partners Forum Training on Strategic Planning" (Cebu City: MASAI, 1991), p. 23 [unpublished document].

[39] "CEC Brochure" (QC: CEC, 1990), n.p. [photocopied material].

intervention; and puts premium on people as key environmental players in development.[40]

No further changes have been made to the Vision Statement. A participant during the CEC@10 National Workshop in September 1999 recommended that the vision statement needed to be more explicit about CEC's class bias. It should state its perspective that environmental problems need to be understood within a class analysis framework that "identifies who or which class has control, access and use of the resources of the Philippines."[41] This recommendation needs to be viewed within the context of the ideological rift within the social movement discussed in the previous section. However, CEC decided to maintain its most recent vision statement as is, given that the class analysis framework was more appropriate to be included explicitly in other organizational statements.

5.2.2   Sharpening CEC's Mission

There have been more radical changes in CEC's Mission Statement, which describes the nature of the organization and the scope of its activities that would contribute to achieving the vision. According to MASAI it is, " the rationale for the organization's existence, and defines how it differs from other groups."[42]

These changes illustrate CEC's attempts at dealing with the tension that Duhaylungsod described earlier of creating an environmental organization that is responsive to the needs of a social movement that has paid "little attention" to environmentalism.[43] While grassroots empowerment is consistently identified as a long-term objective, it was the nature of the organization and the focus of environmental work needed to achieve this objective that was radically changed

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[40] MASAI, "An Evaluative Report of the CEC-Philippines" (QC: MASAI, 1991), p.6 [unpublished document].

[41] "CEC@10: final documentation" (QC: CEC, 1999), p. 34 [unpublished document].

[42] MASAI, "Helvetas Partners..", p. 23.

[43] Duhaylungsod, "Preface…", p. 6.

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during the last ten years. The major shift in the nature of the organization has been from being a support group and service center to a non-governmental development organization, while the focus of its environmental work shifted from grassroots environmental education to environmental advocacy. (See Table 5.2)

PERIOD	MISSION STATEMENT
	Table 5.2: Mission statements of CEC from 1989 – present[44]
1989 – 1991	CEC is a support group and service center committed to raising environmental consciousness and improving the socio-economic capabilities of the local communities through grassroots education for people's empowerment.
1992 – 1994	CEC is a non-governmental development organization that pursues people-oriented solutions to environmental issues/problems through grassroots environmental education, ecosystem rehabilitation and protection, and environmental advocacy for people's empowerment.
1995 – 1997	CEC-Philippines is a non-governmental development organization that pursues people-oriented solutions to environmental issues/problems through grassroots education, ecosystem rehabilitation and protection and environmental advocacy for people empowerment
1997-1999	CEC-Philippines is a non-governmental development organization that pursues environmental advocacy work through education, research, ecological systems management and rehabilitation for grassroots empowerment.

CEC's initial tasks were to establish a national environmental profile and facilitate the formation of a national network for environmental campaigns. The environmental profile was not limited to a statistical profile but rather a profile that was drawn out from people's stories with the assistance of local community organizations. The profile was seen as a preliminary step towards the formulation of a people-based environmental agenda and the establishment an environmental network that would advocate these agenda and lead campaigns together with the sectoral federations. Both tasks called for an organization, like CEC, to provide the research support to the local communities and organizing support to what was to be called the Philippine Environmental Action Network (PEAN).

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[44] "CEC@10 Highlights of the Internal Review" (QC: CEC, July 1999), p. 2 [unpublished document].

A draft research framework[45] was designed by CEC in August 1989 to facilitate documenting the extent of environmental degradation and the corresponding local community responses. It proposed a systems view model for studying environmental problems that saw the

> … community as an open and dynamic system where components are interdependent with each other. It likewise shows that whatever is done to the environment of the community – whether it be towards environmental degradation or conservation – will correspondingly create an impact not only on the community concerned but on the neighboring and distant areas as well.[46]

The Environmental Action and the Community: A Systems view Model that accompanied the draft research framework is presented as Figure 4.1.

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[45] "Research Framework: Action Research on Environmental Degradation in the Philippines" (QC: CEC, 14 August 89), n.p. [unpublished document].

[46] "Research Framework", n.p.
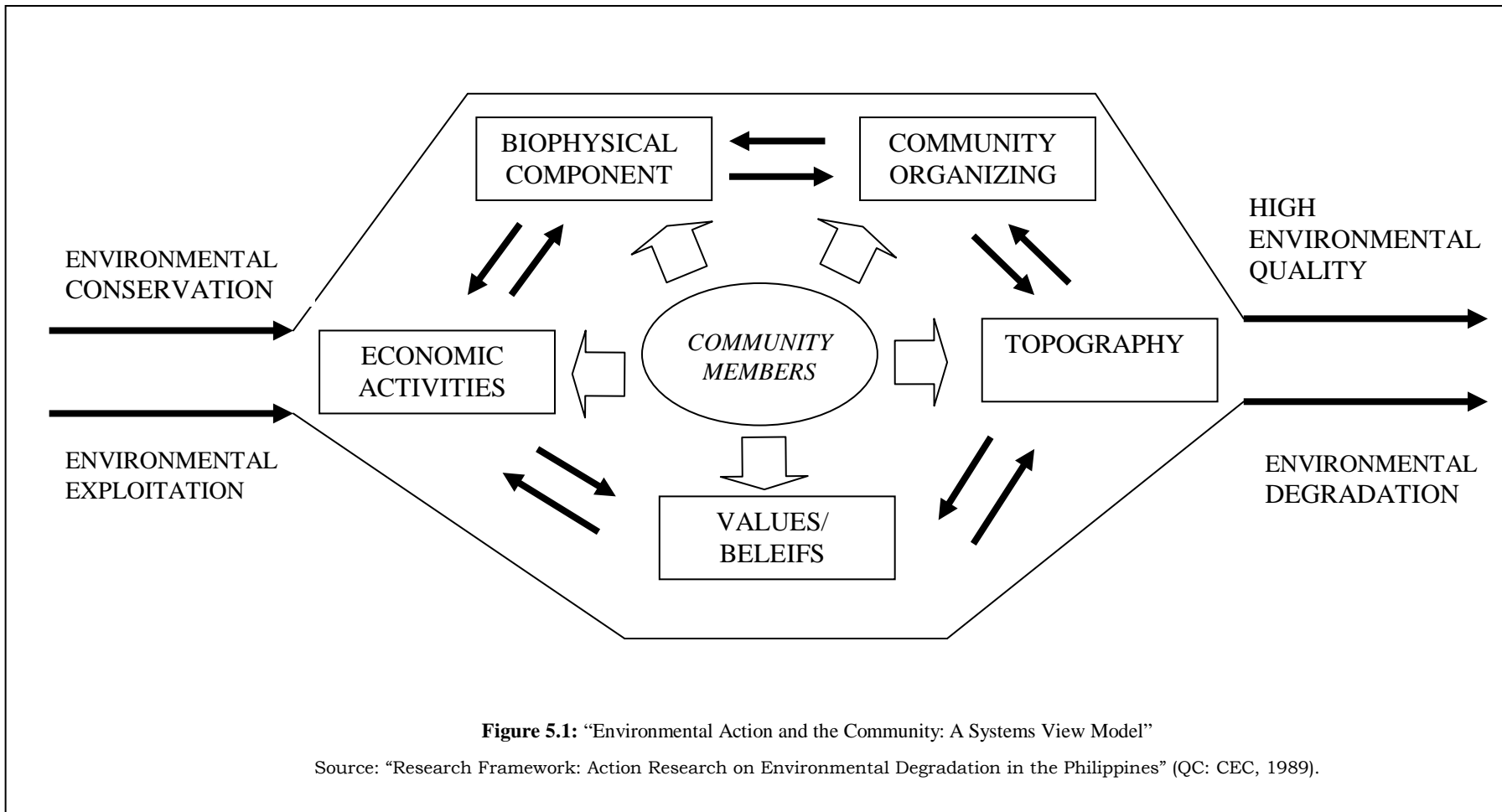
Figure 5.1: "Environmental Action and the Community: A Systems View Model"

Source: "Research Framework: Action Research on Environmental Degradation in the Philippines" (QC: CEC, 1989).

Furthermore, it proposed 11 case studies covering 10 different regions and ecosystems all over the country and one case study on a particular endangered species, the green sea turtle or the Pawikan (*Chelonia mydas*). Table 5.3 lists the proposed case study sites.

<table>
<tr><td colspan="2" align="center">**Table 5.3: Proposed case study areas**[47]</td></tr>
<tr><td align="center">**AREA**</td><td align="center">**PARTICULAR ENVIRONMENTAL PROBLEM**</td></tr>
<tr><td>Bukidnon</td><td>Topical forest denudation</td></tr>
<tr><td>Davao</td><td>Freshwater ecosystem and mercury pollution</td></tr>
<tr><td>Samar</td><td>River pollution, tropical forest denudation and marine and estuarine ecosystem</td></tr>
<tr><td>Cebu</td><td>Coral reef destruction</td></tr>
<tr><td>Negros</td><td>Salt-water intrusion</td></tr>
<tr><td>Antique</td><td>Golden-apple snail infestation</td></tr>
<tr><td>Bicol</td><td>Bicol National Park</td></tr>
<tr><td>Central Luzon</td><td>Effects of the International Rice Research Institute technologies</td></tr>
<tr><td>Bulacan</td><td>Flooding due to reclamation projects</td></tr>
<tr><td>Cordillera</td><td>Deforestation and mining
Effects of fertilizers and pesticides</td></tr>
<tr><td>Wildlife species</td><td>*Pawikan* or the green sea turtle (*Chelonia midas*)</td></tr>
</table>

The framework was distributed to potential local partner NGOs and POs for their feedback. A summary of the feedback received as it appeared in the 1990 Annual Report to the funding agency is quoted below. Regarding the proposed research process, the local partner organizations

> … felt that the proposed research timetable was too idealistic, and not based on the actual conditions and capacities of the identified partners in the regions. Furthermore, such a fast track type of research will only limit the research to general discussions and miss out on the essential regional particularities.[48]

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[47] "Research Framework", n.p.

[48] "ICCO Report" (QC: CEC, 1990), p. 7 [unpublished document].

Furthermore, most of the partners found the proposed framework was

> … too academic, and not grounded on the skills of the local development workers. But prior to developing the necessary skills in environmental research and documentation, the partners felt that their respective organizations must first internalize the value of integrating environmental concerns in their predominantly socio-eco workload.[49]

Duhaylungsod summarized these comments later when he said "as history would tell us now, the research met serious difficulties and the most significant was the inadequate research capability of our organizations."[50] He further noted that despite his view that the research framework was a "'failed" activity, it opened the corridors for grassroots education as the approach. He saw that the Network would facilitate what was identified as the need for "internal environmental advocacy" through a massive education program within the social movement still aimed at developing a people-based agenda for environmental action.

To respond to this need, CEC in December 1989 decided to identify itself as

> … a support group and service center committed to raising environmental consciousness and improving the socio-economic capabilities of the local communities through grassroots education for people's empowerment.[51]

Amidst the delays in the development of the research framework, the groundwork for the other task of CEC, to organize a national environmental network was moving on schedule. On April 22, 1990, Earth Day, the Philippines Environmental Action Network (PEAN) was launched as a people-based environmental network with 77 initial member organizations. Its aims were to "unify and coordinate the various

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[49] "ICCO Report" , p. 7.

[50] Duhaylungsod, "Preface…", p. 6.

[51] "CEC Brochure", n.p.

efforts of different regional, sectoral and national groups engaged in environmental protection and rehabilitation."[52]

With the establishment of PEAN, CEC saw the limitations of being a support group and service center. While it believed in responding to a previously identified mandate and need for grassroots environmental education, it was limited, as a support group and service center in its capacity to initiate its own activities. This realization is a turning point in CEC's organizational development. CEC shifts from being merely responsive, to taking a more pro-active stance in developing its environmental work. In taking this stance, CEC situated itself as an intermediary organization that responds to the needs of its partners, but also initiates its own programs within a broader development framework.

In 1991, CEC identified itself as a

> … non-governmental development organization (NGDO) that pursues people-oriented solutions to environmental issues/problems through grassroots education, ecosystem rehabilitation and protection and environmental advocacy for people empowerment.[53]

Jorge Tigno[54] cites an unpublished work of Cynthia Bautista[55] that defines development NGOs as organizations "that combine or see development work with or as part of political goals." He makes an observation that some NGOs redefined themselves "to distinguish themselves from the run-of-the-mill NGOs," which CEC felt was also necessary. As an NGDO, CEC characterized itself as a non-stock, non-profit organization focused on environmental work within a larger development context. Its membership in the Council for People's Development (CPD), a socio-

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[52] "Grassroots environmental movement gains ground", *Feedback*, vol. 1, no.1, 1990. p. 1.

[53] MASAI, "An Evaluative Report…", p. 7.

[54] Tigno, p. 120.

[55] Bautista, Cynthia, "The Development of NGOs and Sectoral Organizations in the Philippine Rural Areas: Implications of the 1992 Local Elections" (n.d.) [unpublished paper].

economic development-oriented network established in 1986 provided a more holistic context of development work through interactions with other development-related organizations. One distinction between CEC and other local environmental groups was that it has never been involved in any particular wildlife conservation campaign, such as saving a particular species. One possible exception was the *Pawikan*, which was one of the proposed case studies identified in Table 5.3. However, this particular case study never eventuated, which is a reflection of CEC's own choice to work with environment issues that were more directly related to development and people's lives.

This redefinition of CEC as an NGDO resulted into the expansion of its environmental work. From originally "raising environmental consciousness and improving the socio-economic capabilities through grassroots education"[56] in 1989, CEC developed a more comprehensive definition of environmental work which included "grassroots education, research, ecosystem rehabilitation and protection and environmental advocacy"[57] in 1991. It is more comprehensive because its work is not limited to consciousness raising, nor is the desired outcome limited to socio-economic improvement.

In early 1995 CEC, completed a 5 year summing up process where it affirmed its previous vision and mission statements and to continue working in the same manner with its local partners, despite the growing impact of the ideological rift on the progressive people's movement. However, the CEC staff concluded during the organizational review and consolidation in 1996 that

> … the mission was not in tune with the political realities. CEC was not able to implement community-based environmental work because the regions were

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[56] "CEC Brochure", n.p.

[57] MASAI, "An Evaluative Report…", p. 7.

not yet ready at that time to engage in environmental work since the priority then was to consolidate their respective organizations.[58]

From late 1995, CEC went through its own organizational review and consolidation process. This process involved an extensive review of its current VMG statement, its major education and research programs, its local and community partners, and its membership in networks. The review did not result in a change to the identified vision and nature of the organization as a NGDO; however, it identified a shift in CEC's core focus from grassroots environmental education to environmental advocacy. The revised mission statement reads that

> CEC-Philippines is a non-governmental development organization that pursues environmental advocacy work through education, research, ecological systems management and rehabilitation for grassroots empowerment.[59]

The other change was based on the observation that CEC's environmental work was not situated within, and therefore did not address, the semi-feudal and semi-colonial nature of Philippine society. This observation was interpreted as a weakness that contributed to the tendency towards *'NGO-ism'*, particularly the focus on socio-economic work outside the context of class struggle and social change. This interpretation resulted in CEC deciding to be more explicit about its analysis of Philippine society. An orientation paper developed after the 5-year summing up process called Orienting the CEC-Philippines into a Pro-active Politico-Ecologist states that:

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[58] "CEC@10 Highlights of...", p.2.

[59] "CEC@10 Highlights of...", p.2.

This document distinctly forwards the political thinking of a Filipino environmentalist, that environmental problems besetting us are consequent of the *oppressive nature* of Philippine society.[60]

After the consolidation review, this statement was revised, to read:

CEC forwards the political thinking of a Filipino environmentalist, that the environmental problems besetting us are consequent of the *semi-colonial and semi-feudal nature* of Philippine society.[61]

The review acknowledged CEC's strength and experience in the areas of environmental education, research, ecological systems management and rehabilitation work. What the review recommended was that these strengths be seen as the means by which CEC can effectively develop and advocate an environmentalism that "must find integration with the overall movement for social change and development.[62] This recommendation involved changing the nature of the programs, such as, longer time frames, more community-driven and more problem-focused. For example, since 1997, local community organizations and a regional alliance in Southern Negros have worked in close partnership with CEC to address some of the problems caused by corporate mining. More examples of the effect of the shift in CEC's core mission are examined in the following sections on CEC's Goal statements and on the nature and scope of CEC's environmental work.

On reflection, both shifts in the mission statement, from a support group and service-center to an NGDO, and from a focus on grassroots environmental education to environmental advocacy were done in response to the needs of the local partner organizations. But aside from the local partner organizations, the wider progressive

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[60] "Orienting the CEC-Philippines into a proactive politico-ecologist" (QC: CEC, 1995), p. 3 [unpublished document] [emphasis added].

[61] "Vision, Mission, Goal Statements 1989-1997" (QC: CEC, 1999), p 5 [unpublished document] [emphasis added].

[62] "Orienting the CEC…", p. 3.

people's movement, which facilitated the formation of CEC in 1989, has continued to have a major influence on CEC as an organization. The thesis continues to examine the influence of both local partners and the progressive people's movement in CEC's educational practice of progressive contextualization.

5.2.3   Changing Goals

CEC's goal statements from 1989-1999 became more realistic, based on a better understanding of the role of an NGDO within the progressive social movement.
The Goal Statement

> … establishes what the organization aspires to achieve or what it wants to make real relative to its mission, and what it wants to become in the long term as an organization.[63]

There are four Goal Statements that can be identified from 1989 to 1997 that corresponds to the four organizational periods identified in CEC's history; these statements are tabulated in Table 5.4. The 1989 goal does not appear in the documents reviewed as a separate goal statement but can be deduced from the identified strategy of this period. The absence of a goal statement can be attributed to the fact that it was only in 1991 when an organizational development consultant from MASAI was hired to explain and facilitate a process that would help CEC formulate its VMG statement. The previous process was facilitated by the CEC staff based on their experiences in setting-up other organizations. All succeeding VMG statements therefore had the complete Vision, Mission and Goal statements.

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[63] MASAI, "Helvetas Partners..", p. 26.

Period	Goal Statements
1989-1991	CEC will establish the broadest and strongest links with the most number of NGOs, POs and civic organizations. Through these linkages, the CEC will facilitate the establishment of the Philippine Environmental Action Network (PEAN) as the work force for environmental advocacy.
1991-1994	Facilitate the establishment of ecologically developed communities controlled and administered by the people themselves. Together with other NGOs and POs, CEC shall catalyze the mobilization of an environmentally conscious and active citizenry.
1995-1997	In partnership with regional organizations, establish the foundation of socio-ecologically developed communities, which are controlled and administered by the people. Catalyze the mobilization of a critical mass of environmental advocates.
1997-1999	The Center works for the formation of environmental advocates and the development of environmental programs with a nationalist environmental perspective.

Table 5.4: CEC Goal Statements from 1989 – 1999[64]

Two aspects can be considered common to all three Goals statements prior to 1997. These aspects are, the approach of working in partnership with other organizations and community groups, and the establishment and mobilization of a network, group of citizens or environmental advocates.

The 1989-1991 goal statement specifically identified the establishment of the Philippine Environmental Action Network (PEAN) as the expected outcome of linking with NGOs, POs and civic groups. CEC initiated the formation of PEAN in April 1990 and acted as PEAN's interim secretariat until 1992. PEAN provided CEC with a network of NGOs and POs that it could work in partnership with towards mobilizing an "environmentally conscious and active citizenry."

In 1991 it expanded these goals to include the establishment of "ecologically-developed communities, which are controlled and administered by the people." This goal went beyond developing organizational partnerships to actually working closely

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[64] "CEC@10 Highlights of …", p.3.

with communities. In 1995, while maintaining the essence of working in partnership, CEC refined its goals to indicate a more holistic understanding of environmental work and a more realistic view of the role and capacity of NGDOs that work with local communities. The expression of a more holistic understanding of environmental work can be seen in the change from establishing ecologically developed communities to "socio-ecologically developed communities." While some would argue that ecologically developed communities are by themselves holistic in scope, the addition of the prefix _socio_ emphasizes the people component, instead of what is often interpreted as the bias or emphasis of ecologically developed towards the biophysical environment. These goals of working in partnership and of achieving socio-ecologically developed communities are further examined in a later section that describes the characteristics of CEC's environmental work in this same chapter.

The more realistic goals, based on the roles of NGDOs, involved scaling down the goal of "establishing ecologically developed communities" to "establishing the foundations of these communities." The second change, being the shift from mobilizing the "citizenry" to mobilizing a "critical mass of environmental advocates".

The scaling down of the goal statements was a preview of the major changes that would continue to happen in 1997. These changes were consistent with the changes in CEC's mission statement described earlier. CEC's goal was reduced to "working for the formation of environmental advocates and the development of environmental programs with a nationalist environmental perspective." This scaled down goals was an outcome of the internal organizational consolidation. It was also CEC's response to the formal dissolution of PEAN in 1996. The dissolution of PEAN was attributed to "conflicting environmental concepts and administrative problems"[65] within the PEAN secretariat. Hence, there was a need to re-establish a new national environmental network with member organizations committed to a nationalist environmental perspective within the context of the people's struggle.

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[65] "The CEC way: Green and militant", _Feedback_, vol. 10, no. 4 (December 1994), p. 6.

Similar to the mission statements, the goal statements were shaped by both CEC's experiences and its on-going involvement with the progressive people's movement. The effect was a definite scaling down of its goals based on the understanding of the more limited role of NGDOs within the progressive movement.

In concluding this chapter, it can be observed that the progressive social movement, which according to Duhaylungsod has paid "little attention," to environmental work, has had a major influence on CEC as an organization. However, it is important to examine other influences, such as environment-related contexts and their contributions to the growth of CEC's environment work.

5.3   Chapter summary

The chapter has shown how the dynamic political context of the period under study (1988-1999) shaped the development of CEC as an environmental NGDO and consequently its educational practice. The following key political events were identified and described as critical in the development of CEC: the 1986 People Power uprising, the Aquino administration's "democratic space," that resulted in the proliferation of NGOs, and the ideological split within the progressive people's movement.

The organizational development of CEC was traced through the changes in CEC's Vision, Mission and Goals statements. Four major organizational periods were identified. The formative years (1988 – 1991) saw CEC carving out a niche within the social movement in the Philippines. The period of active engagement, experimentation and growth (1991- 1995) involved establishing partnership and responding to numerous requests for education and research services. The period of internal review and organizational consolidation (1995- 1997) was the result of the ideological rift within the social movement in the Philippines. And the period of environmental advocacy (1998-1999) when CEC surfaced from a period of consolidation with a re-focused core mission of environmental advocacy guided by a

nationalist environmental perspective.

The chapter has also shown that CEC's decision to identify itself as a non-governmental development organization (NGDO), instead of a support organization and service center, was a key element in the progressive contextualization of its education practice. Finally, while the political events identified were significant to CEC's development, the chapter observed that it was the progressive social movement, which had earlier paid "little attention," to environmental work, played a major influence on CEC as an organization and the development of its educational practice.

Chapter 6

CEC: Environmental work in the Philippines

CEC, as an organization, has been strongly influenced by the progressive people's movement and the dynamic sociopolitical context described in the previous chapter. This chapter argues that in addition to the people's movement, the environmental situation, and the context of environment and development work in the Philippines, are critical factors in understanding the development of CEC and its environment work. The chapter describes the history and the current state of the Philippine environment. It then identifies the major trends in environment and development work and the possible influence of these trends to CEC's environmental research and education practice. Major influences that are identified are the ideological rift within the progressive people's movement, the shift in the nature of environment and development work, and the decision of CEC to adopt a grassroots environmental education approach in conducting its environmental work.

6.1   Contexts of environmental work in the Philippines

The 1990s were marked by a series of major environmental calamities in the Philippines. This worsening environmental situation contributed to the growth of a new movement in the Philippines.

> An increasing number of People's Organizations (POs) and Non-Government Organizations (NGOs), who have been primarily concerned with socio-economic and political issues, are incorporating environmental awareness into their development projects, undertaking research, and piloting projects which are developmental in nature and environmentally sustainable in reality.[1]

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[1] Rodolfo Desuasido, "Development at loggerheads with ecology", *Kabalikat: The Development Worker*, No.2 (March 1989), p. 5.

Map 6.1: Map of the Philippines indicating the

major environmental problems (1990-1999)

Map of the Philippines showing: Luzon Strait, South China Sea, Luzon, Philippine Sea, Mt Pinatubo Eruption (June 1991), Quezon City, MANILA, Bataan Oil spill (January 1990), Marcopper Mine spill (March 1996), Visayas, Ormoc Flash flood (November 1991), Sulu Sea, Mindanao, MALAYSIA, INDONESIA

It is within these contexts, namely, the state of the Philippine environment, the history of resource exploitation, and the increase in the practice of participatory processes within development work, that CEC's own practice took shape.

The following section studies the contribution of these contexts to CEC's practice, specifically in its decision to focus on environmental rehabilitation, and characterize its research and education work as people-based, participatory and pro-active environmentalism.

6.1.1   Decade of environmental disasters

The Philippine archipelago has a total land area of 30 million hectares. It is subdivided into 12 large, 9 medium and about 7,000 smaller islands, reefs and atolls. It is predominantly rugged and dissected, characterized by undulating mountains with constricted valleys, meandering flood plains and narrow coastal plains.[2]

The eruption of the Mt. Pinatubo in June 1991, after 600 years of dormancy, brought the Philippine environment to the world's attention. The EMB-DENR considers the eruption to be the "most environmentally destructive, natural disaster to strike the country."[3] It forced the evacuation of 250,000 people, it damaged workplaces resulting in the loss of 650,000 jobs, and it permanently damaged 80,000 hectares of productive agricultural lands. Ten years after, voluminous materials deposited by the volcano on high ground cascade as mudflow during the rainy seasons continuing to threaten provinces that surround it.[4] It is a grim reminder of the power and long-term effects of natural calamities.

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[2] EMB-DENR, *A Report on: Philippine environment and development* (QC: EMB-DENR, December 1991).

[3] EMB-DENR, *A Report*, p. xi.

[4] EMB-DENR, *Philippine environment quality report 1990-1995* (QC: EMB-DENR, November 1996), p. 272.

But for every natural calamity, there are dozens more human-induced calamities that damage not just the natural environment but also the lives of Filipino families. One example is the oil spill in January 1990, due to the sinking of a tanker that discharged half a million liters of bunker oil off the southern shores of Bataan. The disaster is considered to be the biggest oil spill recorded in the area, affecting some 6,000 fishers and their families.[5] Another example is the flash flood in Ormoc, Leyte in November 1991, which killed more than 4000 people in less that half an hour. While the flashflood was initially blamed on illegal loggers, Severino[6] reports that the flood was the long-term effect of licensed logging followed by the conversion of these vulnerable slopes to sugar plantation more than 30 years prior to this disaster. A third example is the collapse of the tailings and the waste containment pond of Marcopper in March 1996 in Marinduque that spilled 2.5 million tons of toxic mine tailings into the Boac River and its tributaries. The disaster affected 10 million hectares of agricultural lands, 126 hectares of land along the rivers and 3,000 families.[7]

The background to these major disasters (see Map 6.1) is the Philippines itself: a country with 50 out of 421 rivers is considered biologically dead.[8] It has a coastline that stretches 18, 417 kilometers that had an estimated 500,000 hectares of mangrove areas in 1918 of which only 139,725 hectares remain.[9] Of the 33,088 square kilometers of maximum coral reef cover only 5.3 percent are considered to be in excellent condition.[10] And in 1991, it had 89 species of birds, 44 species of mammals and 8 species of reptiles that were recognized internationally as threatened.[11] But this

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[5] Robin Broad and John Cavanagh, *Plundering paradise: The struggle for the environment in the Philippines* (Berkley: University of California Press, 1993), p. 82.

[6] Howie Severino, "Introduction: Losing the balance" in Cecile Balgos (ed), *Saving the earth: The Philippine experience* (Pasig City: Philippine Center for Investigative Journalism, 1997), pp. 10-11.

[7] ESSC, *Mining revisited: Can an understanding of perspectives help?* (QC: ESSC, 1999), p. 72.

[8] EMB-DENR, *A Report,* p. vii and Allan Mesina, *A Primer on the Philippine environment* (QC; CEC, 1996), p. 19.

[9] EMB-DENR, *A Report*, p. vii.

[10] EMB-DENR, *Philippine environment*, p. 112.

[11] EMB-DENR, *Philippine environment*, p. 168.

Map 6.2: Areas and crops designated for monoculture farming
by the Spaniards in the Philippines

on-going devastation of the Philippine's natural resources is not a recent phenomenon; it began as the following section discusses with colonization.

6.1.2   A history of plunder

Broad and Cavanagh believe that when the Philippines was claimed for Spain in 1521, the "archipelago was perhaps 90 percent forested."[12] This percentage is close to the 27.5 million hectares of virgin forests that existed in 1575, according to the EMB-DENR.[13] However estimates have it at 800,000 hectares of virgin forests remaining in 1994.[14] The colonizers initially awarded large tracts of land to Spaniards and the emerging Philippine elite. But by the seventeenth and eighteenth centuries, the Catholic Church acquired most of this land, which they converted by the nineteenth century into cash crops. According to Alfred McCoy[15] by 1870 the archipelago was divided into several regions to produce a range of commercial crops for the international markets, like tobacco in the Cagayan Valley, rice and sugar in Central Luzon, abaca (hemp) in the Bicol Peninsula, and sugar in Western Visayas. (see Map 6.2) The subdivision of the country introduced the practice of monoculture farming in the Philippines. This practice did not only involve clearing large tracts of forested land to plant a single crop, but often involved, according to McCoy, sudden migrations, land grabbing and displacement of the local indigenous peoples.[16]

The exploitation of resources continued under the American colonizers who bought the Philippines from the Spaniards in 1898. The Americans improved on the unsuccessful attempts by the Spanish colonizers to issue land titles when in 1913

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[12] Broad and Cavanagh, p. 32.

[13] EMB-DENR, *Philippine environment,* p. 140.

[14] EMB-DENR, *Philippine environment,* p. 140.

[15] Alfred McCoy, "Introduction: The social history of an archipelago" in Alfred McCoy and Ed de Jesus (eds), *Philippine social history: Global trade and local transformation* (QC: Ateneo de Manila University Press, 1982), pp. 6-8.

[16] McCoy, p. 6.

cadastral surveys of whole municipalities were conducted.[17] Land titling facilitated further exploitation of the land with the introduction of modern commercial logging and mining. By the end of World War II, forest cover was reduced to roughly 60 percent, and further decreased to 35 percent by 1969, when Ferdinand Marcos won his second bid for the presidency.[18] By 1990 only 6.16 million hectares or approximately 20.5 percent of the total land area remained forested.[19] Marites Danguilan Vitug reports that deforestation was "most blatant during the era of President Ferdinand Marcos from 1965 to early 1986" [20]due to the increase in the number of timber license agreements (TLA) which Marcos used as a tool for political patronage.

The EMB-DENR identify the principal causes of deforestation as

> … illegal logging, shifting cultivation, forest fires, natural calamities, as well as, conversion to agricultural lands, human settlements, and other land uses brought about by urbanization and increasing population pressure."[21]

While all these contribute to deforestation, it tends to simplify a complex problem by putting most of the blame on the people who inhabit the uplands. Broad and Cavanagh sum-up the narrow argument as - "poverty is blamed for the deforestation."[22] The 1989 World Bank Country Study agrees that the problems are "inextricably bound up with population and poverty problems" but the report goes further to identify that it is also "closely linked to the problem of unequal access to

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[17] Marshall McLennan, "Changing human ecology on Central Luzon Plain: Nueva Ecija, 1705-1939" in A. McCoy and E. de Jesus (eds), *Philippine social history: Global trade and local transformation* (QC: Ateneo de Manila University Press, 1982), pp. 71.

[18] Broad and Cavanagh, p. 32.

[19] EMB-DENR, *A Report*, p. v.

[20] Marites Danguilan Vitug, "Forest policy and national politics" in Peter Utting (ed), *Forest policy and politics in the Philippines: the dynamics of participatory conservation* (QC: Ateneo de Manila University Press, 2000), p. 11.

[21] EMB-DENR, *Philippine environment,* p. 153.

[22] Broad and Cavanagh, p. 45.

resources."[23] Broad and Cavanagh conclude that the environmental issue in the Philippines "is primarily a question of power."[24] Vitug calls it "power politics: the influence of political power and vested interests." [25]

Both the Aquino (1986–1992) and the Ramos (1992-1998) governments officially gave a high priority to environmental conservation. Utting enumerates the contributions of both these administrations as having

> … imposed stricter control on large-scale legal commercial logging, supported integrated social forestry and community-based forest resource management, promoted extensive reforestation, accelerated land distribution, devolved considerable responsibility for natural resource management to local authorities, and attempted to provide squatters and indigenous groups with greater security of tenure.[26]

But he followed this enumeration with the observation that – " yet extensive poverty and deforestation continue." [27] President Fidel V. Ramos' vision was called *Philippines 2000*, the transformation of the Philippines into a newly industrialized country by the year 2000. This transformation was to be achieved via Medium-Term Philippine Development Plan, 1993-1998 (MTPDP) that identified twin strategies of people empowerment and global competitiveness as the keys to human development.[28] These twin strategies would explain Severino's characterization of

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[23] World Bank, *Philippines: Environment and natural resource management study* (Washington: The World Bank, September 1989), p. ix.

[24] Broad and Cavanagh, p. 44.

[25] Vitug, p. 11.

[26] Peter Utting, "An Overview of the potentials and pitfalls of participatory conservation" in P. Utting (ed), *Forest policy and politics in the Philippines: the dynamics of participatory conservation* (QC: Ateneo de Manila University Press, 2000), p. 3.

[27] Utting, p. 4.

[28] NEDA, *Medium-Term Philippine Development Plan, 1993-1998* (Manila: National Economic and Development Authority, 1994), pp. 2-5.

the Ramos administration (1992-1998) as having a "mixed record" [29] on the environment. While his administration passed policies that facilitated economic liberalization, the continued growth of environmental activism within civil society, made it difficult for the government to get approval for development projects without "a sufficient degree of public acceptability." [30] For example, "social acceptability" is now a key component in the Environmental Impact Assessment (EIA) system. [31] However, despite gains in institutionalizing improvements in environmental policies, the Ramos administration was responsible for the enactment of the Mining Act of 1995, which according to Severino has made mining "one of the most divisive issues" in the country. [32]

Towards the end of the period under study, Joseph 'ERAP' Estrada was elected president on a populist platform. However, Estrada's selection of mainstream politicians with established business interests in natural resources for key environmental offices drew protests from environmental groups and people's organizations. In January 2001, President Estrada stepped down after being impeached by the Philippine Congress and eventually was forced out by popular revolt in the midst of the Senate impeachment trial on charges of corruption and economic sabotage.

However, amidst this history of plunder, and the recent natural and human-induced environmental disasters, the environment and development organizations within the people's movement have continued to gain strength and advocate for the use of participatory processes in their work.

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[29] Howie Severino, *The Green Guide: A Sourcebook on the Philippine environment* 2nd edn. (QC: PCIJ, 1998), p. vii.

[30] Severino, *The Green Guide*, p.vii.

[31] Ipat Luna and Armand Mejia, " The legal environment" in Howie Severino (ed), *The Green Guide: A Sourcebook on the Philippine environment* 2nd ed. (QC: PCIJ, 1998), p.14.

[32] Severino, *The Green Guide*, p.vii.

6.1.3 Participation in environment and development work

Together with the growth of environmental organizations within civil society, there was an observed shift in the approach to environment and development work, both in the Philippines and globally. Utting characterized what he observed in the Philippines as

> … an environmental movement that undertook and demanded many initiatives associated with participatory conservation in an attempt to reverse the decades of plunder of the country's natural resources.[33]

This section examines this trend towards a more participatory approach to conservation as a prelude to discussing the approach and scope of CEC's environmental work.

The roots of a more participatory approach to environmental work can be traced according to Utting, to earlier debates on citizenship and democracy. He notes that it was not until the 1960s and 1970s when it first gained prominence in the language and practice of international development institutions.[34] A United Nation's Research Institute for Social Development (UNRISD) inquiry into "popular participation" defined it as "organized efforts of hitherto excluded or powerless groups, and movements to increase their control over resources and regulative institutions."[35] The concept of participation resurfaced in the 90s in the fields of environment and sustainable development as integral to the goals of "empowerment", "people-centered" development, "community-based resource management", and what Utting called "participatory conservation". [36] However, the similarities in the language betray the wide range of interpretations of how this concept of participation is understood and practiced.

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[33] Utting, p.3.

[34] Utting, p. 1.

[35] M. Stiefel and M. Wolfe, *A Voice for the excluded: Popular participation in development: Utopia or necessity?* (London: Zed Books, 1994), p.5.

[36] Utting, p. 1.

There seems to be some unity in the thinking, often attributed to the Brundtland Report that "the environment is not at isolated issue, but is in essence linked to the problems of food supply, poverty, safety, etc."[37] Based on this thinking, in order for environmental efforts to succeed wider participation of the different stakeholders is required. These stakeholders include the government, the business sector, civil society organizations, and local resource users themselves – often the marginalized sectors, like women, peasants, fishers and indigenous peoples. In practice, this approach meant a shift from the

> … technocratic or authoritarian approaches to environmental protection that emphasized 'top-down' planning and 'policing' of protected areas and ignored the livelihood concerns, cultural rights and local knowledge."[38]

All these changes were consistent with the policy of greater people participation of both the Aquino and Ramos Administrations. Luna and Mejia cite that

> … legal opportunities for communities have increased in the past few years not only for fighting environmental wrongdoing but for gaining control over natural resources. [For example] in 1996, the government decreed that forest policy of the country will henceforth be community-based." [39]

However, this practice was without its own problems for the social movement. Antonio Contreras[40] argues that there needs to be a distinction between "participation-as-involvement" and "participation-as-engagement". According to Contreras the former equates mere involvement as participation, as compared to the latter, which entails more intensive engagement, where the local resource users are

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[37] Nico Nelissen, Jan van de Straaten and Leon Klinkers, *Classics in Environmental Studies: An Overview of Classic Texts in Environmental Studies* (Utrecht: International Books, 1997), p. 263.

[38] Utting, p. 1.

[39] Luna and Mejia, p. 23.

[40] Antonio Contreras, "Rethinking participation and empowerment in the uplands" in P. Utting (ed), *Forest policy and politics in the Philippines: the dynamics of participatory conservation* (QC: Ateneo de Manila University Press, 2000), p. 167.

involved as genuine subjects and not as objects of the development intervention. His critique goes beyond the official policy statements of government as rhetoric, but is directed more toward NGOs and other civil society organizations that have become service-contractors in behalf of the government. He believes that in effect they have become simply another component in the expanded development bureaucracy. This situation, Contreras argues, is an example of what he describes as "the biggest 'hijack' of a concept in the history of development theorizing."[41] He explains that some of the current practice in the Philippines of participation and empowerment are mere adjunct strategies to the dominant development paradigm. He acknowledges that

> … the radical Left continues to contest the meaning of empowerment and participation. … However, the collapse of the Berlin Wall and the on-going schism in the Left have weakened the ideological anchor of radical development theory in the Philippines and elsewhere."[42]

The on-going schism in the Left that Contreras identified is the ideological rift that was described earlier to have affected the progressive people's movement, including CEC in the mid-1990s.

This section has identified three main environmental contexts that influenced the development of CEC's environmental practice. First, is the continued exploitation and degradation of the Philippine environment, made worse by major natural calamities, which justified the initial reactive nature of CEC's responses. The second influence would be the history of plunder and the role of power, as represented by the colonizers and the governments, in developing a holistic and historically contextualized analysis of environmental issues. Finally, the shift of both the local and international environmental policies towards civil society participation and community-based natural resource management played a key role in shaping CEC's emphasis on participatory processes. All these characteristics of CEC's practice are examined in the next section.

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[41] Contreras, p. 150.

[42] Contreras, p. 151.

Emerging alongside these environmental and political events was a global build-up in preparation for the United Nations Earth Summit in Rio de Janeiro, Brazil in June 1992. This global movement also assisted in the growth of an environmental consciousness among the NGO and people's organizations in the Philippines. The contribution of this event is examined in chapter 10.

6.2   Characteristics of CEC's environmental work

Despite the changes in its VMG statements, CEC in essence has maintained but deepened its original approach to environmental work that can be described as people-based, participatory, pro-active and focused on socio-ecological rehabilitation. Each of these approaches is examined in this section to assist in further understanding their contribution to the progressive contextualization of CEC's educational practice.

6.2.1   People-oriented and participatory

Two key elements in CEC's approach to environmental work have been, since its inception, a commitment

> … to pursue people-oriented solutions to environmental problems [and the recognition] that all efforts at environmental protection will not achieve much success unless people are actively involved.[43]

The reference to people has always been interpreted as a preference towards the grassroots sectors, more specifically the mass-based groups of fishers and peasants, which Yasmin Arquiza interpreted as an indication that CEC was a more progressive group. [44] This people-based approach is reflected in CEC's documents through the use of such terms "local communities", "marginalized sectors", and "community-based groups" to refer to its constituency. However, a people-based approach was

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[43] "Draft Concept Paper", p 4.

[44] Arquiza, "Green evolution: Nature groups fight over funds, principles", p. 6.

more than an indication of a particular constituency. It indicated a belief in the value of people participation not only in environmental protection but also in their empowerment. This idea was articulated in CEC's earliest mission statement that expressed that it was

> … committed to raising environmental consciousness and improving the socio-economic capabilities of the local communities through grassroots education for people's empowerment."[45]

The commitment to a participatory approach for people's empowerment has determined CEC's practice of always working in partnership with local communities, people's organizations, sectoral federations and networks, as underscored in CEC's goal statements. This commitment is further supported by CEC's view of an " NGO as an indirect player in development change, however, it could wield an influence to initiate development change."[46] This view is widespread within the NGO community. Arquiza reported that environmentalists she interviewed agreed, "the future of the environment will not depend on NGOs but on organized communities."[47] This belief explains what would later surface as an observed weakness of CEC in the area of community organizing, as this task was often left to the local community group.

This partnership arrangement, in the context of CEC's grassroots environmental education work translated to CEC's strategy of conducting trainers training workshops prior to any local education program. The strategy of trainers training was primarily aimed at decentralizing efforts in environmental education. This was also seen as a process of empowering local development workers with the necessary knowledge, skills and attitudes not only to understand and act in defense of their local environment, but to be effective environmental educators as well.[48]

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[45] "Orientation Paper" (QC: CEC, December 1989), n.p. [unpublished document].

[46] "Identifying Take off Points for Pro-active Environmentalism" (QC: CEC, 1999), p.2 [unpublished document].

[47] Yasmin Arquiza, "Green evolution: Funding agencies shape RP agenda", p. 1.

[48] Guevara, *Renewing RENEW*, p. 20.

Map 6.3: Examples of environmental problems, areas and responses of CEC (1990-1999)

Through this strategy, CEC has been able to develop local trainers who can assist in designing and conducting future workshops but also involved our local partners "to participate in the process of developing a People-based Environmental Education Curriculum."[49] This strategy is further examined in the succeeding chapters.

6.2.2 Pro-active environmentalism

Most of CEC's environment work has been in responding to crisis situations (see Map 6.3), such as the Bataan oil spill (1990), the Ormoc flash flood (1991), and the Marcopper mine tailing dam spill (1996) to name a few. CEC acknowledges "it is a fulfilling feeling to be relevant by being reactive."[50] But CEC has also been involved in community-based efforts directed at averting potential crisis situations. Specifically, CEC has worked with local groups in areas where potentially risky projects were proposed, for example, the expansion of the Philippine Associated Smelting and Refining Corp. (PASAR) copper smelter (1991), the proposed golf course construction in Batangas (1994), and Western Mining Corporation's exploration in Tampakan, South Cotabato (1995).

It is in these instances that a pro-active environmentalism approach benefits both CEC and its local partner communities. CEC defines pro-active environmentalism as taking

> … active roles in advocacy and organizing in conjunction with its established strengths in community-based environmental assessments and monitoring, grassroots education and training and socio-ecological proto-typing.[51]

The document specifies that being pro-active imply that CEC's work needs to be within a context of "local, nationalist efforts" that addresses the increasingly global scale of environment-related problems. Furthermore, it needs to assist in the

[49] Guevara, *Renewing RENEW*, p. 20.

[50] "Orienting the CEC-Philippines into a proactive politico-ecologist" (QC: CEC, 1995), p. 3 [unpublished document].

[51] "Orienting the CEC-…", p. 3.

formulation and practice of a development model that is based on the nature and constraints of an archipelagic ecosystem like the Philippines.[52] A pro-active approach does not stop CEC from responding to a crisis situation but includes in its response taking steps towards the prevention of similar future crisis. This approach has allowed CEC to take the lead in identifying and preparing for forthcoming concerns based on its reading of developing environmental issues.

In the context of its education work, Duhaylungsod[53] argues that grassroots environmental education needs is both reactive and pro-active. It is often reactive when it conducts workshops that address existing environmental problems. However, it takes a pro-active stance when it advocates for

> … alternative people's paradigms, people-based skills, community-based plans and approaches … [that] challenge the classical education thinking of awareness raising.[54]

Duhaylungsod enumerates other features of a pro-active education work are that it

> … anticipates problems and issues, … develops skills for environmental conflict resolution, … explores strategies of rehabilitation, … [and] hastens the organization of collective action.[55]

However, he acknowledges that to be effectively pro-active CEC's education work

> … must be coursed towards the formation of a conferential body of educators, researchers, technologists and technicians … [that] will serve as a

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[52] "Orienting the CEC-…", p. 4.

[53] Noel Duhaylungsod, "A curricular development design for grassroots environmental education", *Watershed: Ideas on environment and society.* vol. 3, no. 2 (1998), pp. 9-14.

[54] Duhaylungsod, "A curricular development design…", p. 10.

[55] Duhaylungsod, "A curricular development design…", p. 12.

focal body to pursue the education framework on a much broader coverage and impact.[56]

This conferential body took shape as the People's Faculty of Grassroots Environmental Education and Studies, from now on to be referred to as People's Faculty, which was formally launched in November 1995. It was a national conferential body of people's organizations and NGOs, called partners instead of members, "that advocate the interests of the basic masses and have a clear and defined orientation of its environmental work."[57] Its aim was to "systematize the growth and development of grassroots environmental education in the Philippines" through assisting partner organizations in the areas of curriculum development and preparation of information materials for public awareness and advocacy campaigns for environmental concerns.[58] However, the People's Faculty did not have the wider constituency that Duhaylungsod proposed, as it was more specifically for the trainers and educators that had completed CEC's training programs. However, it was envisioned that the People's Faculty, together with the pool of scientists and technicians being organized by the Research Department, would in the future combine into a broader body of environmental advocates.

6.2.3   Socio-ecological rehabilitation

Environmental rehabilitation in the context of "socio-economic work", or "socio-ecological rehabilitation"[59] has continued to be a major influence in the development of CEC's approach to environmental work. The focus on environmental rehabilitation within a socio-economic context illustrated CEC's commitment to a holistic approach in analyzing and responding to environmental problems. While the CEC Draft Concept Paper focused mainly on the need for "environmental protection,

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[56] Duhaylungsod, "A curricular development design…", p. 12.

[57] "People's Faculty Orientation Paper" (QC: CEC, 2 May1996), p. 2 [unpublished document].

[58] "People's Faculty Orientation Paper", p. 2.

[59] Aurelio de la Cruz, "Some notes on socio-ecological rehabilitation", *Watershed: Ideas on environment and society*, vol.1, no.1 (1995), p. 30.

conservation and enhancement,"[60] the CEC brochure identified the need for both protection and rehabilitation. It stated that the

> …destruction of the environment has gone on for years but nothing significant has been done about it. With inadequate and ineffective laws, the Philippine government cannot cope up with the requirements of environmental protection and rehabilitation.[61]

This statement is the first official reference in a CEC document that identified a focus on environmental rehabilitation. Previously, there was an internal document prepared by Duhaylungsod for the December 1989 Summing-up, which included a reference to developing a focus on environmental rehabilitation within a socio-economic development context. The internal document stated:

> In the overall framework of socio-economic development, the preservation of the integrity of ecosystems will be seriously taken into consideration; rehabilitation will be focused in the resources which bear direct influence on the livelihood endeavors of communities; the re-use of any rehabilitated resource will be the sole responsibility and right of the communities.[62]

A CEC Planning Document[63] identified "environmental rehabilitation, defined in the context of socio-economic work" as a feature that distinguishes CEC from other environmental organizations. It explains "the thrust of CEC's work is to help people rehabilitate the environment of their respective communities by helping them improve their socio-economic status."[64] In September 1991, the CEC's mission statement identified "ecosystems rehabilitation" as an approach to pursuing "people-

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[60] "Draft Concept Paper", p 4.

[61] "CEC Brochure", n.p.

[62] Noel Duhaylungsod, "Summing-up document" (QC: CEC, December 1989), n.p. [unpublished document].

[63] "Planning document" (QC: CEC, January 1991), n.p. [unpublished document].

[64] "Planning document", n.p.

oriented solutions to environmental issues and problems."[65] This mission was expanded in 1997 to "ecological systems management and rehabilitation" while maintaining the goal of "grassroots empowerment."[66]

Socio-ecological rehabilitation raised some debate within CEC and its partner organizations. The main debate revolves around the question, why local communities, which comprise CEC's primary constituency, should take responsibility for rehabilitating damaged environments? Instead, CEC should help these communities pressure the government and those responsible for the environmental damage to rehabilitate the environment and pay for the loss of income of the local community. However, Mesina takes the position that rehabilitation can be relevant to CEC's constituency, if it is situated within the

> … general context of resolving the other problems of the community such as land ownership, food for the stomach, and social justice since it is intricately intertwined.[67]

The eruption of Mt. Pinatubo in 1991 provided CEC with a rare opportunity to develop and test its socio-ecological rehabilitation tools, since no one in particular could be blamed for the damage caused by the eruption. While rehabilitation, in this case, should primarily be the responsibility of the government, in the context of a developing country like the Philippines, it was too much to expect the government to respond to the massive damage caused by the eruption. In responding to this situation, CEC, together with other NGOs and the local POs, designed and implemented the Agroforestry Community-based Rehabilitation Technology (CORETECH) in Mawacat, Pampanga. The workshops were aimed at rehabilitating the lahar-damaged areas in the context of the livelihood of the local indigenous populations called *Aetas*. The series of workshops that was aimed at developing the agroforestry skills of the local community included topics in basic ecology, nursery

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[65] "Vision, Mission, Goal Statements 1989-1997" (QC: CEC, 1999), p 2.

[66] "Vision, Mission, Goal Statements 1989-1997" (QC: CEC, 1999), p 5.

[67] Allan Mesina, "Cases of environmental action from assessment results" (QC: CEC, 1994), p.6 [unpublished document].

establishment and operations, soil and water conservation and goat raising.[68] Chapter 9 examines this experience in greater detail.

More importantly, the focus on environmental rehabilitation provided the direction for CEC's educational programs. One concrete evidence is that the basic awareness to action workshop was called the Restoration Ecology Workshop (RENEW). It was generally aimed at equipping

> … local communities with a deeper understanding of how the environment functions and what they can do to help care for and rehabilitate their immediate environment.[69]

Dela Cruz defined rehabilitation as "making degraded land useful for humans on a sustainable basis."[70] On the other hand, he defined restoration as "taking a degraded site to re-establish a community of organisms close to what would be found naturally."[71] The decision to use the word restoration was to aim for the ideal, a catchall word that would include environmental work that involves "regulation, remediation, rehabilitation and revolutionization."[72]

In concluding this section, the essence of CEC's commitment to environmental work, which can be characterized, as people-based, participatory, pro-active and focused on socio-ecological rehabilitation has, through experience, continued to be contextualized. The following section further illustrates these characteristics by examining the influence of these previous contexts in CEC's research and education practice.

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[68] Ma. Crescensia Ines-Comia, "Mt. Pinatubo Rehabilitation Project: Understanding the complexity and challenges of working with indigenous peoples" (QC: CEC, October 1996), p. 2 [unpublished paper].

[69] Guevara, *Renewing RENEW*, p. 16.

[70] De la Cruz, p. 44.

[71] De la Cruz, p. 44.

[72] "Orienting the CEC…", p. 3.

6.3   Education and research for environmental advocacy

Education and research continue to be the main activities implemented by CEC under the broader strategy of environmental advocacy with its local partner organizations. This shift to environmental advocacy, as discussed earlier, is the result of the sharpening of CEC's role as an NGDO within the progressive social movement. In addition, there were activities in the area of data banking, publications, and networking that were conducted with varying degrees of importance during the period under study, which have supported the education and research work. These programs and activities are implemented through the following organizational structure that has equally changed through the years.

The Center has maintained a simple structure that reflected the major programs during a certain period. Each of these programs had a definite focus and were organized into departments, which were coordinated by a Management Committee, composed of the Executive Director (which in 1998 became called the Chief Operating Officer) and the department heads.   An administrative unit provided support for the Center. The highest policy making body was the Board of Directors that was elected by the staff members from the sectoral and regional groups that CEC worked with.

From 1989 – 1991, the education and training related functions were combined with the research functions in the Environmental Education and Research Department. In 1992, the growing demands on CEC required that the two functions be separated. The Environmental Education and Training Department was established and retained until 1997, while the Environmental Assessment and Research Department eventually became the Ecological Studies and Management Program from 1995-1997. In 1998, these departments were once more integrated into Socio-ecological Management Systems Development Department, which handled the area-based programs in Negros and Mindoro, and the Thematic Environmental Education and Research Department, which handled the education and research needs of the issue-

based advocacy campaigns.[73] The following sections describe the nature of these research and education activities.

6.3.1 Environmental research

After what Duhaylungsod[74] described as a "failed" attempt of developing a research framework to document the state of the Philippine environment, CEC consolidated the feedback from the potential local partners and began redesigning a research program. The current research practice is a product of the on-going engagement of CEC with both local communities and multi-disciplinary teams of social scientists, technologists and health practitioners in documenting, analyzing, planning and acting on environmental issues. Since 1989, CEC has developed a range of research tools aimed at assisting local partner organizations to gather information on the causes, extent and impact of environmental degradation through the conduct of comprehensive environmental analysis and evaluation. Included in the research tools developed were community environmental planning, capability building for resource protection and management and environmental policy studies.[75]

The generalized steps[76] involved in conducting a people-based research begin with a request by a local community to investigate an environmental problem. After the nature and scope of the problem have been defined by CEC in consultation with the local community, a multi-disciplinary team of social scientists and technologists is organized based on the key factors to be studied. The team together with local representatives designs the research and places the investigation within the context of the plans of the local organization. The research is conducted with the participation of the local community in the stages of data gathering, analysis and planning.

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[73] "CEC@10: final documentation" (QC: CEC, 1999), p. 11 [unpublished document].

[74] Duhaylungsod, "Preface…", p. 6.

[75] "CEC Brochure 1997" (QC: CEC, 1997), n.p.

[76] Melissa Bengullo-Morales, "Community-based assessment and monitoring of impacts for environmental management towards sustaining people's empowerment", *Watershed: Ideas on environment and society*, vol. 1, no. 1, (1995), pp. 26-49; Noel Duhaylungsod, "Steps in environmental assessment and monitoring", *Feedback*, vol.5, no. 2 (December 1994), and Delilah Padilla, "An evolving people's research methodology" (QC: CEC, 2001), Chapter 3, p 4. [unpublished manuscript].

Smaller teams are formed to focus on the biophysical, health, socioeconomic and legal aspects identified to reduce the time involved in data gathering and analysis. Each of the teams presents their initial findings at a community meeting for preliminary analysis and planning. After additional laboratory tests are conducted a report is written and validated by gathering feedback from the local community. It is at this stage when future actions are identified together with the local community.

The emphasis on a community-based research approach, according to Duhaylungsod is based on the contention that the approach

> … places credence over the capacity of the community as a viable descriptor of the environment. The community's fundamental dependence on the environment … from which they derive their sustenance … makes them more vigilant protectors of their environment."[77]

This intensive engagement between the multi-disciplinary team and the local community has been observed to be beneficial to both parties. According to Mesina this engagement has helped the scientists "realize that the community holds precious information," [78] like local historical knowledge that provides a context for interpreting technical information. In exchange, the experience has validated the community's own knowledge and provided them the opportunity to understand scientific and technical information, through the assistance of the scientists. Furthermore, the wider range of participants has also assisted in expanding the scope of analysis, which was initially dominated by biophysical and technical information. It has also allowed the information collected to be analyzed within the socio-economic, cultural and political situation of the local area.[79]

One key contribution of CEC's research approach lies in the ability of both parties to use the information generated in a range of environmental actions that have since

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[77] Duhaylungsod, "Steps in environmental…", p. 6.

[78] Mesina, "Cases of environmental action…", p.8.

[79] "Advancement of a Pro-active Research for Ecological Studies and Management" (Los Banos: CEC, October, 1996), n.p. [unpublished paper].

been situated within the broader local campaigns. Mesina[80] and Bengullo-Morales[81] identified a range of actions to include, direct people's action, local and international media projection and campaigns, presentations during Congressional inquiries and the strengthening of local organizing efforts, to name a few. Three concrete events are identified below as examples. A barricade by the people's organization stopped quarrying operations that would have affected local water supply in Antipolo in 1992. A local picket, together with an international campaign delayed the construction of a coal-fired thermal plant in Calaca, Batangas in 1990. These actions have been an improvement from the previous predominance of environmental mitigating measures as responses, which has been attributed to the limited scope of analysis, identified earlier.[82]

To give an example the Environmental Investigation Mission (EIM) is CEC's research prototype from which other research methodologies were patterned after. It was first designed and conducted in 1990 as "a short-term duration, problem focused, quick assessment tool." [83] From 1989 – 1998, a total of 36 EIMS in 17 provinces, across a wide range of environmental problems such as corporate mining, energy, land-use conversion, and industrial and from upland to coastal ecosystems have been conducted. The EIM has since developed to become

> … a research tool for advocacy, in particular, it served as an assessment tool for baseline data gathering to which data and/or information generated were input to local campaigns of specific environmental issues.[84]

While the EIM is reactive, the Environmental Risk Assessment (ERA), a tool developed in 1992, is pro-active because it studies the potential environmental impact of development projects. Similarly, the Technology Assessment (TA) was

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[80] Mesina, "Cases of environmental action…", p.8.

[81] Bengullo-Morales, "Community-based assessment …", pp. 26-49.

[82] "Advancement …", n.p.

[83] Bengullo-Morales, "Community-based assessment …", p. 31.

[84] Delilah Padilla, "An evolving people's research methodology" (QC: CEC, 2001), Chapter 3, p 4 [unpublished manuscript].

developed to study specific technologies and their effects on the biophysical and social environments. As previously mentioned all these researches were designed and conducted based on the basic EIM experience.

On a different vein, environmental policy research and advocacy was attempted in relation to the Mining Act of 1995. However, the CEC soon realized that the scope and extent of policy research required a better grounding on legal issues, which was the strength of other environmental groups. Furthermore, in terms of policy advocacy, Padilla asserts that the CEC

> … failed to consider the limitations caused by the absence of an environmental campaign network (PEAN officially folded up in 1996)[85] that could provide the needed support for lobby work to which CEC being a service institution cannot provide."[86]

Therefore, CEC's role was more to provide support in the area of policy research and advocacy through the accumulation of baseline data for use in developing education materials for national or regional campaigns. The combination of these research experiences and the proposed setting-up of a People's Analytical Laboratory and Mapping System (PALMS) by CEC facilitated the development of more comprehensive, long-term and area-focused researches. One example is the People's Integrated Evaluation Systems (PIES) research that involved the integration of both the research and education efforts within a specific local area over a sustained period of time. The PIES research has since been conducted in two areas, Southern Negros and Mindoro Occidental.

The development of CEC's research practice has been largely shaped by its engagement with local communities. Through this involvement, its research practice has deepened from an initial emphasis on documenting the biophysical changes in

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[85] In 1996, KALIKASAN-People's Network for the Environment was established to fill the vacuum left by PEAN. It has been mandated by the progressive organizational alliances of peasants, fishers, indigenous groups, and the science and technology sector to lead local and national environmental campaigns.

[86] Padilla, "An evolving…", Chapter 1, p. 1.

the environment to analyzing these changes within the larger context of people's lives. This expanded or more holistic analysis has consequently resulted in a broader range of environmental actions, beyond the original emphasis on environmental mitigating measures.

6.3.2 Environmental education

The "failed" attempt to develop a research framework for 11 sites in 1989 "opened the corridors for grassroots education as the approach" to strengthen the capabilities of the local organizations in conducting research and of the PEAN network to conduct environmental campaigns.[87] This situation resulted in CEC's mandate to develop grassroots environmental education.

The initial educational themes identified according to Duhaylungsod

> … revolved around the understanding of the problems of flash flooding, pesticide and fertilizer misuse, erosion, the occurrence of red tide, deforestation and industrial pollution.[88]

CEC staff members recall that there were discussions about the use of a problem-specific approach, such as education modules specifically on pesticides or red tide. The alternative was a more holistic and integrated approach that situates environmental problems in the context of the prevailing socioeconomic and political context. The decision was to take a more holistic and integrated approach, while acknowledging the existence of specific local environmental problems as potential entry points for local engagement.

As of 1999, there have been a total of 33 RENEW workshops, 15 Trainers Training workshops, one EduCATOR workshop, two Speakers Training, two Community-based Environmental Monitoring (CBEM) workshop series and three Community-based Rehabilitation Technology (CORTECH) workshops, on the golden apple snail,

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[87] Duhaylungsod, "Preface…", p. 6.

[88] Duhaylungsod, "A curricular development design…", p. 10.

agroforestry and coral reef rehabilitation. [89] The following is a summary[90] of the major characteristics and events that have contributed to the growth and development of CEC's educational practice, all of which are described and examined in the succeeding chapters.

CEC's educational practice has continued to grow from the design and conduct of the basic awareness to environmental action workshop, RENEW, to now include a range of training of trainers workshops, and specialized workshops on environmental monitoring and rehabilitation. It has consistently been guided by the principles of participatory and creative approaches in both content and methods. The core strategy has been the training of educators, cognizant of the fact that as an NGO based in the capital, the CEC would not be able to sustain the development of locally relevant education activities without the assistance of local educators.

The education work has been supported by the development and testing of educational materials such as the regular newsletter, called *Feedback,* audio-visual materials and a series of worksheets called *Understanding our Environment* in the three major languages spoken in the Philippines (English, Pilipino and Bisaya) have been published.

RENEW has also assisted in the formation of local and regional environmental organizations and networks that worked with the then Philippine Environmental Action Network. In 1996 CEC facilitated the organization of the People's Faculty a conferential body of community educators that work in partnership with CEC in developing and implementing localized environmental education modules. The basic workshop has been documented in a manual published in 1995 entitled *Renewing RENEW: a Restoration Ecology Workshop Manual.* The manual documents and analyzes CEC's initial experiences in grassroots environmental education and describes the various learning activities developed as part of the workshop.

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[89] "History of Cooperation: CEC and the Institute for International Cooperation of the German Adult Education Association (IIZ-DVV) 1992-2002" (QC: CEC, October 2001), p. 10-15 [unpublished document].

[90] Guevara, *Renewing RENEW*, pp.15-33.

In the Preface of the *RENEW Manual* Duhaylungsod identified seven lessons learnt in developing a grassroots environmental education curriculum. These lessons were:

(1) that the basic concepts of environmental science could be learned by anyone who has not been schooled formally;

(2) that these basic concepts can be drawn from real life experiences and therefore not just theoretical, in the sense of traditional education;

(3) that the environmentalist's milieu is the biophysical and social environments;

(4) that environmental education modules must correspond to the local ecology and the sectors;

(5) that form is equally as important as content and context;

(6) that the education module must be progressively contextualized, and

(7) that grassroots environmental education is a correct thrust despite the fact that this was provided for as a mandate.[91]

The thesis examines these lessons in the context of the progressive contextualization of CEC's educational practice.

6.4   Chapter summary

The chapter has shown that in addition to the progressive people's movement, the different contexts of environmental work during the period under study influenced CEC's environmental work. The chapter described the major environmental disasters that plagued the Philippines from 1988-1999. The impact of these disasters, the chapter argued, was exacerbated by a history of plunder of the country's natural resources by the colonizers and the succeeding Philippine governments. Despite the dismal environmental situation, the chapter identified the growth of an environmental movement that valued participatory environment and development work as a positive development.

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[91] Duhaylungsod, "Preface…", p. 8.

The chapter has also identified and described the characteristics of CEC's environmental work. CEC is committed to being people-oriented and participatory, which is consistent with its commitment to its primary constituency, the grassroots groups. While CEC valued its reactive work, especially in times of environmental disasters, it characterized its environmental work more as pro-active. CEC felt that a pro-active approach allowed it to identify and prepare for future concerns, based on its analysis of the current situation. CEC also emphasized socio-ecological rehabilitation, as an expression of its holistic and integrated approach to environmental work. These characteristics guided CEC in the development of its education and research work. Since 1997, CEC's education and research work have both been conducted within the framework of environmental advocacy. This shift was the result of the CEC's attempt to situate its environment work within the broader context of social change.

The next chapters examine in greater detail CEC's grassroots environmental education curriculum, in particular, the progressive contextualization of its educational practice. CEC's organizational history, the dynamic social movement in the Philippines, the deteriorating environmental situation, and the growing practice of environment and development work, all provide the critical context that informs this analysis.

Chapter 7
Renewing RENEW:
Factors in progressive contextualization

The Restoration Ecology Workshop (RENEW) is the basic "awareness to environmental action workshop"[1] that initiated the development of CEC's popular environmental education curriculum. Formulated in 1990, RENEW is CEC's core education module that continues to be adapted, revised and renewed. This process of renewing RENEW has been CEC's primary source of experience in progressive contextualization. This chapter examines the development of RENEW in order to describe the basic practice of progressive contextualization. More specifically, it identifies the key contextual factors that have been involved in what has been called renewing RENEW. The process of renewing RENEW, as the chapter suggests has primarily been a process of adapting RENEW to the local context, hence it can be described as a process of localization

Most of the descriptions and analyses that follow are based on documents that relate to the national evaluation of the RENEW workshops conducted between 1992 and 1993; the *Renewing RENEW: A Restoration Ecology Workshop Manual*, written by the researcher and published by CEC in 1995, and *Purposive Education*, unpublished work written by Noel Duhaylungsod and this researcher in 1997.

7.1   RENEW: The seeds of progressive contextualization

The first RENEW workshop was conducted in April 1990 in Infanta, Quezon in the south east of the main island Luzon in the Philippines. Prior to this workshop, the researcher, who was then in-charge of the Education and Research Department, together with the CEC staff, brainstormed learning objectives, developed a course outline, and identified learning methods.

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[1] Guevara, *Renewing RENEW*, p. 17.

Since 1990, all RENEW workshops have been guided by the following objectives as identified in the *RENEW Manual*:

    (a) to heighten environmental awareness of the participants by making them realize that they are part of a larger ecosphere that is currently threatened by their own activities;

    (b) to equip the participants with basic ecological concepts regarding ecosystem structure and function and the interrelationships that exist in our environment;

    (c) to draw out the current environmental situation in their respective sectors and/or localities; and

    (d) to develop concrete mechanisms in response to the identified environmental problems.[2]

These objectives were based on the identified need, which according to Duhaylungsod, was to provide a "bridge between the need for skills and [a] deeper understanding of the laws of ecology." [3]This need explains the strong emphasis of ecology topics such as ecosystem structure and function, energy flow, chemical cycling and balance of nature, in the course outline as documented in Table 2.1.

The RENEW workshops "required three whole days and a typical classroom with moveable tables and chairs with enough space for 15-30 participants."[4] Whether in the rural or urban areas, the workshops were almost always residential, as the workshop activities often extend to the evenings. While most of the participants were adults or older youths, each workshop would have a different composition depending on the location and sponsor of the workshop. For example, most of the workshops conducted in 1990 could be considered as multi-sectoral and province or area-based, where the participants would come from a particular area but would represent a range of sectors. In 1991, the Sectoral Environmental Education Program (SEED

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[2] Guevara, *Renewing RENEW*, p. 16.

[3] Duhaylungsod, "Preface…", p. 6.

[4] Guevara, *Renewing RENEW*, p. 17.

Program) conducted workshops that had representatives from different parts of the country but from a particular sector, such a farmers, fishers, urban poor or women. The basic content and methodology of a RENEW workshop have been described and initially examined in the previous chapters. A sample RENEW syllabus has been included as Appendix 7.1.

Structurally, RENEW workshops were designed using the conceptual learning map illustrated in Figure 7.1 below.

Figure 7.1: RENEW Conceptual Learning Map[5]

AWARENESS → UNDERSTANDING → ACTION
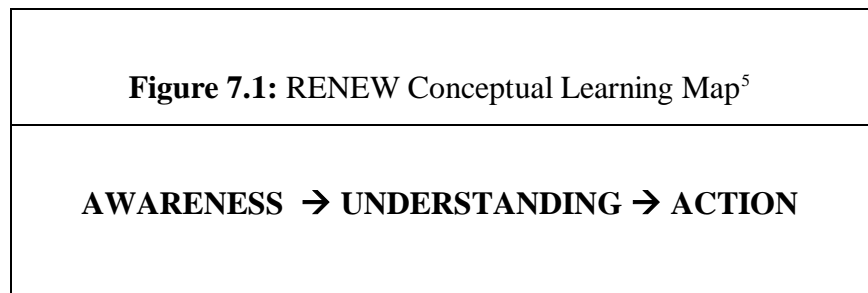
Briefly, the workshop starts with activities that draw out from the participants their current level of awareness regarding their local environment. This activity is followed by a deepening of this awareness through discussions on basic ecological principles that help to explain and emphasize the interrelationships between environmental problems across ecosystems. The participants are then given the opportunity to broaden their examination of environmental conditions and the interrelationships between the local, national and global environments. Specific options for actions are then identified together with possible mechanisms for implementing them.

This conceptual learning map is similar to a framework proposed by Ma. Luisa Doronila[6] regarding the structure of most development education seminars conducted by NGOs in the Philippines for local community organizations on a specific issue or problem. She identified and described seven phases common to these seminars, namely:

(1) unfreezing,

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[5] Guevara, *Renewing RENEW*, p. 19.

[6] Maria Luisa Doronila, "A critique of development education and training among Philippine NGOs", *Edukasyon, vol.1*, no. 1 (1995), pp. 39-40.

(2) conscientization or awareness raising,

(3) levelling-off,

(4) contextualization,

(5) further conscientization,

(6) planning, and

(7) implementation.

These two frameworks are tabulated in Table 7.1 to illustrate that the initial RENEW conceptual learning map is very similar to the dominant learning framework within the practice of development education in NGOs during the late 1980s and early 1990s when Doronila conducted her study.

Table 7.1: *RENEW* Conceptual Learning Map and Doronila's Framework compared.	
Stages in the RENEW Conceptual Learning Map	**Doronila (1995)**
Awareness	(1) Unfreezing (2) Conscientization or awareness-raising (3) Off-off
Understanding	(4) Contextualization and (5) Further conscientization
Action	(6) Planning and (7) Implementation

Matching the content modules (Table 2.1) with the above learning map (Figure 7.1) results in the sequence of modules outlined in Table 7.2.

Table 7.2: *RENEW* Conceptual Learning Map Matched with *RENEW* topics	
Stages in the RENEW Conceptual Learning Map	**Topics**
Awareness	• Acquaintance, Release,

	Expectation Check and Orientation
	• Environment Situation (Local or Sectoral)
Understanding	• Ecosystem Concept
	• Ecosystem Structure
	• Ecosystem Function
	• Balance of Nature
	• Environmental Situation (National and Global)
Action	• Vision Towards Environmental Action
	• Evaluation
	• Celebration

As described in chapter 4, CEC chose "to use a PARTICIPATORY approach"[7] in conducting RENEW workshops based on the recognition that the basic ecological concepts may be learned by anyone and may be drawn from real life experiences.[8] Therefore RENEW developed a learning process that encouraged the participants to share and learn from each other's experiences. This process provided opportunities for participants to share and learn more about their own environment, how it functions and what they can do, individually and collectively. To enhance the sharing and learning, creative educational approaches were utilized. The training of local facilitators continues to be a key strategy to ensure the de-centralization of CEC's environmental adult education efforts and the development of locally relevant programs. The commitment to locally relevant educational programs was further enhanced after this focus was strongly supported by the findings and recommendations of the 1993 national evaluation of RENEW. In 1994, the Education and Training Department identified "Indigenization and Localization of Grassroots Environmental Education" as its core thrust.[9]

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[7] Guevara, *Renewing RENEW*, p. 18.

[8] Duhaylungsod, "Preface…", p. 8.

[9] "Indigenization and Localization of Grassroots Environmental Education" (QC: CEC, 1994) [unpublished document].

RENEW has lived up to its acronym since the workshop content and design continues to be renewed prior to, during and after each workshop. This on-going change is an example of what Duhaylungsod described as progressive contextualization.[10]

Chapter 1, detailed previous attempts, from unpublished papers, that describe progressive contextualization based on CEC's experience. One of these descriptions is presented below to help identify the key elements and processes that are being studied in this chapter.

> Progressive contextualization is about a dynamic movement for the better, in terms of, designing educational activities that are influenced by time, space, and our organizational identity and by our learners. This can be translated into actually influencing the educational content through a local problem as entry point, the depth of analysis to be conducted and the nature of the action proposed.[11]

The following sections used the above quotation as a starting point to identify and describe the local contexts that shaped the RENEW workshops.

7.2   The local context: factors in progressive contextualization

The influences on the content and methods used in the RENEW of the local context, particularly time, space, and the learners, three of the four factors identified in the previous description are examined in this section. The other factor, CEC's organizational identity, has been described in detail in the previous chapter; however,

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[10] Duhaylungsod, "Preface…", p. 8.

[11] Duhaylungsod and Guevara, Chapter 3; p 9.

the following chapter examines CEC's organizational processes and its contribution to the practice of progressive contextualization.

7.2.1 Time

Three aspects of time that were critical in shaping the RENEW experience are identified and discussed, namely: duration, change through time, and urgency.

(a)   Duration

In education work, time as a factor often refers to the duration of a training program, which in turn is often determined by the workshop scope and objectives. However, from experience the duration of a RENEW workshops was constantly adjusted to suit a combination of the following:

- availability of the participants (e.g. balancing between family and work schedules);
- time of year (e.g. avoiding the planting and harvest seasons);
- time of day (e.g. time for fishing, cooking time, Muslim prayer time), and
- funding limitations (e.g. accommodation and food considerations).

In response to the possible range of objectives and local situations, CEC has designed workshops that run for a couple of hours, half a day, all day, or continuous for 3-6 days. There are workshops that are conducted at different intervals over a period of time with the topics progressively building on the previous workshops, hence the description of a ladder-type or staggered workshops.

The original RENEW was designed to run for three days, but at times may extend to a fourth day. A sample workshop syllabus is provided in Appendix 7.1. To include the training of local educators would extend the duration to generally a full week, which incorporates a three-day RENEW, a one day visit to a local environmentally critical area, and three days for the trainers' training component. The weeklong

training of trainers is often followed by a RENEW workshop where the new trainers assist the CEC educators in the design and actual workshop facilitation, as part of their training. From experience, the longest continuous workshop CEC has conducted ran for 10 days, the Advanced Trainers Training in 1993, which the participants found too long.

(b)   Change through time

Time as a key factor in progressive contextualization refers more to the on-going adjustment of the objectives and workshop activities over a period of time as a response to the changing nature and level of awareness of the participants. The influence of this factor is best illustrated by changes to the introductory module, specifically the Local or Sectoral Environment Situation, and its corresponding effect on the objectives of the succeeding modules. When RENEW was designed in 1990, the introductory module called the Local or Sectoral Environment Situation was a diagnostic module. The objective was to gauge the level of awareness and understanding of the participants often by asking them to draw their current home environment and their hopes for their home environment in the future. Because of the diagnostic nature of the module, the activity involved merely encouraging the participants to share stories about their home environment without any in-depth discussions or synthesis.

After conducting a few workshops the facilitators realized that

> … in addition to being diagnostic, the local environmental situation module could provide the facilitator with concrete examples from the participants' actual experiences to illustrate the ecological concepts that would be discussed next.[12]

The additional objective of gathering examples to help explain ecological concepts using components of the environment familiar to the participants made it necessary

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[12] Guevara, *Renewing RENEW*, p. 25.

that a more detailed documentation of the workshop outcomes be done. This was the first change, though it was more a realization on the part of the facilitators that brought the change. The following experience, on the other hand, highlights the need to respond to the changing nature of the participants through time.

In 1992, during a workshop with agricultural workers in South Cotabato, Mindanao, the facilitators were faced with the need to adjust objectives and methods in the middle of the workshop. The need to adjust the module was in part due to the observed "increased level of environmental awareness"[13] of the current participants compared to previous workshop participants. The following is a description of this particular incident. After the acquaintance module, the participants were divided into groups based on the province they came from. Each group was asked to report on the local environmental situation in their respective provinces. The objective of the activity was merely to gauge the level of awareness of the participants and identify the major environmental problems in their local area hence the extent of processing or synthesis is often only a list of local problems. However, the facilitators noted that all the groups went beyond describing in detail the local environmental problems, they even "reported probable causes and effects, as well."[14]

The facilitators felt that given the comprehensive nature of the information provided by the participants that there was a need to process and synthesize the activity more thoroughly. The CEC facilitators decided to use a framework that organizes the information into columns under the following headings: Problem, Area, Cause, Effect and Response (PACER framework).[15]

Table 7.3: Synthesis of Provincial Environmental Situation:
Cagayan de Oro / Misamis Oriental[16]

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[13] Guevara, *Renewing RENEW*, p. 26.

[14] Guevara, *Renewing RENEW*, p. 26.

[15] Guevara, *Renewing RENEW*, p. 62.

[16] "Documentation of the Trainers Training Workshop on Basic Ecology: 26 July to 1 August 1992" (South

Problem	Area	Cause	Effect	Response
• Water/ air pollution and poisoning	• CDO/ Mis.Or. & Ginoog	• No proper disposal of toxic wastes	• Sickness: people, animals, plants	• Filed a petition with the DENR and local government
• Soil/ water contamination	• Del Monte plantation in Bukidnon	• Use of deadly and banned chemicals (fertilizers and pesticides)	• Some species vanished • Unsafe drinking water • Sickness • Damage of plants and animals • Damage of soils • Loss of wildlife due to expansion [of the plantation]	• Political intervention • Advocacies • Foreign environmental group investigation
• Top soil damage/ forest fires	• Malasag, CDO reforestation	• Soil erosion • Long drought periods • Continuous tree-cutting	• Flooding of low lands • Loss of wildlife • Farm/creek damages • Loss of clean drinking water	• Tree planting • Filed a petition with the DENR and local government

In previous workshops, the PACER framework is used to synthesize the outcomes of the module on the national environmental situation at the middle of the workshop. This was the first time the framework was used to synthesize the local environmental situation, again mainly due to the perceived comprehensive nature of the information provided.[17] Table 7.3 is a translation, from *Bisaya* to English, of the synthesized report of the group from Cagayan de Oro (CDO) in Misamis Oriental (Mis.Or.). (see Map 1.1) This observation, of the comprehensive nature of the information provided was further illustrated by the synthesis of all the provincial reports, as presented as Table 7.4.

Cotabato: CEC, MASIKAP, NFL, August 1992), n.p. [unpublished document]. Note that most of these are translated from the local dialects.

[17] Guevara, *Renewing RENEW*, p. 62-62.

Table 7.4: Synthesis of Provincial Environmental Reports[18]			
Problems	**Causes**	**Effects**	**Responses**
• Loss of flora and fauna • Air and water pollution and contamination • Unsafe drinking water • Drought • Forest fires in reforestation areas • Peace and order • Destruction of coral reefs and mangroves • Expansion of fish ponds • Mining using chemicals • Deforestation • Too hot in summer • Flash floods	• Overuse of illegal and banned agrochemicals • Multi-national operations of agriculture and aquaculture • Illegal logging • No proper waste disposal • Slash and burn • Deep well use by MNCs • Government not supportive of the local people / corrupt • Disposal of toxic wastes • Soil erosion • Semi-colonial and semi-feudal system • Vested interest of the ruling elite • Dynamite fishing • Use of timber in underground mining • Tuna canning industry	• Sickness and poor health of people, animals and plants • Destruction of homes carried away by flooding • Diseases (tuberculosis, skin disease and blindness) • Malnutrition • Inhuman working conditions • Overpopulation • Survival of the fittest • Economically poor • Springs have ceased to flow • Unemployed and underemployed	• Health and safety training • Protest actions • Petitions to government authorities • Political interventions • Advocacies • Tree-planting • Social forestry projects • DENR reforestation and monitoring

The synthesis of the reports confirmed to the facilitators that the participants were not just more aware about the local or provincial environment, but they also had a better understanding of the complex interrelationships of their local environmental problems to the broader socio-economic and political realities. The decision of the facilitators to use the PACER framework to synthesize the local environment situation was an appropriate adjustment given the situation they found themselves in. However, having used the PACER framework forced the facilitators to re-think the objectives and methods for the national situation module that was to follow. The original objective of the national situation module was to develop an understanding

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[18] "Documentation of … 26 July to 1 August 1992", n.p.

of the "interrelationships of problems across ecosystems, sectors and localities to the existing socio-political, economic and cultural system."[19] As mentioned, the PACER framework was originally used to achieve this objective.

Since the PACER framework had been used to synthesize the local situation, the facilitators decided not to adjust the original objective of the national situation module but to use a different framework. The participants were divided at random and each group was assigned an ecosystem (forest, agricultural plains, freshwater and marine, and the urban environment). Each group was asked to identify the relationships between current national environmental problems in each ecosystem to the economic, political and socio-cultural aspects of society. Table 7.5 is a translation of the table prepared by the group assigned to the forest ecosystem that identified deforestation and mining as the key problems

Table 7.5: Economic, political and socio-cultural impacts of deforestation and mining in forests[20]

Economic	Political	Socio-cultural
• Export-oriented economy • Emphasis on foreign investments • Controlled by TNCs • Exploitation of labor (e.g. Native products are bought much cheaper) • No funds for rehabilitation	• Unfair laws imposed by legislators • Foreign intervention • Corruption • Total war policy • Bureaucracy	• Loss of cultural values (i.e. Rituals) • Religion • Influenced by urban values

[19] Guevara, *Renewing RENEW*, p. 26.

[20] "Documentation of … 26 July to 1 August 1992", n.p.

While the activity may have achieved the original objective of drawing out the national environment situation and identifying the interrelationships involved, it did not provide any additional depth to what the participants had demonstrated they understood at the start of the workshop. The translated comments and recommendations of the participants gathered during the evaluation of this particular workshop support this observation.[21]

- *"Mas palalimin ang national situation at global situation."* ("Provide a more in-depth national and global situation.")
- *"Dapat may punto na maka-update ng datos or figures on environment situation in the Philippines."* ("There must be a part in the workshop where we can be updated with data and figures on the environment situation in the Philippines.")
- *"Mas maayo nga dungagan pa ang inputs after the national situation workshop."* ("It would be better if more information was provided after the national situation workshop.")
- *"Usahay dako ang oras sa workshop nga masayang ug gamay lang ang input."* ("Sometimes too much time is wasted in a workshop, and with very little new information given.")

In response to this experience and the observed increased environmental awareness of the participants, the

> … national situation module has ceased to be one where the participants learn a framework of analysis. It has become a venue for updating knowledge on the current situation and deepening the understanding of the local situation in the context of national developments.[22]

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[21] "Documentation of … 26 July to 1 August 1992", n.p.

[22] Guevara, *Renewing RENEW*, p. 26.

This experience highlighted to the facilitators the need to respond to the changing nature of the workshop participants, in this particular instance over a period of time. Other relevant factors in relation to the nature of the participants, such as place and levels of literacy, are considered in the next sections.

(c) **Urgency**

Aside from the two aspects of time discussed previously, CEC identified the urgency of certain issues, more particularly the timing of the workshop, as critical in designing the education module. For example, a few months after a major mine tailings spill in the province of Marinduque in 1996, CEC was asked to co-facilitate an environmental education workshop as part of a Popular Education Festival called *Daupan*. The festival brought popular educators from all over the country to Marinduque for a week to renew ties and share experiences in popular education.

The following is a quotation from the reflections of CEC educator Queenstein Banzon who co-designed and co-facilitated this workshop with a local organization, the Philippine Rural Reconstruction Movement (PRRM) - Marinduque.

> As far as the educator-participants were concerned, the need to obtain additional information about mining was their primary concern. It was the urgency that determined the workshop content and flow. … As popular educators, we advocate the use of creative and innovative learning processes. In this instance these processes had to give way, resulting in a straight lecture with minimal discussion. The participants listened and wrote quickly, anxious not to miss a single piece of information. For about five hours, both the speakers and the participants maintained this intense level of sharing and learning - which was followed by unstoppable questions from the participants. Therefore, in a way, it was no less interactive. [23]

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[23] Queenstein Banzon, "Blending content, context and process in developing and testing a mining education module" in *Liberalization of the Philippine Mining Industry, A Road to Industrial Development?* (Quezon City: CEC, 1997), p. 52.

This reflection relates more to methodology than to content, where the urgency or recentness of the disaster and the timing of the workshops was motivation enough to engage and sustain the participants in a lively and rather lengthy discussion. The immediacy of the situation, in terms of time, was identified as an important factor in adjusting the design of the workshop.

7.2.2 Space

Space is another factor that influenced the content and methods involved in conducting RENEW. This section specifically examines the concept of space to include the actual training-workshop venue, the immediate biophysical environment or the local ecosystem, and the broader socio-economic, political and cultural environments and their respective impact on the education module.

(a)   Workshop location

Often space, the physical space, is understood to mean the workshop venue. From the experience of CEC educators' knowledge of the workshop venue continues to be an important consideration in designing a workshop because certain activities have specific space requirements.

For example, an activity called *Food Chase* was developed as part of the RENEW to illustrate the concept of food chain.[24] Participants are assigned to role-play different plants, animals and humans. The animals and humans are asked to chase the specific plant or animal they wish to eat, based on what they know about the feeding habits of the animal assigned to them. The participants are asked to hold on to the waist of the participant they have eaten and the chase continues until all the participants are

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[24] Guevara, *Renewing RENEW*, p. 45-46.

connected or part of a chain. The plants, animals and humans in each chain are then identified and listed on the board, and the concept of food chains discussed.

This activity could not be conducted in a classroom with fixed seats. It requires an open space nearby, like a basketball court or a grassy area. Otherwise, an alternative activity had to be designed to adjust to the given space. In the case of RENEW, the CEC educators developed an activity called *My Food Chain*.[25] This involves asking the participants to write their name on a piece of paper and then recall the different food items they had during their last meal or their favorite dish. The main plant and or animal component of the meal is identified and written on separate pieces of paper and placed next to the piece of paper with the participant's name. On another piece of paper the participant is asked to identify what the animal they identified ate to nourish itself, which is again placed in sequence next to the previous piece of paper. This process goes on until we reach the end of the feeding sequence. Then arrows are placed in between the pieces of paper to illustrate the individual participant's food chain.

However, aside from space considerations, the latter activity was developed also as a response to a cultural consideration. In one instance the *Food Chase* activity could not be conducted because the male and female participants were not allowed by their religion to hold each other. Other examples of the influence of culture in the development of CEC's educational practice are identified in the next section. Workshop location or venue is therefore a straightforward factor that can easily limit what can be done. But it can also help motivate the facilitator to develop different methods based on a wide variety of possible workshop spaces.

(b)   Bio-physical environment

More importantly, space refers to the local area where the participants live and work – their local environment or ecosystem. Space is an additional factor that has affected

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[25] Guevara, *Renewing RENEW*, p. 47.

the design of the RENEW workshop. The activity called *Tree of my Life* [26] can help to illustrate the influence of space as a contextual factor. This activity is often conducted in the Philippines as part of RENEW. Participants use the symbol of a tree to introduce themselves and present their expectations at the start of the workshop. Using large sheets of paper the participants draw their own trees with the roots representing deep influences in their lives; the trunk representing their current occupation; the branches, skills or experiences they wish to share during the workshop, and buds representing their hopes and expectations from the workshop.

The researcher conducted this activity during an international workshop on community-based environmental impact assessment in Calgary, Canada.[27] It seemed to be a straightforward enough activity, until a number of participants came up to ask if they could use a network of rivers instead of a tree to represent their responses to the questions. They explained that in Northern Canada, where they were from, they did not have trees, but mosses and lichens. These primitive plants do not have developed structures that they can call roots, trunk and branches, like trees. They explained that they could use the headwaters to represent life's deep influences; the main river, to represent their current occupation; the branching rivers and streams to represent experiences they wish to share, and the outflows to the seas as their expectations.[28] This situation demonstrated that symbols from nature are very context specific. While the participants knew what trees were, it was important for them to use nature symbols that were more familiar to them in introducing themselves. For an archipelago, like the Philippines, the more than seven thousand islands and the wide range of ecosystems present a wide range of environments to draw out symbols from. This biophysical diversity was a key factor in conducting the local environment situation at the start of the RENEW workshop because it informed

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[26] Guevara, *Renewing RENEW*, p. 104-105.

[27] "Community-based Environmental Impact Assessment Module", International Summer Institute on Participatory Development, University of Calgary, Alberta, Canada (June 1995) [workshop].

[28] A revised version of this same activity that incorporates this experience has been published in D. Clover, S. Follen and B. Hall, *The Nature of Transformation: Environmental Adult and Popular Education.* (Toronto: Ontario Institute for Studies in Education, University of Toronto, 1997), pp. 63-64.

the facilitators of the specific ecosystem the participants were familiar with, which often was where they lived or the ecosystem that was damaged or threatened.

(c)   *Socio-political economic and cultural environments*

CEC has always emphasized the links between the biophysical environment with the socio-economic, political, cultural and historical context in its environment work. This holistic and integrated perspective has been present in documents examined, including the Draft Concept Paper[29], which initiated the discussions that eventually give birth to CEC. The concept paper makes an observation that existing environment organizations lack a "unified view of the nature and root of Philippine environmental problems"[30] and that CEC would fulfill this need for an organization with a more integrated and holistic view.

The concept paper explained, "CEC will have to address not only environmental issues but also economic issues that shape people's lives and affect the environment."[31] The concept paper gave as examples upland farmers converting forests to agricultural lands, and fishers using cyanide or dynamite to ensure a big catch. The concept paper admitted that these illegal efforts only "temporarily sustain them, but they lose in the long run." CEC's role is to "encourage people to adopt ecologically sound economic and livelihood alternatives."[32]

This seeming emphasis on economic and livelihood concerns was one of the major issues identified as part of the development divergence that resulted in the ideological rift within the progressive political block, which was discussed in the previous chapters. It was during the internal consolidation that resulted from the split when CEC's earlier education work was criticized as having placed too much emphasis on

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[29] "Draft Concept Paper" (Quezon City: CEC, October 1988) [unpublished document].

[30] "Draft Concept Paper", p. 3.

[31] "Draft Concept Paper", p. 4.

[32] "Draft Concept Paper", p. 4.

an ecological perspective. It was only in the mid-1990s that a more holistic socio-economic, political and cultural perspective became evident. As a result of the internal consolidation, CEC adopted a mode of production framework, which is further described in chapter 9. Educationally, this holistic analytical approach provided the RENEW workshop with a wider range of entry points to engage the participants in learning about their environment. It also helped to develop a more comprehensive analysis of the local problem and, correspondingly, facilitated the identification of more realistic environmental responses.

In addition to the holistic approach to examining environmental problems, the aspect of culture is important to raise as a distinct concern in the development of RENEW. In section 7.2.2(a) the need to develop a different activity to study food chains was illustrated as an example of responding to a limitation of the physical workshop space. However, this same example of opting to use the activity *My Food Chain* instead of *Food Chase* can be used to illustrate the respect of the educators for a cultural practice of Islam where male and female participants are not allowed to touch each other.

Ramiro Plopino is in support of the need for cultural sensitivity and argues, "social learning requires that the educator must understand the trainee's culture." [33] However, CEC did not always succeed in adjusting to the local culture. Plopino argues that culture includes the language, which section 7.2.3(a) examines is a difficulty that CEC continues to experience.

7.2.3   The learners

The learners have played a critical role in shaping the RENEW experience. Three factors are examined in this section: the issues of language and literacy, women and gender, and awareness and level of organization. In researching this section, it became evident that the factors identified to be significant in terms of the learners

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[33] Ramiro Plopino, "The Contexts of RENEW" (Quezon City: CEC document, 1993), p. 16 [unpublished report].

could not be examined without being reflexive about influence of these same factors from the context of the CEC staff and the organization itself. This section provides additional support for the earlier argument raised regarding the institutional role of CEC in the practice of progressive contextualization.

(a) *Language and literacy*

There are more than 100 languages or dialects in the Philippines.[34] Filipino is the national language that was identified in the 1987 Constitution. Therefore, Filipino was not only the "language of everyday life everywhere in the country, … a *lingua franca*, but likewise as a language of education and scholarly discourse."[35] Filipino essentially comes from *Tagalog*, the dominant language spoken in parts of Central and Southern Luzon that surround Manila, the capital city. However, Andrew Gonzalez makes the important distinction that it is called Filipino because it has been "enriched with lexicon from Philippine and other languages."[36] Ideally, CEC wanted to conduct the workshops in the language of the local participants. However, English and Filipino continue to be the major languages used in CEC's education work during the period under study. As mentioned these are the dominant languages in the capital city, where CEC is located, and are the languages that the CEC staff are confident in speaking, reading, writing and facilitating in, including this researcher. This situation is confirmed by the fact that English and Filipino are the languages of conversation, documentation and discussion at CEC.[37]

CEC publications were mostly written in English, because the target audience of these publications was local and foreign NGOs, local educators and leaders, and more recently, schools and universities. While most of the posters printed used

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[34] Russ Kerr, and others, *Philippines* 7th ed. (Melbourne: Lonely Planet, 2000), p. 478.

[35] Andrew Gonzalez, "The Dilemma of English" in A. Gonzalez (ed), *The role of English and its maintenance in the Philippines* (Manila: Solidaridad Publishing, 1988), p. 9.

[36] Gonzalez, p. 9.

[37] I speak English and Filipino fluently, but have through years of working in different parts of the country picked up some key words that often arise in discussions about the environment.

Filipino, there was only one issue of the newsletter (*Pinoy Feedback* 1995) and one environmental primer that were written in Filipino. Other publications like the *Understanding our Environment* worksheets were only translated in Filipino and in another local language widely spoken in the south, *Bisaya*. In 1997 one of the partner organizations in Negros translated these same worksheets in *Hiligaynon*. The audio-visual materials produced, like documentaries that featured local communities used whatever the language of the local area was, which were then sub-titled in English or Filipino. At various stages during the period under study CEC had 3 to 5 staff who were fluent in other local languages like *Bisaya, Hiligaynon* and *Ilocano*. However, they themselves admitted at times to finding it difficult to conduct training-workshops in their local language. They explain that most of the time they would be translating themselves, instead of thinking in the local language. Language classes for the CEC staff in *Hiligaynon* were conducted in 1998, as part of the long-term area-based program in the province of Negros. This project is ongoing.

One of the major reasons that help to explain this rather unfortunate situation is that all of the CEC staff members were educated prior to the adoption of Filipino as a national language, hence predominantly in English. It was only in 1974 when Filipino was declared as the national language together with a bilingual education policy. However, while Filipino made a smoother transition in the teaching of the arts and the social sciences, it was more difficult for the natural and physical sciences, including ecology and environmental sciences. Manuel Eugenio and Ester Ogena support this observation when they describe that science education is unique in the Philippine because "it utilizes a medium of instruction definitely alien to the population – English."[38]

A recommendation from a conference on the role of English and its maintenance in the Philippines, held in December 1987 further reveals the dilemma of language for science education during the period under study.

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[38] Manuel Eugenio and Ester Ogena, "Meeting the language needs in science and technology" in A. Gonzalez (ed), *The role of English and its maintenance in the Philippines* (Manila: Solidaridad Publishing, 1988), p. 101.

For the short-term goal, English must continue to be used as a language of science and technology. However, in the long-term, it will most likely be confined to the highest levels of education (tertiary and/or graduate). In the meantime, the Philippines needs a language of the masses to facilitate scientific literacy in the culture and to disseminate scientific concepts and technological know-how as soon as possible.[39]

While CEC believed that environmental problems are more than a "scientific problem" (in the sense of being empirical or factual problem), CEC's attempt to link scientific and people's knowledge about the environment had to involve a certain amount of learning about science. In 2000, more than a decade after this recommendation was proposed, the first local environmental education textbook was published - still in English.[40]

Table 7.6 gives some indication of the languages understood by the participants based on a complied directory of participants from April 1991 to December 1992. Note that the years 1991 and 1992 are part of the historical period described in the previous chapter as the period of active engagement, experimentation and growth and hence would be the peak period based on the number of workshops conducted.

Table 7.6: Languages read, written, and spoken by participants (April 1991-December 1992)

Languages	Number of participants who read, wrote, and spoke the language (n=155)
Filipino	145
English	80
Bisaya/Cebuano	61
Hiligaynon/ Ilonggo	24
Ilocano	10
Maranaw	9

[39] Gonzalez, p. 16.

[40] Ruth Guzman and Roger Guzman, *Environmental education for sustainable development* (Quezon City: Wisdom Advocates, 2000).

Others local languages/dialects	24
Foreign languages other than English	7

This data only further highlights the limitation of the CEC staff in conducting workshops in the local language. However, this limitation was used to motivate the local organizations to conduct a training of trainers' workshop prior to the actual local RENEW workshop, which was mentioned earlier is a key strategy of the education program. The contribution of the strategy of trainers' training to the development of RENEW is examined in the next chapter. Language became a deterrent in the contextualization of CEC's popular environmental education program. While the training of local educators was identified and implemented as a key strategy, the educational materials produced to support these educators continued to be in English. As mentioned earlier, only the *Understanding our Environment* worksheets were translated by the local educators themselves to *Hiligaynon*. The translation of the worksheets is reflective of the shift in CEC's strategy to an area-based and sustained engagement with the local organization in Negros as compared to the shorter workshop-based or project-based engagement in the other areas. Therefore, while RENEW claims to have been contextualized to the local context, language continues to be a major limitation.

(b) Women and gender issues

> Women are the main procurers of essential resources like wood and water. Women farm for food, and provide family health care. … Women play a central role in the environment movement.[41]

This quotation was part of the conclusion of an article on women and environment published by the Center for Women's Resources (CWR) in the Philippines. The

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[41] Elizabeth Cruzada, "Women and Environment", *Piglas-Diwa*, vol.4 no.2 (1991), p. 26.

degradation of the environment Cruzada continues to argue only increases the burden on women, contributing further to their oppression and impoverishment.

Despite the growth of women and gender concerns within NGOs and POs during the period under study, both locally and internationally, CEC struggled with integrating these concerns into its organizational and educational practice. Records show that the major influence on RENEW and CEC as a whole, with regards to women and gender issues, have been mostly from outside CEC. Specifically, these were individuals and groups involved with the national federation of women organizations called GABRIELA and the women health workers from the MASIKAP – Workers' Health Program of the National Federation of Labor (MASIKAP-WHP-NFL).

Table 7.7 shows that the CEC the staff had more women then men, except for a period in 1992-1994, when the numbers were equal. The profile of participants from April 1991- December 1992 shows that there were a total of 85 female as compared to 71 male participants. Despite the numbers, there was not enough push to integrate a gender-aware perspective on CEC's environmental education work.

Table 7.7: CEC staff distribution (1988-1999)			
Year	**Females**	**Males**	**Total**
1988-1991	5	4	9
1992-1994	7	7	14
1995-1997	4	2	6
1997-1999	6	2	8

One example, in 1993, is worth relating, particularly about how these concerns managed to modify a major training program. After months of planning a comprehensive program for the first Advanced Trainers' Training (ATT) workshop, it was not until the second day when the CEC facilitators realized that there was no session allotted to explore the issues of women, gender and its relationship to the environment. This oversight was brought to the attention of the facilitators by some of the women participants who insisted that time be provided to discuss these issues

before the training could proceed. The request was granted and a group of women volunteered to facilitate the session.

The CEC facilitators soon realized that the request was a reaction to an offensive sexist joke by some of the male participant. This joke, in particular, involved a play with words and language. While the joke was related in Filipino, the punch line had a word that was offensive to women in another local language. The women used this situation as their entry point for discussion. The initial discussion was followed by an overview of women's oppression, which was then linked to their role as environmental educators. There was not enough time to deepen the discussion, but there was an agreement to stop the use of sexist language and to look into gender issues in future workshops. However, this event did not result in the development of modules that integrated women and gender issues within CEC's organizational and education work. While CEC was open to the women educators integrating the issues of women, gender and environment in their respective local workshops, there was no commitment from CEC of integrating it in all workshops.

A similar observation was made based on the experience of CEC in conducting a research on women and mining in Sipalay, Negros Occidental in 1996-1997. The project involved the training women researchers within the local community to document the impact of mining on their lives. In a follow-up project proposal, developed in 1998, the results of the project were described as follows,

> … while CEC was able to draw out the Sipalay situationer through the research conducted by women researchers, the research is weak in terms of establishing women's role in a farming community such as Sipalay. This can be attributed to the weakness of the Center in doing research with a clear women or gender perspective.[42]

The following quote from the 1997 evaluation further supported these observations.

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[42] "Gender Research and Education: Towards the integration of gender in CEC's environmental education and research work, project proposal" (QC: CEC, October 1998), p. 2 [unpublished document].

Despite the Center's years of involvement in the Women Project, a clear conceptualization of "women and environment" even at the level of the staff is still lacking. An important issue that has to be addressed is looking at women issue whether along gender or women perspective? Considering this, it is proposed that the institutional development program include in their planning a staff development program on gender perspective, the women's movement and a reflection activity for CEC to reflect on its experience in women project.[43]

Two reasons can be identified to explain these experiences. First, that these concerns were not rooted within the organization because gender was not an issue identified as a priority by the local organizational partner or by the CEC staff. Second, it was not an issue that was supported by the majority of the Center's staff. Therefore, in terms of contributing to the contextualization process, the incorporation of women and a gender-perspective was highly dependent on the individual educator.

(c)   ***Awareness and community organizing***

CEC observed an increase in the level of environmental awareness of the participants attending the workshops during the period under study. The 1992 workshop experience with agricultural workers in Mindanao, described in section 7.2.1(b), is an example of how this increased level of awareness required CEC educators to make important adjustments to both the methods and the content of RENEW. This increased level of awareness is attributed to the fact that CEC's partner organizations were mostly organized groups of farmers, fishers, workers, women, indigenous peoples or urban poor who tended to have members who were more sociopolitically aware. The need to work with organized local communities was necessary because of CEC's limited capacity to stay for extended periods to conduct community-

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[43] "1998 CEC Planning: Institutional Development Program" (QC: CEC, 16 December 1997), p. 1 [unpublished document].

organizing work in any local area. This constraint was primarily due to CEC's decision to have a national scope and the limited number of staff.

This observed level of awareness of workshop participants from organized groups represents what Freire described as an awareness of "the emergence of popular consciousness."[44] In a number of his books, Freire extensively describes and analyzes the process of conscientization (based on the Brazilian *conscientizacao*), "the process by which human beings participate critically in a transforming act."[45] Freire described three main types of consciousness based on his work in Latin America, magical consciousness, naive consciousness and critical consciousness.[46] He argued that conscientization for social change involves a shift from magical or naive consciousness to critical consciousness.

He defined magical consciousness as simply apprehending facts and attributing "to them a superior power by which it is controlled and to which it must therefore submit."[47] On the other hand, a naive consciousness tends to oversimplify problems, uses "fanciful explanations" and is nostalgic of the past.[48] Critical consciousness is characterized by having deeper understanding of the problem and when "magical explanations" are substituted with causal principles.[49] However, he warned that despite this classification, "there are no rigidly defined frontiers between the historical moments that produce qualitative changes in men's awareness."[50]

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[44] Paulo Freire, "Cultural Action and Conscientization", Loretta Solver (trans.) in D. Macedo (trans.), *Politics of Education* (Massachusetts: Bergin & Garvey, 1985), p. 77. (originally appeared in the *Harvard Educational Review*, vol. 40, no, 3 (August 1970), pp. 452-477.)

[45] Paulo Freire, "The Process of political literacy" in D. Macedo (trans.), *Politics of Education* (Massachusetts: Bergin & Garvey, 1985), p. 106.

[46] Paulo Freire, *Education for Critical Consciousness*, Myra Bergman Ramos (trans.) (New York: Seabury Press, 1973).

[47] Freire, *Education for Critical Consciousness*, p. 44.

[48] Freire, *Education for Critical Consciousness*, p. 18.

[49] Freire, *Education for Critical Consciousness*, p. 18.

[50] Freire, "Cultural Action….", p. 77.

In the situation with the agricultural workers, described in section 7.1.2(b), it was crucial for the facilitators to recognize, and address, this level of awareness or consciousness of the participants. The response of the facilitators was simply to change the method used to draw out the national situation. This response did not directly address the observed level of awareness of the participants. This failure was reflected in the evaluation of the participants. The recognition of different levels of political awareness of participants has resulted in CEC developing advanced topics for the RENEW workshops. One example is the topic, "History of the Philippine Environmental Movement", which requires from the participants an understanding of the historical context the Philippine social movement. Or more recently, CEC has included topics that identify the roots of environmental problems, beyond the holistic and integrated approach, but a more political economy and mode of production approach. These new topics and frameworks are examined in greater detail in the next chapter.

Previous experience has shown that the initial outcomes of RENEW workshops needed to be sustained at and from the local level. Therefore, the presence of a local community organization, or people's organization, not just a local NGO continues to be an important criterion in deciding whether to respond to a particular request. The decision to develop long-term, area-based programs in Negros and Mindoro has resulted in CEC becoming more involved in community organizing work. However, this long-term engagement continues to be possible only through the assistance of previously established local groups or networks, and always within the context of environmental work.

From the evidence provided, it can be observed that various aspects of the local context identified have influenced the development of the RENEW syllabus, content and methods, in varying degrees. For example, the different aspects of time, the various spatial contexts and the level of community organizing and hence political awareness of the learners played a major influence in the development of RENEW. However, the evidence suggests that while the importance of the learners' context was acknowledged, specifically the issues of language, and women and gender, were not as influential in CEC's educational practice. The common denominator between

these factors is that they were all determined by the limitations of CEC as an institution and its staff. While the staff was very sensitive and committed to the needs of the partner organizations, it could not escape the limitation that language dictated hence the dominance of English and Filipino in its teaching and materials. In the same way, while there were attempts at integrating the issues of women, gender and environment from CEC's partners, it was not a felt need within the CEC staff, and hence it did not become a major influence in the development of RENEW.

These observations support the argument put forward in the previous chapter that CEC, as an institution was critical in steering the practice of progressive contextualization. However, in this case it was so in varying degrees for each of the factors identified. The organizational and educational processes that influenced the degree to which the different factors identified facilitated the practice of progressive contextualization are examined in the following section.

7.3 Chapter summary

The chapter identified the contextual factors that facilitated progressive contextualization of RENEW. The contextual factors identified were the different aspects of time (duration, change through time and urgency), varying contexts of space (venue, biophysical environment, and the socioeconomic, cultural and political environments) and the specific characteristics of the learners (language and literacy, women and gender, and level of awareness and local organizing). However, these factors did not equally contribute to the development of RENEW. The temporal and spatial factors, and the level of awareness and organizing, had greater influence compared to the issues of language and gender. Collectively, however, these factors indicate a trend towards the localization of RENEW, which fulfils a major recommendation of the national RENEW evaluation in 1993, to localize and or indigenize RENEW. The next chapter further examines this trend by identifying the educational and organizational processes that have contributed to localization.

Chapter 8

Renewing RENEW:

Progressive contextualization processes

Paulo Freire observation that "education is thus constantly remade in praxis,"[1] is another way of looking at progressive contextualization as an on-going learning process. This chapter describes the organizational and educational processes that facilitated the localization of the RENEW module based on the local factors identified in the previous chapter. Data for this chapter was gathered mostly from CEC workshop and evaluation documents.

8.1 Organizational processes

Two organizational processes that contributed to the progressive contextualization of the RENEW module are identified and described. These processes are action research approach and the emphasis on a participatory approach for people's empowerment in its environmental work, as demonstrated by CEC's emphasis on a strategy of training the trainers.

8.1.1 Guided by an action research approach

CEC has been guided by an action research approach, which translates into organizational processes that implement the "spiral of self-reflective cycles"[2] of planning, acting, observing, reflecting, re-planning and so forth. These processes facilitated the progressive contextualization of CEC's educational practice, as well as its mission and goals, as examined in chapter 5. CEC annual reports and evaluation documents highlight the importance of conducting regular reflection sessions to

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[1] Freire, *Pedagogy of the Oppressed*, p. 75.

[2] Stephen Kemmis and Mervyn Wilkinson, "Participatory action research and the study of practice" in B. Atweh, S. Kemmis and P. Weeks (eds), *Action research in practice: partnership for social justice in education* (London: Routledge, 1998), p. 21.

identify lessons learned and document them. Duhaylungsod in his 1992 report to the CEC Board of Directors stated that he believed that "every program must block off time for the reflection period and writing."[3] The following year the value of this practice was noted in CEC's 1993 Evaluation that acknowledged "we must continue the practice of having regular reflection periods to ensure that experiences and learnings are not lost."[4]

More specifically, the Education and Training Department identified four forms of reflection activities during the said 1993 evaluation, namely:

- post-training team evaluation;
- monthly departmental feedback sessions, prior to the regular staff meetings;
- staff meetings – reporting of highlights from departmental feedback sessions, and
- mid-year and year-end departmental reflections.[5]

It was during these sessions that significant lessons from workshops, like the 1992 workshop in South Cotabato, previously discussed in chapter 7, are identified and shared to the other CEC educators and staff members. These discussions are opportunities for the different departments and programs to come together and reflect on their respective experiences, incorporate the lessons learned and plan activities informed by the broader organizational and sociopolitical contexts.

This action research approach would have been one of the tools for development that was passed on from earlier experiences in community organizing. Margarita Lopa identified participatory action research as one of the "new catchwords in development"[6] in the early 1908s, together with community-based health programs,

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[3] Noel Duhaylungsod, "Memorandum Series 220193 to the CEC Board of Directors, Re: Annual Report" (QC: CEC, 1992), p. 5. [unpublished document].

[4] "Documentation of 1993 CEC Evaluation" (QC: CEC, 1994), n.p. [unpublished document]

[5] "Documentation of 1993 CEC Evaluation", n.p.

[6] Margarita Lopa, *Singing the same song: Reflections of two generations of NGO workers in the Philippines* (Quezon City: Asian NGO Coalition and Philippine Partnership for the Development of Human Resources in Rural Asia, 1995), p.50.

community-theater and herbal medicine. Oscar Francisco confirms this link when he described that in the Philippines both popular education and community organizing involve "consciousness-raising and learning from action-reflection."[7] He continues to explain that

> … throughout the organizing process one employs the methods of the progressive cycle of action-reflection-action and consciousness-raising through experiential learning.[8]

These observations regarding action research help establish a link between CEC's educational and organizational practice. This link is further developed in the following section, which illustrates an example of how these action research processes facilitated progressive contextualization. It specifically examines an organizational strategy that CEC decided to adopt in implementing its education work, the training of trainers.

8.1.2 Participatory approach: Training of trainers' strategy

The training of local trainers or educators continues to be a key strategy of CEC's grassroots environmental education program. This strategy is consistent with CEC's commitment to participatory development processes that emphasize the importance of local participation as identified in section 6.2.1. However, there were also some practical reasons that were important for a young NGO, like CEC. Some of these reasons were CEC's office location in the capital city, the decision to have a national coverage, the small number of staff, funding, and the issue of language. This situation would have made it difficult for CEC to sustain the development of locally contextualized education activities without the assistance of local educators. This strategy has become both a key processes and an outcome of progressive contextualization. As a process, it was the training of trainers that facilitated the development of new activities, modules and topics for RENEW. As an outcome, the

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[7] Oscar Francisco, "Building civil society at the grassroots: the Philippine community organizing experience." in M. C. Ferrer (ed), *Civil society building civil society* (Quezon City: Third World Studies Center, UP, 1997), p. 97.

[8] Francisco, p.90.

trainers training strategy itself changed from conducting pre-RENEW trainers training-workshops in 1990, to a National Trainers Training in 1991, to the Advanced Trainers Training (ATT) from 1993-1995, the EduCATOR training in 1997 and most recently a Speakers' Training in 1998. (see Map 8.1)

In 1990, trainers' training workshop were conducted prior to a local RENEW workshop, which involved the CEC educators arriving at the workshop area a few days before the actual workshop. A small group of local trainers, previously identified by the local host organization would undergo a 3-day RENEW followed by a 2 day trainers training workshop. These workshops were conducted in both English and Filipino. The local trainers, together with the CEC educator, would then design and conduct another RENEW workshop, as part of their training. The trainers were then encouraged to conduct re-echo workshops. A sample trainer's training workshop design can be found in Appendix 8.1.

However, the RENEW that immediately followed the training of trainers tended to be very much like the original RENEW module. The exception would be the use of new activities developed by the trainers, the use of more local examples to illustrate some of the ecological concepts and the use of the local language by the trainers at different times during of the workshop. The local trainers commented that this observation was mainly due to the very short interval between the training of trainers and the actual RENEW workshop. CEC's main reason for the conducting the RENEW workshop immediately after the trainers' training was to optimize on transport costs. Succeeding training of trainers' workshops have had a longer gap between the first training and the re-echo RENEW workshops.

By 1991, CEC changed this approach, in particular with the implementation of the Sectoral Environmental Education Program (SEED Program). The SEED program involved the conduct of a National Trainers Training Workshop that was conducted in July 1991 for educators of national sectoral federations of fishers, indigenous peoples, peasants, women, workers and the urban poor. At the end of the five-day workshop, the educators developed sector-specific environmental education workshops, using RENEW as the base module.

Map 8.1: Areas and focus of each of the trainers' training workshops conducted by CEC (1993 – 1998)

The proposed workshop designs were then tested with their respective member organizations at least a few months after the national workshop. The initial output of these workshops were called RENEW Plus because they continued to be RENEW workshops with an additional module, specifically addressing a concern of the sector. For example, the women's workshop included a module on women and environment, the peasant workshop included a module on sustainable agriculture and the urban poor workshop included a module on nature. Chapter 9 provides a more in-depth discussion of the SEED Program.

From 1993 - 1995 annual Advanced Trainers' Training workshops were conducted to assist in the ongoing development of the skills and knowledge of the trainers. The general design of the ATT was a combination of a conference and a training workshop. During the conference portion, the trainers were encouraged to present their respective experiences, either as reflections, new activities developed, and or new challenges. The training workshop section is based on the expressed needs of the trainers. For example, the first ATT in 1993 was focused on community-based environmental monitoring and was conducted in Leyte, which included actual field sampling in Isabel, Leyte (see CBEM experience in chapter 9). The second ATT had a combined focus on indigenous ecological knowledge and the impact of agro-industrial corporations, hence it was conducted in South Cotabato, the location of Dole-Philippines plantations and one of the sites of the Indigenous Knowledge in Ecology Research (IKSER), which is discussed in chapter 9. The third ATT, conducted in 1995 in Bohol, was focused on the issues of peasants and farming. It was during the first ATT in 1993 that the idea of a national pool of educators was first suggested. This pool of educators has since become the People's Faculty, which was officially launched during the ATT in 1995 the last ATT conducted in this format.

By 1997, a new workshop called the EduCATOR workshop was designed and conducted in Southern Negros. The workshop was designed to address the realization of CEC and its local partners of the broader and multi-faceted tasks and roles of an environmental educator. The workshop acknowledged the centrality of environmental education work but emphasized that education work involved more than just the role of trainer. Hence the workshop included modules that discussed the

different tasks and roles such as a Campaigner and Advocate or Activist, a Trainer, an Organizer and a Researcher, hence the acronym EduCATOR. Table 8.1 presents an outline of the EduCATOR workshop modules.

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Table 8.1: EduCATOR Workshop Outline[9]

Module 1: Acquaintance, Expectations check and orientation

Module 2: Local environment situation
Learning objective: To draw out from the participants the local environment situation, including current educational programs and to develop a shared community vision.

Module 3: Review of ecological concepts
Learning objective: To revisit basic ecological concepts, specifically the ecosystem concept as demonstrated by the web-of-life.

Module 4: Training as education
Learning objective: To distinguish between training and education in terms of philosophy and methodology.

Module 5: Education beyond training
Learning objective: To brainstorm and develop the concept and roles of the EduCATOR (Education, Campaign, Advocacy or Activism, Training, Organizing and Research).

Module 6: Planning an educational program
Learning objective: To develop an integrated educational program within the context of the identified scope of the EduCATOR.

Module 7: Evaluation and closing

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This training has been further modified to focus on the Campaigner and Advocate or Activist aspects of the EduCATOR. In 1998, a Speakers' Training on Mining and the Environment in Negros was conducted to examine and modify a 3-day Mining and Environment workshop that was previously developed by CEC and the local partners. This module had to be compressed within a shorter timeframe and with

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[9] "EduCATOR Workshop Design" (19-21 November, Negros Occidental: CEC and PDG, 19-12 November 1997) [unpublished document].

more campaign-focused sessions. This modification, according to CEC, is in response to the need for more rapid and wide spread education work to provide support for the province wide mining campaign. An outline of the said Speakers' Training is presented as Table 8.2 below.

Table 8.2: Speakers' training on Mining and Environment[10] (conducted 28-29 November 1998, Negros)
Module 1: Sharing of experience Learning objective: To draw out from the participant educators the problems encountered in terms of content, method, facilitation skills and teaching aids in conducting workshops. **Module 2: Relating CEC's experience in module preparation** Learning objective: To share CEC's experience in education work and module development. **Module 3: Examination of 3-day Mining & Environment Module** Learning objective: To examine the 3-day module on mining and environment with emphasis on content, methods, facilitation and teaching aids. **Module 4: Upscaling the education efforts** Learning objective: To develop and present a modified module on mining and environment.

The 1999 CEC@10 evaluation[11] concluded that, "trainers training continues to be the core approach" in CEC's environmental education work. However, the process of progressive contextualization has seen the shift of the practice, from a RENEW trainers' training, to the advanced trainers' training, to the EduCATOR workshops, and finally the Speakers' Training workshops. These changes indicate a development of the understanding of the role of education work within a dynamic environmental context. But the changes also provide CEC and its partner organizations with a range of trainers' training workshop designs that are responsive to the local context.

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[10] "Speakers' training on Mining and Environment Workshop Design" (Negros Occidental: CEC and PDG, 28-29 November 1998) [unpublished document].

[11] "CEC@10 final documentation" (QC: CEC, 2000), n.p.

This section identified and described two organizational processes that contributed to progressive contextualization. These processes are the action research approach and the participatory approach to environmental work, as illustrated by the strategy of training the trainer. Both processes contributed directly to the development of CEC's grassroots environmental education curriculum. However, the action research approach, in particular, has contributed more widely to the organizational development of CEC. Action research processes, like regular reflection and evaluation sessions, facilitated the changes to mission and goal statements of CEC, as discussed in chapter 5, are one example of its contribution.

8.2   Educational processes

In addition to the organizational processes identified in the previous section, there are five educational processes that have been identified to have contributed to the progressive contextualization of the RENEW Module. These processes are the creative and participatory approach, the expectations check module, the local situation module, the vision-setting module and the daily feedback. Each of these processes is discussed in the following section.

8.2.1   Guided by a participatory and creative approach

CEC's environmental education processes have consistently been described as participatory and creative. Participatory because the learning processes used are evocative and experiential, and where the experience of the participants is the starting point of learning. Creative methodologies are used to enhance the process of participation - of sharing and learning, to add variety to what may at times become a very technical workshop, and to help release the inhibitions of the participants so they may be relaxed within the learning environment. The participatory character of CEC's educational practice, however, extends beyond the use of evocative and experiential methods and the commitment to acknowledging and building on the participants' knowledge. Participation means the involvement of the participants or their representatives in the development and implementation of the educational

programs. In the experience of CEC, this was the involvement of the local trainers in the process of renewing RENEW.

Ramiro Plopino one of the consultants employed to evaluate the RENEW acknowledged this participatory nature of CEC's education work as an "ideological as well as a methodological stance".[12] However, he also criticized that it was not purely participatory, because "it lacks on stringent requirement of participatory training, which is [that] the learners must be co-planners in determining the content and methods of training."[13] He continues that a closer examination of RENEW reveals that the syllabus was drawn up by CEC and therefore was "a pre-determined one."[14] However, he adds, that it is participatory because "the facilitators promote participation through stimulating the minds of the participants and encouraging them to feel free to ask questions."[15]

Instead of calling it participatory, Plopino proposed that "a jargonistic term – prescripatory"[16]- a combination of prescriptive and participatory be used to describe RENEW. He explains that it is prescriptive,

> … only in the sense that the facilitators consciously direct the teaching-learning process towards an objectively desirable goal that is beneficial to the participants.[17]

This description would acknowledge that the educational process was initiated by CEC but that it allowed the participants increasing opportunities to influence the educational content and methods as it proceeded. Plopino also acknowledged that prescription was necessary to initiate the process, particularly within social

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[12] Ramiro Plopino, "The Contexts of RENEW" (Quezon City: CEC document, 1993), p. 11 [unpublished report].

[13] Plopino, p. 13.

[14] Plopino, p. 13.

[15] Plopino, p. 13.

[16] Plopino, p. 13.

[17] Plopino, p. 13.

movements where education plays a vital role. However, he also warns about the dangers of too much prescription. A discussion of participation and prescription is in chapter 4.

The creative character of CEC's educational processes are often mistaken to be limited to arts-related activities, like drawing, drama, poetry, dance and movement. While these arts-related activities are part of the repertoire of learning activities, the creative character of CEC's education work is based on a deeper understanding of the need to stimulate the creative thinking in both the educators and the learners. This creative character may mean facilitating a workshop without the common audio-visual equipment or developing a campaign to resist the proposal to mine an old-growth forest. The participatory and creative characteristics of RENEW have resulted in a flexible workshop design that is responsive to the needs of both the local trainers and participants. However, it has been observed that despite the greater involvement of local trainers, often the RENEW workshops conducted by these trainers are very similar to the original RENEW, except for maybe a new activity, the use of the local language and some localized examples. The trainers attribute this outcome to the newness of both the topic and the methods used.

In addition to the strategy of training the trainers, there are a number of educational processes within RENEW that assist in process of contextualization of the workshop design or module. These educational processes are the expectations check and orientation module, the local context module, and daily feedback sessions.

8.2.2   Expectations check module

Before any training-workshop, CEC educators conduct a series of consultations to gather information about the local host organization's expectations, the objectives of the workshop and the local context. CEC then distributes a workshop registration form that also acts as a simple Training Needs Analysis form. The information requested includes: name, age, address, occupation, languages/dialects (reading, writing, speaking), organizational affiliation, responsibilities in the organization, environment-related training-workshops attended, expectations from the workshop,

health and diet restrictions. The completed forms provide additional information needed to plan the technical aspects of the workshop and design the workshop.

This preliminary information is re-confirmed at the very beginning of the workshop during the Acquaintance, Expectations, Release, and Orientation module. It has been noted that the participants often present with a broader and more detailed list of expectations compared to the one gathered from the preliminary registration forms. This observation has been attributed to the participants tending to build on what they hear from the other participants. The facilitators use this additional information to fine-tune or further contextualize the prepared module.

From CEC's experience, adjustments have included changes in both content and methods. It has been rare for a new topic to be identified that has not been previously mentioned. Often the expectations check guides the facilitators with the degree of emphasis required for certain topics. However, when a topic is identified that none of the facilitators are qualified to discuss, this problem is immediately identified to the participants and options are explored.

For example, during a basic RENEW workshop in Southern Negros, the participants identified the need to know more about the new Mining Act. While the educators present were in a position to provide information about the general features of the Mining Act of 1995, they admitted that they did not have the technical expertise that a qualified lawyer would have. The resolution was to request one of the local lawyers to attend the specific section of the workshop when the Mining Act was to be discussed. The local lawyer was contacted and the program was adjusted to accommodate his schedule. However, if it was not possible to obtain the required person or information, a future session is suggested and CEC assists the local organization in identifying a resource person.

In terms of methods, activities that involved men and women holding hands in a predominantly Muslim area were adjusted, after this concern was raised at the start of the workshop. The planned activity was continued, except that scarves and handkerchiefs were used instead of directly holding hands. Other key adjustments have involved setting up learning groups to provide support for individuals that

presented as having difficulty in understanding English and Filipino. In such situations the timetable is adjusted to provide more time for the learning groups to meet.

However, despite trying to obtain a comprehensive list of expectations and limitations at the start of the workshop, it was essential that the contextualization process was ongoing throughout the workshop, often through regular feedback sessions.

8.2.3   Local environment situation

CEC's experience indicates that there are many ways of engaging people to talk about their environment. The major challenge for popular environmental educators is to find a key or an entry point, that would not only engage the participants in a conversation but will motivate them to want to understand and act on what they see or experience. Often, from the experience of CEC, it has been an urgent environmental problem that gets people talking. The Bataan oil spill, the proposed expansion of a copper smelter, golden apple snail infestation, and the construction of a new coal-fired thermal plant are just some of the urgent environmental problems that resulted in requests for workshops. These requests may indicate a reactive nature of CEC's environmental education, where the motivation for learning and action is an urgent problem. But while it is reactive, in the first instance, this same problem can be viewed as simply the initial point of engagement. It is from this point therefore that the CEC educators have found the need to broaden the view of the complex interrelationships of this particular problem to their lives, to their local community, and to the larger society.

To develop this broader view, a facilitator needs to engage the participants in the learning process. Paulo Freire described in *Pedagogy of the Oppressed* that

… the point of departure must always be with men and women in the 'here and now', which constitutes the situation within which they are submerged, from which they emerge, and in which they intervene.[18]

CEC's experience indicates that finding an entry point is more challenging when there is not an urgent problem that confronts a local community, but more a long-term environmental change that is incremental and not readily visible. For example, a tourism development project that utilizes local attractions may seem to be harmless and even appear to contribute to enhancing the features of the physical environment. The potential impact of these kinds of projects are difficult to study, except through the examination of similar previous projects in other areas. In such situations, knowledge of the local context, maybe even some historical information about the local environment, is helpful in identifying possible entry points. Hence, the value of local environment module at the beginning of the workshop is to provide the educator with additional information and examples from the experiences of the participants. In short it can be viewed as the diagnostic module for the educator to better understand the local context.

CEC educators believe that the practice of starting from the experiences of the participants is important because it brings the local context, in particular, the participants' reading of their context, into the learning setting. Discussing the local context provides information for the educators that may confirm, expand or sometimes even change their understanding of the context given by the local organizers. This understanding influences the succeeding activities and is an example of progressive contextualization as the workshop unfolds. For the participants, these preliminary processes allow them to view their understanding of their own context vis-à-vis the views of the other participants. This moment, for the participants can be viewed as the initial step into learning.

The local environment as an entry point starts from the bio-physical environment that is familiar to the participants, whether it be a pine forests, sloping agricultural land, vast rice fields, lakes, mangroves, the open sea and or the urban landscape. The local

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[18] Freire, *Pedagogy of the Oppressed*, p. 66.

context as entry point is consistent with key principles in adult learning of being context-based and beginning with experiences familiar to the participants, in this case, the local environment.

However, as emphasized in the previous chapters, the local environment is used only as the entry point for discussing the broader socioeconomic, political, cultural and historical contexts that impinge on the local environment. In examining the RENEW modules and other educational modules developed, it is clear that the introductory modules, aside from being an acquaintance and expectations check and orientation module, always began with the local environment. It was either an activity that would draw out the participants' vision of the future, or the current situation, of their local environment. This environment could be as specific as their immediate surroundings, such as the home, or the larger community environment. CEC educators conclude that this preliminary process, by itself, does not localize the module. However, it provides the educator with important information that facilitates the localization of the succeeding modules. Localization is achieved by identifying the key environmental problems from the point of view of the participants, which in turn provides the entry point for the modules on basic ecological concepts and the national situation.

This local approach is consistent with how CEC applied an action research process. Wadsworth described a similar approach in her own work as a research facilitator with participants she called consumers. She emphasized the need to

> … start from where the consumers were at and respond to that rather than starting from professional theory and practice and attempt to achieve consumer compliance with these.[19]

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[19] Yoland Wadsworth, "The Mirror, the Magnifying Glass, the Compass and the Map: Facilitating Participatory Action Research" in Peter Reason and Hilary Bradbury (eds), *Handbook of Action Research: Participative Inquiry and Practice* (London: Sage, 2000), p. 426.

Francisco concurs that in the Philippine experience of community organizing "one starts with local issues and felt needs, and develops local leaders and organizations through the learning process of mass struggles."[20]

Two approaches have been identified from CEC's experience in adapting the discussion on ecological concepts to the local environment. First is to use the local environment or ecosystem, local plants and animals and local processes to help illustrate the ecological concepts. Second is to use the local environmental problems identified by the participants to illustrate key ecological concepts and explain the nature of the problem. For example, in discussing the concept of food chains or the series of feeding relationships in nature, from CEC's experience, participants who lived in a coastal environment found it easier to relate to an aquatic food chain. They would often identify the local phytoplankton being eaten by the zooplankton, followed by a series of fish of increasing sizes, with local names, and eventually humans. (see Figure 8.1)

Figure 8.1: Sample food chains

An aquatic food chain.

Phytoplankton → Zooplankton → Small fish → Larger Fish → Humans

Terrestrial food chains.

Corn → Chicken → Humans

Grass → Cow → Humans
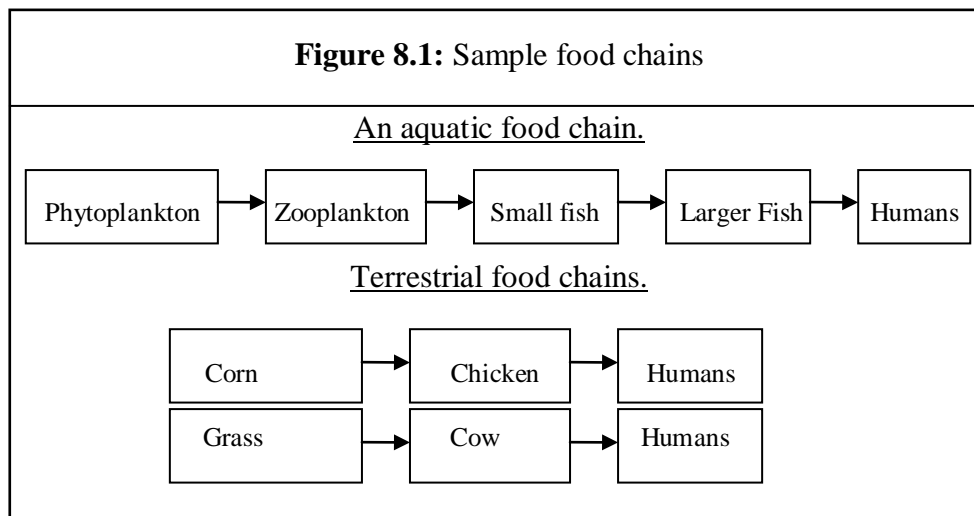
On the other hand, participants from an upland environment would be more familiar with a land-based food chain, such as corn, eaten by the chicken and then eaten by humans or the grass being eaten by the cow and then eaten by humans. Following this pattern, therefore, the concept of food webs or interlocking food chains is also more effectively understood using the local food chains.

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[20] Francisco, p. 94.

With regards to biogeochemical cycles, experience has shown that the most effective starting point is the water cycle, as most, if not all, parts of the cycle are within the direct experience of the participants. These experiences could include the glass of water the participant just drank, clouds, rain, the flooded streams or the dry riverbed. More importantly, the discussion of ecological concepts is always linked back to the existing or sometimes the potential problems identified. For example in a locality where there is concern about the presence of mercury in the water it is important for the educator to illustrate how and why mercury in the local food chain may be toxic to humans but not to fish lower in the food chain.

These ecological processes are called bioaccumulation and biomagnification. Bioaccumulation is when "molecules are absorbed and stored in specific organs or tissues at levels higher than normally would expected." [21] These accumulated molecules are then "magnified as they pass through the food chains and webs"[22] such as the accumulation of heavy metals like mercury in small quantities from fish into the bodies of humans. Since mercury is non-biodegradable, and since humans are in the higher end of the food chain, then what seems to be a minimal amount of mercury in the lower levels, such as where the fish are, is negligible. But as the mercury moves up the food chain it can becomes more concentrated and hence toxic.

In addition to the localization of the content of the modules, in particular the identification of local examples to help illustrate the concepts and to indicate what concepts need to be discussed, the local situation provides the educators with a springboard to discuss the national situation. The main purpose is to find possible links between the local and the national situations.

8.2.4   Vision-setting

Vision setting, an activity conducted often at the start and or at the end of a RENEW workshop also helps to contextualize the module. At the beginning of a workshop,

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[21] G. Tyler Miller, *Living in the environment: principles, connections and solutions,* 12th edn. (California: Wadsworth Publishing, 2002), p. 398.

[22] Miller, 12th edn, p. 398.

participants are asked to draw their vision of the future of their immediate environment. These drawings give the facilitators an idea of the level of awareness and knowledge of the participants about their environment. In addition, it also indicates if the participants have a positive or a negative outlook about the future of their environment.

At the end of a workshop, on the other hand, instead of an individual vision, the participants are asked to draw a group vision. From experience, the group vision provided the facilitators with some sense of the immediate impact of the workshop on the participants but also helps to facilitate the identification of environmental action needed by the participants to achieve the vision.

Plopino emphasized "defining a vision and developing the skills on visioning is a first stage if an alternative movement is to proceed, as it does, from a critique of existing reality."[23] Plopino explains further that

> … developing the participants visioning skill becomes a process of helping them develop analytical and questioning minds and a scientific approach to understand the realities, a process though basic, but quite crucial for social action.[24]

Hence through a visioning activity, the education module is not contextualized only in content, but also in the skills needed by the participants to analyze their environment and act on what they discover.

8.2.5 Daily feedback

CEC educators have found feedback sessions at the end of the day, using a range of techniques, very helpful in providing information needed to prepare for the next day. The feedback is often re-confirmed at the start of the next day, followed by the identification of the adjustments that have been made. Major program changes are

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[23] Plopino, p. 7.

[24] Plopino, p. 7.

consulted with the participants. All these processes help to make the participants aware of the importance of ongoing feedback in shaping the workshop design.

8.3   Chapter summary

The action research approach was identified as the key organizational process that facilitated the process of progressive contextualization. An action research approach was implemented by the Education and Training Department, and therefore directly facilitated the progressive contextualization of the education modules. In addition, this approach was applied more widely to CEC's organizational processes in general. The other process that was identified to have contributed to progressive contextualization is a combination of an educational and an organizational process. The training of trainers' strategy is a major organizational strategy of CEC that displays its commitment to participatory approach for people's empowerment. This strategy, as the chapter described facilitated the contextualization of the RENEW module. However, the implementation of the trainers' training itself changed, in response to the changing needs and context of the local partner organizations. The change from the RENEW trainers' training to the most recent Speakers' Training is itself an example of progressive contextualization.

Educational processes equally contributed to the progressive contextualization of the RENEW Module. The five processes that were identified and described were, the creative and participatory approach, the expectations check module, the local situation module, the vision-setting module and the daily feedback.

The local factors described in chapter 7, and the educational and organizational processes described in chapter 8, were identified primarily for their influence in the development of the content and methods of RENEW. However, some of these factors and processes, as chapter 8 has shown, have had an impact, beyond the contextualization of RENEW. These factors and processes have contributed to the development or more precisely the contextualization of CEC as an organization.

Therefore, the previous argument regarding the critical role of CEC as an institution in the progressive contextualization of the education module can be expanded to include a complimentary role. In this role, the educational development process, and the educators themselves, have shaped CEC as an organization. Evidence of this complimentary relationship can be seen from the on-going changes of the trainer's training strategy that was discussed in this chapter.

In the next chapter, the thesis describes and examines the outcomes of progressive contextualization. The previous discussion has identified that progressive contextualization is a complimentary process, and therefore has both educational and organizational outcomes. The organizational outcomes of progressive contextualization have been discussed in detail in chapters 5 and 6. These organizational outcomes are revisited in the analysis chapters. Hence, it is the educational outcomes, in this case CEC's grassroots environmental education curriculum that is examined in the next chapter.

Chapter 9

Curriculum outcomes of progressive contextualization

The Restoration Ecology Workshop and its trainers training component have been CEC's primary source of experience in progressive contextualization. This process which started with RENEW has resulted in the design and conduct of a number of new workshops, which CEC calls its grassroots environmental education curriculum.

The previous chapters identified the local factors, and the organizational and educational processes that contributed to the progressive contextualization of RENEW. This chapter examines this curriculum to understand how these factors and processes together shaped these new workshops from the basic RENEW. The 1997 definition that described how progressive contextualization influenced the "educational content through a local problem as entry point, the depth of analysis to be conducted and the nature of the action proposed"[1] is used as the starting point for this chapter. It adds to these the attempt of CEC to use local knowledge and ways of learning as an approach to curriculum development. However, as this chapter illustrates, it was not just the educational content that was contextualized.

To appreciate the cumulative nature of the contextualization experience, the chapter examines the development of the curriculum in a chronological order. It begins with the examination of the Sectoral Environmental Education Program (SEED Program), which emphasized the identification of an *entry point* in working with different sectoral groups. This is followed by a discussion on the *nature of the action proposed*, which refers to action or skills-based workshops developed in response to particular environmental problems such as the Community-based Environmental Monitoring (CBEM) workshop series in 1991, and the Community- based Rehabilitation Technology (CORETECH) workshops in 1992.

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[1] Noel Duhaylungsod and J. Roberto Guevara, "Purposive Education: An Examination of Context, Content and Process of Grassroots Environmental Education Experience in the Philippines" (Quezon City: CEC, December 1997) [unpublished manuscript], Chapter 3, p. 9.

The education research called the Indigenous Knowledge Systems in Ecology Research (IKSER) conducted in 1994 is analyzed in terms of its focus on *local knowledge and ways of learning*. Finally, the chapter describes CEC's recent attempts at developing modules within an advocacy framework and with a sharper *depth of analysis*. These modules are the Issue-based modules on mining in 1996 and the Area-based modules in 1997 in Southern Negros and Mindoro Occidental. A schematic diagram of the different components of the curriculum under study is presented in Figure 9.1, which can be studied together with Map 9.1. The Chronology of Significant Events (1988-1999) and Table 5.1 may be referred to in situating when these workshops were developed in the context of CEC's organizational history.

The chapter concludes by identifying the over-all trends observed in the development of CEC's grassroots environmental education curriculum. These trends support the earlier observation that CEC's practice of progressive contextualization has focused on localization. This trend towards localization has been driven by CEC as an institution and in turn has also influenced CEC as an institution and its educational practice. The chapter illustrates that progressive contextualization, which initially was described as a curriculum development process, has in this case also been an organizational development process.

Map 9.1: CEC's Grassroots Environmental Education Curriculum
and the main areas where they were implemented

Figure 9.1: CEC Education design flow (modified from Duhaylungsod 1998)[2]

		RENEW and *RENEW* Trainers Training Modules		

Sectoral Environmental Education (SEED) Program Modules (1991 – 1992)	Skills-based and Problem-based Modules (1991-1993)	Indigenous Knowledge Systems on Ecology Research (1994 – 1998)	Advanced Trainers Training Workshops (1993-1996)	Issue-based (1996) and Area-based (1997) Modules

RENEW Plus Modules for

Fisherfolk

Peasants

Agricultural workers

Women

Urban Poor

Indigenous peoples

Sectoral Integration Modules

Examples: Occupational Health and Safety

Genuine Trade Unionism

CBEM (1991) Leyte Industrial Development Estate (LIDE)

CORETECH (1992-1993) Golden Apple Snail

Mt. Pinatubo Agroforestry

Coral Reef Rehabilitation

Topic outline for a basic course on small-scale mining

Advocacy Modules for Small island ecosystems

T'boli chant as potential medium for environmental education and advocacy

EduCATOR Workshops (1997)

Speaker's Training Workshops (1998)

Mining Modules (1996)

Southern Negros Curriculum (1997 – present)

Mindoro Curriculum (1998 – present)

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[2] Noel Duhaylungsod, "A Curricular Development Design for Grassroots Environmental Education", *Watershed: Ideas on Environment and Society* (Special Issue on Indigenous Knowledge Systems on Ecology Research), vol. 2, no. 2 (1998). p. 14.

9.1   SEED Program: Identifying an entry point

The emphasis on identifying a *local problem as an entry point* is one approach to progressive contextualization that is examined in this section. It studies the experiences that relate to the Sectoral Environmental Education Program (SEED Program), a curriculum development program that was initiated by CEC in 1991 together with the major sectoral federations in the Philippines. The Program involved working in partnership with the national or regional federations of the following sectoral groups:

- *Kalipunan ng mga Katutubong Mamamayan ng Pilipinas* (KAMP, Federation of Indigenous Peoples of the Philippines),
- *Kilusang Magbubukid ng Pilipinas* (KMP, Philippine Peasant Movement),
- *GABRIELA* (women),
- *Kongreso ng Pagkakaisa ng Maralita ng Lungsod* (KPML, Congress of the Solidarity of the Urban Poor),
- *Pamalakaya Pilipinas* (PAMPIL, Philippine Federation of Fisherfolk),
- MASIKAP-Workers Health Program, National Federation of Labor (NFL), and
- National Federation of Sugar Workers (NFSW).

It is important to emphasize that the CEC was organized with the support of most of these same key sectoral groups. The ensuing political debate within the cause-oriented groups in the Philippines has affected these groups and their working relationships, with each other and with CEC.

The objectives of the SEED Program were

> … to build upon curricular and pedagogical experiences towards a grassroots environmental education curriculum, and to evolve mechanisms for sustained environmental action. More specifically, the Program aimed at strengthening the capability of the regional networks in conducting environmental

campaigns and to gather baseline information that could support these campaigns.[3]

After a series of meetings and consultations with the leaders and key educators of each of the groups, a National Trainers Training workshop was conducted in July 1991, which included a basic RENEW workshop and its accompanying Trainers Training module. The participants were expected at the conclusion of the workshop to design an environmental education workshop that would be conducted with their respective sectors. Because the educators attending the workshop were representing particular sectoral groups, the main factor that was considered in designing their respective workshops was understandably the learners. However, instead of a *local problem as entry point*, it was a specific environmental concern of each of the sectors as a whole that was identified as an entry point. These sector-specific modules were seen as possible entry points that would engage the sectors into learning more about the environment.

Table 9.1: Training Modules for Women's RENEW[4]
Module 1: Introduction, Expectations check and Orientation Module 2: Women and Resources workshop Module 3: Ecosystems definition and structure Module 4: Ecosystem concept Module 5: Ecosystem function Module 6: Balance of nature Module 7: Feminist framework on Women and Environment Module 8: Local Environment situation Module 9: Philippine Ecological Situation Module 10: Exposure Trip to Mt. Pinatubo Module 11: Vision and Action plan Module 12: Course synthesis and evaluation

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[3] J. Roberto Guevara, "Planting the Seed: A Sectoral environmental education program in the Philippines" in Darlene Clover, Shirley Follen and Rene Karttoki (eds), *Case Studies in Popular and Environmental Adult Education* (Toronto: OISE, 1997), p. 30.

[4] "Training Modules for Women's RENEW" (QC: CEC and Gabriela, 1991) [unpublished document].

As a result, most of the initial workshop designs used the RENEW workshop as the base syllabus (see Appendix 7.1) but added a module on a specific environmental concern of the sector. Examples of these sector-specific modules were: sustainable agriculture for the farmers; feminist framework on women and environment for the women's groups; occupational health and safety for the workers' sector, and nature awareness and sensitivity for the urban poor. Because these workshops were basically RENEW with an additional module they became known as RENEW Plus workshops. Table 9.1 is an example of such a workshop design.

Some of the proposed workshop designs, however, incorporated parts of RENEW, particularly the module on ecology concepts, and added modules that emphasized the study of environmental problems that were of interest to their sector's concerns within a broader socioeconomic and political context. The Fisherfolks and Environment Training Workshop in Table 9.2 is one example of such a workshop.

Table 9.2: Fisherfolks and Environment Training
Workshop Outline[5]

Module 1: Basic concepts of ecology and ecosystems
A. Definition of ecology
B. Definition of ecosystems
C. Our aquatic ecosystems
D. The ecosystem concept

Module 2: Our environmental problems
A. The original state of our aquatic ecosystems
B. Our current environmental problems
C. Problems of our fisherfolks caused by society that aggravate our environmental problems

Module 3: What our fisherfolks should do
A. Keys to solving our problems
B. Strengthening our ranks
C. Characteristics of our alternatives
D. The fisherfolks' alternatives
E. How to attain these alternatives

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[5] Guevara, *Renewing RENEW*, pp.144-145.

The proposed workshop designs were then conducted with their respective sectoral groups. The key comments and insights presented below were gathered during Evaluation of the SEED Program conducted from February 11-15 1992 at the Institute for Forest Conservation, Los Banos Laguna.

The educator for the indigenous peoples reported that participants strongly believed that

> *"ang usapin ng environment ay hindi puwedeng ihiwalay sa kaniling buhay."*[6] ("Environmental concerns cannot be separated from their daily lives.")

Neither can it be separated from their demand for self-determination therefore they did not see the need to study it separately. The indigenous peoples who participated in the workshop found the methods lively and enjoyable, however some of them also felt that some of them could be interpreted as tending to be disrespectful of the sacredness of nature. They suggested that, instead of training programs, more exposure trips, between different tribes that are less structured, might be more effective. Finally, it was emphasized during the evaluation that the participants were very critical of the western and scientific concepts, such as the classification of parts of the environment into living and non-living things. This observation was documented during the 1991 mid-year assessment as follows,

> A point raised regarding the KAMP experience was that ecological concepts discussed in RENEW are westernized and are, in ways, different from those held by indigenous people's.[7]

The educators reported that the participants felt that everything was living because they all contributed to life.[8]

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[6] "Documentation of the Evaluation of the Project: Development of a People-based Environmental Education Curriculum through RENEWs, February 11-15 1992" (Los Banos: CEC, 1992), p.3 [unpublished document].

[7] "CEC 1991 Mid-year Assessment Documentation" (QC: CEC, 1991), p. 4 [unpublished document].

[8] Guevara, *Renewing RENEW*, p. 30.

Similarly, the farmers and fishers sectors were aware of the impact of environmental degradation to their livelihood. However, they did not believe that a purely environmental response was the answer. PAMPIL leader Rudy Sambajon emphasized during evaluation workshop that

> …*"mas kailangan pa ng sectoral campaign dahil hindi mo rin makukuha sa education kahit na sabihin natin ito ang susi ng paggagap sa environment."* [9] ("There is a greater need for a sectoral campaign because education alone cannot address the issues, even if we say that it is the key to understanding the environment.")

More specifically, while they saw the need to add modules that discuss sustainable agriculture and community-based coastal resource management, respectively, they saw these alternative models only as a part of the broader advocacy work for genuine agrarian and aquatic reform.

The urban poor sector needed more convincing before they participated in this project. According to one of their leaders, environmentalists are people

> … who work for clean environments, and since the urban poor live on trash and survive by scavenging, environmentalists would therefore look at them as part of the problem. [10]

The CEC 1991 mid-year assessment noted that at first

> … it was difficult to get KPML interested in environmental issues. The KPML was eventually convinced on the importance of environmental education to the point that its executive committee saw the need to develop its own environmental program and curriculum. [11]

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[9] "Documentation of the Evaluation of the Project…", p. 1.

[10] Guevara, *Renewing RENEW*, p.28.

[11] "CEC 1991 Mid-year Assessment Documentation", p. 4.

Toward the end of the KPML RENEW workshop that incorporated a day-trip to a forested area close to Manila, the Makiling Rainforest Park, one of the urban poor workshop participants said,

> *"Ang pagkabulok ng sistema ay hindi natin sinisisi sa maralitang taga-lungsod. May maralitang taga-lungsod dahil may problemang pampulitika, pangekonomiya, pangkapaligiran at panlipunan."* [12] ("We cannot blame the urban poor sector for the decay of society. There are urban poor people because of political, economic, environmental and social problems.")

The urban poor facilitator summed up the urban poor RENEW workshop by saying,

> *" Ang mahalaga rito ay makita natin ang paguuganay-ugnay. Ang problema ng kapaligiran ay nakapasok sa lahat ng aspeto ng buhay natin at sa lahat ng uri ng gawain. ... Sa hanay ng maralitang taga-lungsod, bagamat bago pa lang, tinitignan natin kung ano ang mapagkaisahan o mapagtutulungang gawin na nakabatay sa kalagayan at kaya sa simula. Bagama't meron tayong pangmatagalang gustong gawin na hindi pa natin kaya pero maaaring magsisimula na bilang unang hakbang."* [13] ("It is important that we see the interrelationships. Environmental problems are part of all aspects of our life and all types of work. ... Among the ranks of the urban poor, while we acknowledge that we are new to this, we shall see what we can agree on and assist with given that we are new to this. While we have a long-term mission which we still cannot achieve, we can start now with a first step.")

The links between health and the environment seemed to be the common concern of both the women's groups and the agricultural workers involved in the program. However, the women educators stressed that these concerns had to be studied within the context of their demands for women's rights and empowerment. The agricultural

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[12] "Documentation of KPML RENEW: 25 –29 October 1991" (QC: CEC, 1991), p. 42 [unpublished document].

[13] "Documentation of KPML RENEW", p. 42-44.

workers, on the other hand, decided to focus on health risks and the environmental damage caused by working for transnational agro-industrial corporations, like Dole-Philippines.

It was during a trainers' training workshop for agricultural workers in 1992 that the tendency of simply adding sector-specific modules to the basic RENEW design, the RENEW Plus model, was challenged. The educators argued that the main objective should be to integrate environmental concerns into existing sectoral training courses and not designing new courses like RENEW Plus or other special environmental workshops. This argument was based on the view that

> … we may continue to create new courses on the environment for a particular sector, [but] it is only when one integrates environmental concerns into the sector's basic courses that the environment becomes a legitimate sectoral issue.[14]

This suggestion resulted in some of the educators from the agricultural workers sector integrating environmental topics in existing basic courses, such as, Genuine Trade Unionism, Occupational Health and Safety and Gender and Reproductive Rights. For example, the Basic Occupational Health and Safety workshop for agricultural workers employed by Dole-Philippines in South Cotabato modified to integrate environmental concerns is shown in Table 9.3.

The workshop design suggested that they should start from the workplace environment but expand to include the local environment situation. Within the local situation, the educators suggested that the basic concept of ecology – that all parts of the environment are inter-related and inter-connected – could be used to illustrate the interrelationships between health, occupational safety and the environment. Specific ecological concepts such as food chains, food webs, balance of nature, and feedback mechanisms could be introduced to explain these interrelationships. One of the examples given was the massive use of chemical fertilizers and pesticides by Dole-Philippines, and how these chemicals manage to get into the food chains and their

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[14] Guevara, *Renewing RENEW*, p.29.

potential impact on the health of the workers and the consumers, and its long-term effects on the environment.

This module is followed by a discussion of the national environment situation where a holistic framework linking the local situation with the socioeconomic, political and cultural situation of the country is introduced. One example to illustrate these interrelationships was the continued expansion of Dole- Philippines into the traditional lands of the indigenous group called the T'boli. Other examples identified were the very low lease payments to local small land owners despite the consistent ranking of Dole in the top 50 corporations in the Philippines, and the continued poverty and health problems of the local community.[15]

Table 9.3: Outline of Basic Occupational Health and Safety workshop[16]

Objectives:
1. Know the workers concept of health and safety in the workplace and the environment
2. Know the health and safety situation of the workers
3. Enable the participants to come-up with action plans on health and safety
4. Foster team building among the participants

Outline:
Module 1: Orientation and Expectations check
Module 2: Concept of good health
Module 3: Health and safety situation in the workplace

3a. Draw our local environment situation to illustrate interrelationships between health, safety and the environment and the following basic concepts of ecology: food chains and food webs, balance of nature and feedback mechanisms

3b. Discuss national environment situation to illustrate the interrelationships between health, environment and the socioeconomic, political and cultural situation of the country.

Module 4: Action planning

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[15] Noreen Manatad, "Dolefil ruins Earth, NGO study says", *Media Mindanao News Service/Philippine News and Features Release,* vol. 10, no. 62 (7 May 1992), p. 1.

[16] "Documentation of the Trainers Training Workshop on Basic Ecology: 26 July to 1 August 1992" (South Cotabato: CEC, MASIKAP, NFL, August 1992), n.p. [unpublished document].

However, discussions in 1997 with Maisie Faith Dagpyo, one of the educators of the Basic Occupational Health and Safety workshop described above, revealed that the extent of integration has been dependent on the individual educator's grasp of and commitment to environmental issues, rather than a federation-wide commitment.[17] Unfortunately, CEC was unable to sustain a more structured follow-up of the SEED Program beyond 1995 due the ideological rift within the people's movement. Some of the sectoral educators continued to work with CEC on an individual basis, others CEC simply lost contact with, while some became founding partners of the People's Faculty.

Two approaches to progressive contextualization can be identified from this experience. The first is based on the identification of a *local problem as entry point*, which in this case, was not a local problem within a specific area but a sector-specific environmental concern that could be present across different areas. This sectoral concern was then developed as a distinct module and added to the existing RENEW workshop design, hence the RENEW Plus workshops. The second approach was identified by the agricultural workers and focused on the integration of environmental concerns within current sectoral education programs. However, revisiting this experience in greater depth indicated that while it may have been the worker educators who proposed the integration of environmental concerns within the existing sectoral training courses, this idea of integration was evident in the other sectors as well. These were not directly in terms of integrating environmental issues into existing education workshops but more of integrating these same issues into their broader sectoral concerns.

For example, the indigenous people's participants identified the link between environmental issues and their own way of life and their struggle for self-determination. The farmers and fishers saw the value of integrating environmental issues within their own contextual analysis and advocacy for genuine land and aquatic reform, respectively. Even the experience with the urban poor educators was

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[17] Maisie Faith Dagpyo, People's Faculty founding member (Baguio City, December 1997) [interview].

significant in showing how their perception of an environmental movement separate and in opposition to their interests can be changed if seen as integrated within their own sector's demands. This integration approach effectively shifted the emphasis of progressive contextualization from examining the local context and identifying an entry point that would assist in designing workshops, to examining the local or sectoral context and integrating the goals of environmental education into their existing programs. In using this approach the process does not begin with what the environmental educator wants to integrate but instead with the educator working in partnership with the sector to study their issues, their environment-related concerns, their campaigns and eventually identifying areas for integration.

The two approaches identified from this experience relate to what Plopino[18] described as the challenge involved in balancing between prescriptive and participatory approaches in training. The first approach was more prescriptive, because it was the RENEW design that continued to be the dominant influence, hence the sector-specific module was an add-on resulting in the RENEW Plus workshops. While this prescriptive approach was not the intention of CEC, this was what the experience and the outcomes suggest.

The integration approach on the other hand allows for a greater degree of participation because it is not the RENEW design that is the major influence. RENEW was the means or the process used to engage the different sectors into exploring the issue of environmental concerns, through the National RENEW Trainers Training Workshop. The major influence in the development of the curriculum was the context of the sectors involved - their respective sectoral issues, campaigns and even frameworks of analysis – which from this experience was broad enough to embrace environmental concerns, not as separate, but integrated with their own issues.

While the identification of an entry point can continue to be a valid approach to progressive contextualization of educational practice, it does not need to be limited to a particular module within a particular workshop. Instead it is important that as

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[18] Plopino, Ramiro. "The Contexts of RENEW" (QC: CEC, 1993), p. 13 [unpublished report].

educators we identify an entry point that provides opportunities for the integration of our objectives into the broader needs of the learners. This integration approach is one lesson that CEC continues to learn, even as it attempts to develop skills-based workshop in response to identified environmental problems, discussed in the next section.

9.2   CBEM and CORETECH: Responding to nature of action proposed

The *nature of the action proposed*, the second aspect identified to have contributed to the process of progressive contextualization is examined in this section. While RENEW had a more generalist approach to understanding environmental problems and actions CEC developed a series of workshops in response to requests by local communities and organizations to address specific environmental problems. The key local context that influenced the module in this instance is therefore space, specifically the particular problem experienced within the local biophysical environment.

The Community-based Environmental Monitoring (CBEM) workshops and the Community-based Rehabilitation Technology (CORETECH) workshops are the two workshops described and analyzed as outcomes of the progressive contextualization of RENEW. Both of these are skills-based workshops that were designed to build on the concepts discussed in the basic RENEW; hence they were sometimes referred to as second level workshops.

9.2.1   Community-based Environmental Monitoring Workshops

The Community-based Environmental Monitoring (CBEM) is

> … a corollary activity to RENEW, which focuses on the development of techniques in community based monitoring and the actual training of local community volunteers in actual environmental monitoring.[19]

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[19] Noel Duhaylungsod, "Executive Director's mid-year report to the Board of Directors 1992" (QC: CEC, 1992), p. 6 [unpublished document].

These workshops were designed and conducted by the Education and Training Department together with the Assessment and Research Department of CEC.

The first CBEM was developed in 1991 to address environmental problems attributed to the Leyte Industrial Development Estate (LIDE) located in Isabel, Leyte. The main company in LIDE is the Philippine Associated Smelting and Refining Corporation (PASAR), one of the major copper smelters in the Asia-Pacific region. Its main products are copper cathode, gold and silver. Its by-products are supplied to two other corporations within the Estate. The government-controlled Philippines Phosphate and Fertilizer Corporation (PHILPHOS) utilizes the sulfuric acid used in the smelting process and converts it to phosphate fertilizer, and the privately owned Lepanto Consolidated Mining Company (LCMC) which has a copper roaster and dryer that removes the arsenic from the copper ore.[20]

The Estate was established through the assistance of Japanese Overseas Development Aid (ODA) during the time of President Marcos. Japanese ODA funds amounting to US $480 million are reported to have built the infrastructure (first-class roads, portable power barges, a geothermal power station, and a large-capacity port) required for the Estate to be viable. PASAR, the biggest of the three plants was a joint project between the Philippine government, a group of Japanese corporations and a consortium of local mining firms. The three plants started their respective operations between 1983-1985.[21]

In 1989 the Tokyo Broadcasting System commissioned a survey to gauge impact of LIDE on the local community. Seventy-six percent of those interviewed said that pollution was the primary impact of LIDE. Others complained about forced evictions, worsening health problems and declining fish catch in the bay.[22]

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[20] Sol Juvida, "Copper smelter under fire" in Cecile Balgos (ed), *Saving the earth: The Philippine experience* 4th edn. (Pasig City: Philippine Center for Investigative Journalism, 1997), pp. 105-109.

[21] "Aid for profit: Japanese ODA in Leyte", *Kabalikat: The Development Worker*, no. 9 (September 1990), pp. 8-10.

[22] "NGO Task Force on the LIDE Issue. Some considerations on the establishment of environmental and social monitoring scheme for LIDE: An NGO Framework" (QC: NGO Task Force, 5 May 1990).

Nobuo Kojima reports that

> … when I carried out the on-site investigation in August 1989, the sea stank of chemicals and the seawater, whose transparency had once been lauded, had changed to either a deep red or light green. The sea was found to be remarkably acidic. [23]

This study follows previous tests by Professor Masado Kawada from Nagoya University in August 1988 who said, "the sea water in the catchment area was like vinegar."[24] However, the major concern was the high level of mercury found in the waters of Matlang Bay, the main fishing area of the local community. Juvida reported that

> … the tests conducted by the DENR on January 30, 1990 showed mercury effluents at more than twice the standard level of five parts per billion (ppb), another test on February 27, 1990 showed the mercury level at 8.50 ppb.[25]

Organic mercury has been identified as the cause of Minamata disease, a fatal illness that damages the central nervous system, named after a bay in Japan where it was first discovered.[26]

It was during an environmental conference in Ormoc City in March 1990 when previous tests that indicated high levels of mercury in the bay were reported. However, both the industry and the government representatives present challenged these results due to questionable sampling procedures. To establish results acceptable to all parties concerned, then DENR assistant secretary Delfin Ganapin proposed that environmental monitoring of the Isabel environs be conducted. The monitoring team

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[23] Nobuo Kojima, "Two cases of Pollution in Southeast Asia caused by Japanese-affiliated companies", *Mizu Joho,* vol. 10. no. 8.

[24] "Aid for profit…", p.10.

[25] Juvida, p.106.

[26] Jun Ui, "Minamata disease", *Industrial pollution in Japan* (Tokyo: United Nations University Press, 1992), pp. 103-132.

was to be a multipartite effort composed of representatives from the local government of Isabel, the DENR, the LIDE and the SOS Earth, an environmental group from Ormoc.[27]

It was not long before the multipartite monitoring effort eventually broke down because the LIDE companies questioned and in the process effectively limited the involvement of some NGOs, which they claim were not authorized by the DENR. *Kabalikat*[28] reported "on August 20, 1990, LIDE management prevented the first monitoring exercise of the LIDE site by refusing entry to environmentalists from EMI[29]." These developments prompted the NGOs to conduct their own environmental monitoring through a consortium called the People's Monitoring Team (PMT). Members of the PMT included CEC, SOS-EARTH (formerly EMI), Conspectus Foundation, Commission on Development and Social Concerns – National Council of Churches of the Philippines (NCCP), Environmental Legal Assistance Center -Protestant Lawyers League of the Philippines (ELAC-PLLP); the Green Coalition Resource Center, Volunteers in Scientific and Technological Assistance (VISTA) and the LOOC-PASIL Fishermen's Association.

The objectives of the PMT were to

> … establish the degree and extent of damages by the industrial plants operating in LIDE; to identify the impact of the operating plants on the socio-economic, health and cultural aspects of the community; to conduct a qualitative and quantitative investigation on the physico-chemical and biological aspects of the area; to tap community-based participation and enhance people's support in environmental work and decision-making process, and to educate and train the local communities in simple monitoring techniques.[30]

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[27] Juvida, p.106.

[28] "Aid for profit…", p.10.

[29] Ecological Monitor Incorporated (EMI) "represents a broad cross-section of the local community, from fisherfolk and farmers to professionals and bureaucrats." (from "Aid for profit…", p.10)

[30] "Environmental monitoring in LIDE", *Feedback*, vol. 2, no.2 (March –April 1991), pp. 7-8.

The argument for community-based environmental monitoring, according to Duhaylungsod is that it

> … places precedence over the capacity of the community as a viable descriptor of the environment. It emphasizes the strategic importance of *in-situ* (local) group assessors in relation with *ex-situ* assessors. The rationale for this is the community's fundamental dependence on the environment from which community residents derive their sustenance and continued existence. As a consequence, communities are inclined to be more vigilant protectors of the environment.[31]

The CBEM workshop series was designed to respond to the *nature of action proposed,* in this instance by the PMT, which was environmental monitoring. The main objective was to systematically train the local participants with skills to monitor the impact of the LIDE on the biophysical environment.

Bengullo-Morales described it simply as "community men, women and children looking out for fish kills, as well as human and animal diseases resulting from industrial pollution."[32] She defined environmental monitoring as a

> … systematic collection and analysis of data through repeated measurements. In some development projects of the government, it is purposely to determine or check if something is still in compliance with the legal standards as stipulated in scientific standards, contracts and agreements.[33]

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[31] Noel Duhaylungsod, "Steps in environmental assessment and monitoring", *Feedback,* vol. 5, no. 2 (December 1994), p. 6.

[32] Melissa Bengullo-Morales, "The community as watchdog of earth", *Feedback*, vol. 5, no. 2 (December 1994), p. 4.

[33] Melissa Bengullo-Morales, "Community-based assessment and monitoring of impacts for environmental management towards sustaining people's empowerment", *Watershed: Ideas on Environment and Society*, vol.1, no.1 (1995), p. 31.

Table 9.4: Community-based Environmental Monitoring Workshop Series[34]
Workshop 1: Restoration Ecology Workshop (*RENEW*)   Workshop 2: *RENEW* Trainers' Training   Workshop 3: Socioeconomic and Health Monitoring   Workshop 4: Environmental Law   Workshop 5: Environmental Monitoring   Workshop 6: Community-based Environmental Monitoring Planning

The CBEM workshop series (see Table 9.4) was initiated with the conduct of a RENEW and a trainers training workshop. These were followed by workshops on the following topics: socioeconomic and health monitoring, environmental law, and environmental monitoring. It culminated with a planning workshop where the local participants designed a community-based environmental monitoring plan. The goal of the plan was to gather quantitative and qualitative information that would establish the perceived impact of the industry on the environment and identify mitigating measures.

All the proposed workshops were conducted and a monitoring plan was designed and implemented. Bengullo-Morales noted "three years of CBEM have not dulled the desire of Isabel town residents to save their community from further environmental degradation."[35] Therefore, as an educational response to the nature of action proposed, CBEM achieved it goal of providing the Isabel community with the skills to monitor the on-going impact of the industries in LIDE. While the industries within the Estate are still in operation and the threat of pollution continues, Bengullo-Morales argues that CBEM

> … brought home the value of collective lobbying for results. Residents – empowered with the scientific certainty of their observations – filed petitions with the Department of Environment and Natural Resources (DENR) and the Department of Agriculture (DA), conducted seminars on animal care,

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[34] "Community-based Environmental Monitoring Workshop Series" (Leyte: PMT, 1991) [unpublished document].

[35] Bengullo-Morales, " The community…", p. 4.

engaged in media-channeled information campaigns and linked up with concerned scientists, doctors and other environmental health experts.[36]

Two limitations can be identified in encouraging local communities to engage in mitigating measures like environmental monitoring, particularly for NGOs like CEC that advocate for more comprehensive social change. The first limitation identified by the CEC staff and its local partners was that when conducting environmental monitoring "we should be very careful and not be trapped in the 'technical discourse' or purely technical discussion with the government."[37]

This observation was a reaction to situations, like that experienced in Isabel when the companies within LIDE questioned the interpretation of the positive mercury tests obtained by the DENR during its routine sampling and monitoring in early 1990. The industry representatives insisted that the standard level for mercury should be 50 ppb (parts per billion) since the bay should be classified as Industrial Waters. However, the locals insisted, and the government ruled, that the standard should be based on the bay as fishing ground, which is five ppb. Tests conducted in January and February 1990 recorded mercury levels from two water samples to be 29.9 ppb and 18.5 ppb.[38] The researcher recalls that before the debate was settled, the DENR Regional Director who was arguing in favor of the lower value of five ppb or the standard of a fishing ground was replaced.

The second limitation identified was that a response such as mitigating measures that are largely technical, for example, conducting environmental monitoring activities, might give the impression that "the resolution of the problem was also technical."[39] CEC, however, maintains that there was always a conscious effort to integrate other factors affecting environmental problems at the micro-level because "the cause of

[36] Bengullo-Morales, " The community…", p. 4.

[37] "Advancement of a Pro-active Research for Ecological Studies Management" (Los Banos: CEC, 3-5 October 1996), p. 6 [unpublished document].

[38] Juvida, p.108.

[39] "Advancement….", p. 6.

environmental problems involves the interrelation of socioeconomic-political and bio-physical components."[40]

During the review and organizational consolidation phase (1995-1997) the objective of identifying and conducting mitigating measures was observed to be one of the "weak points of the whole research process" and was described as a tendency "towards narrow environmentalism and reformism." [41] This observation meant that through advocating for mitigating measures, there was "a conscious or an unconscious presumption that environmental protection can be attained by mitigating measures without transforming the unjust social set-up"[42]

This perceived analytical weakness, CEC argues can be attributed to "the limitations of the actors [involved] in analyzing the research results."[43] One possible explanation to support his observation is the dominance of trained scientists and technologists in the CEC staff as shown in a summary of the staff profile in Table 9.5.

However, despite this observed weakness the data gathered and the understanding of the scientific information allowed the local community to utilize this information to their advantage. The report states, "the technical report is a positive tool for community empowerment. It supplements the needed data for the community to pursue its own programs."[44]

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[40] "Advancement….", p. 6-7.

[41] "The CEC way: Green and Militant" *Feedback*, vol. 10, no. 1 (December 1999), p.5.

[42] "The CEC way: Green and Militant", p. 5.

[43] "Advancement….", p. 6.

[44] "Advancement….", p. 6.

Table 9.5: CEC staff profile of fields of specialization profile[45]			
1988-1991	1992-1994	1995-1997	1997 – 1999
Ecology/Biology	Ecology/Biology(2)	Ecology/Biology	Ecology/Biology
Geomorphology	Geomorphology	Mining engineering	Mining engineering
Chemistry	Animal science	Agribusiness	Forestry
Animal science	Zoology	Sociology	Human ecology
Zoology	Mining engineering	Psychology	Agribusiness
Agribusiness	Human ecology	Accounting	Sociology
Accounting	Forestry		Political Science
Administration	Economics		Accounting
Information	Psychology		
	Agribusiness		
	Accounting		
	Administration		
	Information		

On reflection, CEC's experience indicates that CBEM as an environmental education response to support the *nature of the action proposed* has had a tendency to focus on scientific and technical responses, such as environmental monitoring. While the researcher argues that there is a continued need to develop the skills of local communities in these areas, it is important that these skills and actions, and the accompanying educational programs, are situated within the broader and long-term contexts of the community. These lessons have informed the second CBEM workshop series conducted as part of the on-going area-based program in Southern Negros, which is discussed later in this chapter.

9.2.2   Community-based Rehabilitation Workshops

The Community-based Rehabilitation Technology (CORETECH) workshop was first designed and conducted in 1992 as

> … a corollary activity of RENEW [that] takes off from identified environmental problems of which possible rehabilitation measures can be drawn up. The module includes a discussion of the ecological concepts that

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[45] "CEC@10: final documentation" (QC: CEC, 1999), n.p. [unpublished document].

will scientifically explain the identified problem. The cause, effect and impacts of the problem are considered in depth. Its rehabilitation technology measures are presented with the end in view of solving the problem while at the same time providing additional and/or alternative livelihood source.[46]

CORETECH workshops were designed and conducted by the Education and Training Department together with the Socio-Ecological Development Department (SEDD) of CEC.

To date three CORETECH workshops have been designed and implemented. It is the first CORETECH workshop called the 'Rehabilitation of golden apple snail infested areas' that is discussed in greater detail, as this particular workshop was where the major lessons in terms of progressive contextualization were learned.

The golden apple snail (GAS) workshop

> … was a product of a research effort to quantify the impact of the golden apple snail infestation and their control. Some selected municipalities of the provinces of Antique and Mindoro were the sites of the research and training.[47]

The snail, also called the golden miracle snail or giant apple snail, is known scientifically as *Ampullaria cabaliculata* or *Ampullaria cuprina*. It is an

> … aquatic snail varieties crossbred in the US and Taiwan with the exotic species from South America. … It was introduced in the Philippines between 1983 to 1984 as an alternative source of protein and additional source of income for lowland rice farmers. The size, rapid growth and reproduction, adaptability to local conditions, hardiness and ease of raising, quality of meat and nutritive value, and its high economic value were attractions which led

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[46] "People's Faculty of grassroots environmental education and studies proposal" (QC: CEC, 1994), p. 10 [unpublished document].

[47] "People's Faculty… Proposal", p. 8.

government agencies and private entrepreneurs to recommend its propagation – snail farming, as part of livelihood and food production projects.[48]

However, being an introduced species, the golden-apple snail did not have its natural predators. A CEC study indicated that the snails had soon become more of a pest rather than a means to upgrade the farmer's livelihood. The snails feed on the young rice seedlings resulting, for example in destruction of 6,500 hectares of rice crops in 1988 in 32 towns of Antique, Capiz, Iloilo and Negros Occidental, according to a Department of Agriculture report cited by the CEC study.[49]

The CORETECH workshop included a discussion on the ecological concept that would explain that often introduced species, like the golden apple snail, do not have its natural predators in the new environment, and hence would allow rapid population growth resulting in an infestation problem. It also explained the national implications of this infestation, such a decline in the harvest and associated problems, like the health risks involved in using the pesticides or molluscides recommended by extension workers. Finally, the workshop explores alternatives to these pesticides like manual picking of snail eggs and the use of ducks as natural predators. In the end more time was spent on the topic of duck raising and management, both as an alternative to the pesticide use but also as a possible additional source of income. An outline of this CORETECH workshop has been provided in the Table 9.6.

The second CORETECH workshop was designed to respond to the environmental disaster that was the result of the volcanic ash spewed by the 1991 eruption of Mt. Pinatubo on a relocation site in Mawacat, Pampanga. It was a series of workshops that included topics on "basic ecological concepts, nursery establishment and operations, soil and water conservation, and goat production."[50]

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[48] "A Report on the Environmental Investigative Mission on the Golden Apple Snail Infestation" (QC: CEC, August 1988), p. 1 [unpublished document].

[49] "A Report on …Golden Apple", p. 1.

[50] Ma. Cresencia Ines-Comia, "Mt. Pinatubo Rehabilitation Project: Understanding the Complexity and Challenges of Working with Indigenous People." (Los Banos: APPROTECH ASIA, 4 September to 2 October 1996) [unpublished conference paper].

Table 9.6: CORETECH: Rehabilitation of golden apple snail perturbed areas[51]

Objectives:
a. To understand the ecological concepts that can explain why the Golden Apple Snail has become a problem
b. To learn more about the context of similar local and national problems of introduced species and pesticide use
c. To understand the biology of the GAS (life cycle, reproduction, habitat, etc.)
d. To learn more about duck raising and management, in order to use ducks effectively as an alternative to the use of pesticides to control the GAS

Workshop design:
Module 1: Acquaintance, expectations check and orientation
Module 2: Local environmental situation
Module 3: National environmental situation
Module 4: The Web-of-life activity
Module 5: Biology of the Golden Apple Snail
    5a: Field observation and collection
    5b: Discussion
Module 6: Ecological pest management
    6a: Principles
    6b: Methods, control and management
Module 7: Duck-raising and management
Module 8: Community planning
Module 9: Workshop evaluation
Module 10: Celebration

The third workshop was designed and conducted in Naujan, Mindoro on coral reef rehabilitation in 1994. This was a follow-up activity to an Environmental Investigation Mission (EIM) that was conducted after a massive flood destroyed the coastal and marine environments in December 1993.

Allan Mesina, then Coordinator of the SEDD, defined rehabilitation as

> … a step towards regaining the integrity of the environment. Although it could never bring back the *old glory* of the environment, it could at least approximate the original state.[52]

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[51] Guevara, *Renewing RENEW*, p. 146.

[52] Allan Mesina, "Cases of environmental action from assessment results" (QC: CEC, 1994), p.8 [unpublished document] [italics in original].

A return to the original state, according to Aurelio dela Cruz who established the SEDD at CEC, would be closer to restoration, which "involves taking a degraded site to re-establish a community of organisms close to what would be found naturally."[53] Dela Cruz continues to say that rehabilitation in the Philippines, specifically within the ranks of genuine NGOs and POs, rehabilitation "is part and parcel of the whole societal transformation process … and falls under the general concerns of a people-based environmental agenda."[54] Mesina emphasized that these rehabilitation measures must be situated within the "general context of resolving the other problems of the community such as land ownership, food for the stomach, and social justice since it is intricately intertwined."[55] An examination of CEC documents reveals that as early as December 1989 an internal note identified that "rehabilitation will be focused on resources which bear direct influence on the livelihood endeavors of communities" within an "over-all framework of socioeconomic development."[56]

While these previous documents demonstrate that CEC viewed rehabilitation within the broader socioeconomic and political context, the 1995 summing-up document identified that advocating for rehabilitation exhibited "a weakness in incorporating the political, cultural and economic factors that influence community development."[57] This weakness in developing a more comprehensive analysis and response was further highlighted when the socio-ecological rehabilitation options drew criticisms that CEC was promoting an *"ekonomistang pananaw"*(economism).[58] The criticism meant that instead of dealing with the root

[53] Aurelio dela Cruz, "Some notes on socio-ecological rehabilitation", *Watershed: Ideas on Environment and Society*, vol. 1, no. 1 (1995), p. 44.

[54] Dela Cruz, p. 49. Note that the Philippine Environmental Action Network (PEAN) through an extensive consultation process developed a people-based environmental agenda with its national membership. Unfortunately, there was little time to popularize this agenda as PEAN ceased to operate in 1994 and was officially disbanded in 1996.

[55] Mesina, "Cases of environmental action…", p. 8.

[56] Noel Duhaylungsod. "Our outside world: The beginnings of the external affairs work of CEC in 1989 (A note for the summing-up session)" (QC: CEC, December 1989) [unpublished document].

[57] "Documentation of the CEC's Five-year Summing Up (1989-1994)" (Calamba: CEC, 5-9 June 1995), p. 4 [unpublished document].

[58] "Documentation of the CEC's Five-year Summing Up (1989-1994)", p. 4.

causes of these environmental problems, CEC was merely promoting alternative livelihood programs, such as duck raising.

However, for CEC the first CORETECH on the golden apple snail infestation, was more about making sure that the farmers were aware of an alternative to the harmful pesticides being recommended. The use of natural predators, like ducks, which in addition can supplement their incomes, was the proposed solution or a possible rehabilitative measure. However, the criticism was that the use of ducks was a short-term solution to the real problems of agricultural policy in a semi-feudal economy that continues to be dependent on foreign technology like pesticides. This criticism needs to be understood within the context of an internal organizational consolidation process that was part of a larger ideological review and rectification effort within the progressive movement, as discussed in the previous chapters.

From this particular ideological perspective, CBEM and CORETECH can be viewed as examples of the reactive tendency of progressive contextualization - where the educational response addressed only the effect rather than the root cause of the specific environmental problem. While these immediate responses are necessary, CEC acknowledged that it is important not to lose sight of the larger context of why the problem exists and identify and develop skills to address these bigger issues.

Both the CBEM and CORETECH were designed to develop the skills of the local community to respond to a specific local environmental problem. While both workshops emphasized the holistic, complex and inter-related approach to studying environmental problems, the focus on a specific environmental response, in this case, environmental monitoring or rehabilitation can be and has been described as a "tendency towards narrow environmentalism and reformism."[59] However, environmental monitoring and ecosystem rehabilitation are two possible responses that can be conducted in conjunction with a range of other more comprehensive responses. Individually or in isolation, these actions maybe considered as examples of non-comprehensive responses because they are limited to addressing only the immediate problem.

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[59] "The CEC way: Green and Militant", p. 5.

For example, the local community in Leyte was able to use the information gathered through monitoring to popularize the problem and to advance their demands. In this case it was not to close the polluting firms, much less to advocate for societal change. Local leaders Pepe Alfaro of SOS-Earth and Dr. Mel Tatoy of Isabel were reported to have said that, "they only want the plants to remedy the pollution problem and protect the people from pollution." [60] A comprehensive empowerment response would not even concern itself with levels of pollution, but would question, and act on, the government's push for industrial development. However, it would still need to use an example, such as the pollution caused by PASAR to illustrate how it is detrimental to the people. Based on this example, even comprehensive responses need data, which can be provided by activities such as environmental monitoring. Therefore, if the CBEM workshops were not conducted in isolation, they could become opportunities for educating and organizing the local community for wider social concerns.

CEC arrived as the same conclusions about CORETECH. It is not enough to be reactive and rehabilitate what has been damaged. It is necessary to question why it went wrong in the first place, who caused it and to make them who are responsible pay. While continuing to press for those responsible to pay, rehabilitation can be an option the community can take. Furthermore, it is possible to document the time and the costs of the rehabilitation efforts and demand that the company cover these costs.

These educational responses were the first opportunities for the different CEC departments to work together for a sustained period of time in a local area. These experiences drew CEC's attention to the need to expand its environmental work beyond education, research and rehabilitation. More specifically, it was identified that such sustained involvement called for more comprehensive responses that included local community organizing work as an essential part of whatever the *nature of the proposed action* is.

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[60] Juvida, p. 109.

In other words, direct environmental responses supported by corresponding environmental education courses or modules are important. However, they should not at being reactive or merely addressing the effects or symptoms of a problem. Establishing a broader perspective of problem is therefore needed. Establishing this broader perspective is similar to Vayda's approach[61] of understanding the wider contexts of the problem and potentially comprehensive and contextualized responses as well.

9.3 IKSER: Exploring local knowledge and ways of learning

The Indigenous Knowledge Systems on Ecology Research (IKSER), conducted in 1994, is another example of CEC's attempt at progressive contextualization, which focused on the use of *local knowledge and ways of learning* as an approach to curriculum development. Conceptualized as a participatory education research, IKSER was a response to major recommendation of the national evaluation of RENEW in 1993 to "indigenize and/or localize the education modules."[62] The major objective of IKSER was to "improve through localization and / or indigenization CEC's core education modules."[63] More specifically, it wanted to "determine the environmental worldviews of communities situated in different geographical areas; identify the trans-generational transfer of skills, and develop an indicative training module."[64] Therefore, the main local contexts that determined the indicative training modules were the combination of the learners and the spatial contexts, both the biophysical and the socio-cultural space, with varying degrees of emphasis based on the case study area.

Three areas in the Philippines were selected, with each area having a specific research focus. The research in the Cordilleras in Northern Luzon focused on

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[61] Vayda, p.265.

[62] Delilah Padilla, "Indigenous knowledge systems on ecology research: The research design", *Watershed: Ideas on Environment and Society*, vol. 3, no.2 (1998), p. 16.

[63] Padilla, "Indigenous knowledge…", p. 17.

[64] Padilla, "Indigenous knowledge…", p. 17.

traditional small-scale mining. Specifically it looked at the "trans-generational transfer of technologies and tradition" and "the cultural practices of defending and conserving small-scale mining areas" towards developing a training module on small-scale mining. [65]

In central Philippines, the research was conducted in the island of Cabilao, Bohol. It examined the "biophysical status of resources of the island, their access, control and use by the communities and external interest groups"[66] in the context of developing modules to advocate for setting up a small-island socio-ecological sanctuary. In Mindanao, the research was conducted with the T'boli people in South Cotabato. The research studied the indigenous group's concept of environment and the T'boli chant called *lingon* as a possible method of discussing environmental issues and concerns. [67]

All three research projects involved actual immersion of the assigned researcher in the respective local communities as part of the data collection. During these immersions, several approaches to gathering data were conducted, such as focus group discussions, one-on-one or group interviews, and documenting the day-to-day activities with the aid of a camera, rough sketches and written observations. Secondary data was obtained from previously written or published documents. The collected data was synthesized and the resulting research report was subjected to a community validation to gather feedback prior to developing the respective local training or advocacy modules. [68]

Once more, the ideological rift within the development NGOs and local community groups in the Philippines in the mid-1990s affected the research activities and outcomes. This situation influenced the extent that the research could proceed within

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[65] Noel Duhaylungsod, J. Roberto Guevara and Delilah Padilla (eds), "Indigenous Knowledge Systems on Ecology Research" (IKSER), *Watershed: Ideas on Environment and Society*, vol. 3, no.2 (July – December 1998), p. 28.

[66] Duhaylungsod and others, "IKSER", p. 107.

[67] Duhaylungsod and others, "IKSER", p. 77.

[68] Padilla, "Indigenous knowledge...", p. 21.

the identified communities. Only two community validation workshops were conducted prior to what was supposed to be the crucial project activity, the Educator's Workshop-Conference on Translating Research Information into Training Modules in 1995, and the publication of the research results in 1996. The third community validation workshop for the Cabilao, Bohol study area was completed only in January 1997. After this validation workshop, a revised edition of the research findings was published in 1998, however, none of the training and advocacy modules developed, to CEC's knowledge has been conducted. This situation is unfortunate, because the three modules were the outcomes of an extensive community immersion and research process, which most of the previous education modules did not undergo.

The aims of the basic course on small-scale mining, the outcome of the Cordillera research, were to orient

> … the younger generation to rediscover their culture and for the outsiders to gain an appreciation of the worldviews and wisdom of an indigenous mining community. It puts across the value and importance of appreciating an indigenous technology as a reflection of a distinct culture yet is presently being eroded with the intrusion of corporate mining interests over the community's local resources.[69]

Table 9.7 provides a summary of the topics identified for the proposed basic course on small-scale mining. The advocacy module developed for the Cabilao research was divided into three smaller modules. "Every module was based on the context of Cabilao as a small island ecosystem that has its own dynamics of management and administration for a socio-ecological development."[70] A summary of the proposed education advocacy module is presented in Table 9.8.

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[69] Duhaylungsod and others, "IKSER", p. 61.

[70] Duhaylungsod and others, "IKSER", p. 130.

Table 9.7: Basic Course on Small-scale Mining[71]

Learning objectives:
1. To give an overview of the small-scale mining situation particularly at the local / community level;
2. To show a comparative analysis of small-scale and corporate mining, and
3. To come up with a community plan in response to the pressing issues on mining specifically on small-scale mining.

Topics:
Unit A: Biophysical cost(s) of small-scale mining
Unit B: Social cost(s) of small-scale mining
Unit C: Small-scale mining as an alternative
Unit D: Framework and/or perspective in looking at the mining situation particularly at local/ community level

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Table 9.8: Education advocacy module for Cabilao, Bohol[72]

Module 1: A People's Socio-ecological Island Sanctuary

Learning objective: To provide a comprehensive understanding of the features, resources and economic potentials of the island within the context of ecological concepts, policies, legislation and environmental rights.

Module 2: Island Resource Management

Learning objective: To acquire tools of integrated environmental management for socio-ecological development based on the critical and unique sub-systems of the island.

Module 3: Local Ecology Conflicts

Learning objective: To discuss the handling of local conflicts in the context of resource control, access, use and protection.

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[71] Duhaylungsod and others, "IKSER", p. 61-71

[72] Duhaylungsod and others, "IKSER", p. 131-133.

Instead of a specific module, the local chant or

> … the *lingon* that was documented, in effect, became a module in itself. The potential for *lingon* for a locally based, culture-specific environmental education cannot be underestimated. … As it turned out, the thoughts and reflections generated by the chanters and among those who simply listened were a wealth of wisdom about both their environment and culture. … The *lingon* is both a knowledge and an indigenous learning system, which should help provide means - spontaneous or structured - to enable indigenous groups to speak for themselves.[73]

Three contextual themes that weave through the three research projects were identified and discussed by the researcher in the concluding notes of the revised 1998 publication. These themes are introduced below as the starting point to analysing the IKSER experience in the context of progressive contextualization of the CEC curriculum.

First, all of the three research projects possess a shared context of resource depletion, heightened environmental conflict and loss of the traditional livelihood.

> The introduction of large-scale mining in the Cordilleras continues to be a threat to traditional small-scale mining, and both the local culture and the environment. The influx of capital from both local and transnational agro-industries, facilitated by the local political powers, has hastened the exploitation and loss of lands of the T'bolis. And in Cabilao, the intrusion of illegal fishing vessels into municipal waters has pushed the fisherfolks to seek other forms of livelihood.[74]

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[73] Duhaylungsod and others, "IKSER", p. 103.

[74] Jose Roberto Guevara, "Concluding notes: Threads, weaving themes and tensions", *Watershed: Ideas on Environment and Society*, vol. 3, no.2 (July – December 1998), p. 155.

The second theme appears to confirm the close link between indigenous knowledge about nature and resource use, and traditional learning systems.

> In the Cordillera case study, mining customs and practices were learned through actual involvement in the processes of mining that are closely associated with local cultural activities. For the T'bolis, discussions and consultations often take the form of chanting, similar to a marathon debate, during community events. In Cabilao, learning about fishing continues to be gained through experience.[75]

It was found that a third theme emerged from the first two themes. Both contexts of resource depletion and the on-going decline of traditional livelihoods contribute to the loss of local knowledge and ways of learning about the environment.

> The inter-generational transfer of knowledge about small-scale mining in the Cordilleras is threatened by large-scale mining and the cash crop economy. The same is true for the T'bolis, where local cultural practices, like chanting, have become a declining practice - currently limited to a number of local elders. The decline in aquatic resources around Cabilao has forced some parents to send their children to study maritime courses in the city. They rationalize that this will give them a better future - a future that is still linked with the sea.[76]

It is this loss of local knowledge and ways of learning that the participatory education research hoped to address. More specifically, the focus of the progressive contextualization process was the development of modules based on the documented local knowledge and ways of learning, rather than directly addressing the context of resource depletion. The modules developed in the Cordilleras and Bohol focused on disseminating the findings of the research on small-scale mining and an inventory of the local resources, respectively. While the South Cotabato research identified a potential educational method - the *lingon-* from a local way of learning. It can be

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[75] Guevara, "Concluding notes…", p. 155.

[76] Guevara, "Concluding notes…", p. 156.

argued that these modules, when implemented, indirectly contribute to addressing the context of resource depletion and loss of livelihood.

Fikret Berkes observes that the application of traditional ecological knowledge to contemporary resource management problems is increasingly being recognized.[77] Traditional ecological knowledge refers to

> … information, practices, beliefs, tools, skills and institutions that local people have developed over time and continue to develop. It is usually based on experience, tested over long periods of time, adapted to local conditions and continuously evolving.[78]

Apart from the ethical imperative of preserving cultural diversity and the new biological and ecological insights into the environment, the International Union for the Conservation of Nature, according to Berkes, identified that these forms of knowledge are valuable for conservation education, development planning and environmental assessment.[79]

Through CEC's experience, indigenous and local knowledge has provided baseline information to enable a comparison between the past and present environment. Such comparisons have helped to identify possible causes of the perceived change, the impact on people's livelihood, and possible alternatives. Furthermore, indigenous and local knowledge provides alternative ways of seeing, studying and responding to the current environmental situation, and allows greater access for the local people to decision-making process using their own forms of knowledge. On the area of local ways of learning, the transmission of traditional ecological knowledge has been perceived, according to Kenneth Ruddle as "disorganized, unstructured and highly

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[77]Fikret Berkes, " Traditional ecological knowledge in perspective" in Julian Inglis (ed), *Traditional ecological knowledge: Concepts and cases* (Ontario: International Program on Traditional Ecological Knowledge and International Development Research Centre, 1993), pp. 1-7.

[78] IIRR, *Participatory methods in community-based coastal resource management, Volume 3: Tools and Methods* (Silang, Cavite: International Institute for Rural Reconstruction, 1998), p. 183.

[79] Berkes, pp. 5-6.

individualistic."[80] However, studies have shown that for this knowledge to persist requires some form of educational process.[81] These educational processes are culture specific, though they often involve learning by doing that is repeated over time, observation followed by imitation, and some aspect of enjoyment through narration of stories.   Ruddle concludes, "the curriculum and process of knowledge transmission is culture itself."[82]

From CEC's experience, it is difficult to separate local knowledge from ways of learning, as one provides the context for the other. However, it is valuable from the point of view of the outsider educator, in this case CEC, because it helped CEC recognize what Plopino identified, that even participatory methods can themselves be prescriptive approaches if conducted out of context.[83] Furthermore, it broadened the educators' perspective on how learning can happen within a community setting. Finally, it is important to emphasize that research into local ways of learning was not meant to be used to indoctrinate the community with new ideas, but more to allow the outsider to engage the local community in dialogue using their own forms of learning.

Environmental education, which has long been dominated by scientific knowledge, is slowly acknowledging the value of traditional and local knowledge to its practice. This experience confirms that research, documentation and popularization of these forms of knowledge and ways of learning are significant to developing grassroots environmental education. The knowledge generated helps to contextualize the content of environmental education and challenges or engages both the local community and the environmental educator to deal with different forms of knowledge.

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[80] Kenneth Ruddle, "The transmission of traditional ecological knowledge" in J. Inglis (ed), *Traditional ecological knowledge: Concepts and cases* (Ontario: International Program on Traditional Ecological Knowledge and International Development Research Centre, 1993), p. 17.

[81] Ruddle, p. 20.

[82] Ruddle, p. 22.

[83] Plopino, p. 13.

Finally, it important to acknowledge that while some of the areas studied in the research were previously very isolated, such is no longer the case. The influx of capital, goods, languages, education, and technology need to be addressed if progressive contextualization is not to end up merely romanticizing local knowledge and ways of learning.

9.4   Advocacy modules: Sharpening the depth of analysis

This final section focuses on the influence of the *depth of analysis* to the outcomes of progressive contextualization. The major local contexts under consideration in this case are socioeconomic and political space and the level of awareness and organizing of the learners.

The shift of CEC's core mission from grassroots environmental education to environmental advocacy in mid-1997 resulted in a major change in CEC's approach and analysis in its education work. From the previous discussions, this particular change, in approach and analysis, may appear to be exclusively the result of the ideological debate. However, a broader view of CEC's experience, indicates that the shifts in the nature and practice of CEC's education work is the cumulative result of the experiences in environmental education and CEC's own institutional development, including CEC's response to the ideological debate.

As emphasized in chapter 5, the changes that resulted from the organizational consolidation phase involved the development of programs with much longer time frames; more community-driven and more problem-focused. Furthermore, these programs were situated within an advocacy framework that "finds integration with the over-all movement for social change and development."[84] CEC also became more explicit about advocating a particular analysis of environmental problems as "consequent of the semi-colonial and semi-feudal nature of Philippine society."[85]

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[84] Orienting the CEC-Philippines into a proactive politico-ecologist" (QC: CEC, 1995), p. 3 [unpublished document].

[85] "Orienting the CEC…", p. 3.

The following sections examine in greater detail the sharpening of CEC's analytical framework and its influence in the development of both issue-based and area-based advocacy modules.

9.4.1   Sharpening the framework of analysis

Allan Mesina, who has held a range of leadership positions at CEC from staff member to acting Executive Director, during a focus group conducted in October 1999 emphasized that "there was no shift in the analytical framework of CEC's environmental work but rather there was a sharpening of this framework." [86] This section traces how this new analytical framework developed from an ecological and holistic framework to a mode of production framework of analysis.

The core content of RENEW is the ecological concept that *"Ang lahat ng bagay ay magkakaugnay"* ("All things are inter-related and inter-dependent"). This concept is based on the ecological tenet of interrelationships of the different components of a natural system. [87] This concept has always included areas beyond the natural or the biophysical components of the environment, specifically to include the social, economic, political and cultural components and inter-relationships. It was this holistic perspective that guided CEC's initial analysis and shaped the level of discussions in its education work.

This perspective can be found in the earliest document, the draft concept paper that identified that CEC "will have to address not only environmental issues, but also economic issues that shape people's lives and affect the environment."[88] It specifically identified the issue of poverty in rural communities as a key issue that needed to be addressed. Manny Pambid supports this observation in his report submitted as part of the comprehensive RENEW evaluation where he proposed a

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[86] Allan Mesina, CEC staff (Quezon City, 8 October 1999) [focus group discussion].

[87] From basic ecology texts such: Eugene Odum, *Fundamentals of Ecology* 3rd edn. (Philadelphia: Saunders, 1971), and G. Tyler Miller, Jr., *Living in the Environment.* 8th edn. (Belmont, California: Wadsworth Publishing Co, 1994).

[88] "Draft Concept Paper" (Quezon City: CEC, October 1988), p. 4 [unpublished document].

modification of the original conceptual learning map (see Figure 7.1) for RENEW. In his revised conceptual map (see Figure 9.2) he identified that the "basic ecological concepts can be seen as the METHOD – the main tools for analysis of the Environmental Situations." [89]

Figure 9.2: Proposed RENEW Concept Map[90]				
Point of Entry **Micro-context**		**Method**	**Macro-context**	**Integration Re-entry into the Micro-context**
Acquaintance Individual Vision	Local Environment Situation	Basic Ecological Concepts	National and Global Environment Situation Philippine Environmental Movement Group Vision	Planning Evaluation Celebration
	CORE CONTENT			

While this holistic perspective attempted to show the interrelationships inherent to analyzing the environmental situation, it tended to focus on the links between different environmental problems and between different ecosystems. Such a focus, that emphasizes the environmental links can, from CEC's experience, result in what has been perceived to be very limited environmental responses. The CBEM and CORETECH workshops are examples of how the proposed responses or environmental actions remained very limited in scope – often at the level of dealing with the immediate problem at the individual or local community level.

The educational tool developed from the RENEW workshops called PACERR[91] demonstrates this similar tendency. PACERR is the acronym for Problem, Area,

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[89] Manny Pambid, "Evaluation of CEC's Restoration Ecology Workshop: Pedagogy" (QC: CEC, 1993), p. 38 [unpublished report].

[90] Pambid cited in Guevara, *Renewing RENEW*, p.33.

Cause, Effect, Response and Recommendations. It was developed as a way of presenting a synthesis of the local environmental situation in tabular format, an example is shown in Table 9.9.

Problem	Area	Cause	Effect	Response	Recommend ations
Illegal/ commercial logging	Honda Bay	Poverty; foreign trawls	Decline in fish catch and the income of fishers	Organizing of people's organization	
Mud flow due to flooding	Barangay Lucban	Logging	Decline in the number of shrimps and crabs caught	Bantay-Dagat (Sea-watch) program of the government	Tree planting Strict law enforcement
Decline in agricultural yield	Barangay Lucban	Loss of soil fertility Chemical pesticides Lack of government support	Peasants are forced to sell their lands		NGOs to give training on sustainable agriculture
Loss of livelihood in the uplands	Ipilan Brooke's Point	Logging Mining	Indigenous peoples forced to move to the lowlands	Strategic Environment Plan for Palawan	Alternative livelihood

Table 9.9: Example of a PACERR workshop output[92]

The story of the development of this analytical and visual tool is an example of the participatory approach that guided CEC in developing its education work. The earliest documentation of this tool was the first RENEW workshop in Quezon in

[91] Guevara, *Renewing RENEW*, p. 62-63.

[92] "Documentation of the Restoration Ecology Workshop and Trainers Training Workshop: 12-16 December 1996" (Puerto Princesa: CEC, 1996), n.p. Note: The table was translated from the local dialect.

April 1990. It appears in the documentation as merely PACE (Problem, Area Cause, and Effect). A few months later, during a training of trainers in Bacolod, the framework appears as PACER with R as Response. In the evaluation of this workshop, one of the trainers indicated that often the workshops were too focused on Problems and as a result they ignore the community's responses to the problem. A few years later, in another workshop the participants suggested that the framework needed to include recommendations, as some of the responses were not effective in challenging the problem. The additional R in PACERR stands for Recommendations.

The framework, while useful in demonstrating the inter-connected nature of problems across ecosystems, can be perceived as very limited to a linear cause, effect and response approach. This observation is very similar to what Piers Blaikie argued when he presented a table called 'The technocratic perception: environmental protection' (see Table 9.10) prepared by Randell Baker[93] based on a case study of Kenya's environmental crisis.

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[93] Randell Baker "Environmental degradation in Kenya: Social crisis or Environmental crisis?", *DEV Discussion paper*, no. 82 (Norwich: University of East Anglia, 1981).

Table 9.10: The technocratic perception: environmental protection[94]				
Problem	**Symptoms**	**Causes**	**Solutions**	**Consequences**
Kenya has an Environmental Crisis →	Desertification → Deforestation	Overpopulation → {overgrazing} {overcultivation}	Family → Planning	Lack of response
	Soil erosion		Education → Change attitudes	Inappropriate knowledge = frustration
	Catchment loss	Ignorance → {tradition {culture {inappropriate practices		
	Silting		Demonstrate → New ides	Short-term palliatives
	Decline of rivers			
	Decline of food production	Lack of → Environmental awareness	Environmental education → and EIA	Rationalizing oppression
				Oppression and polarisation
		Inadequate → Legislation	Tougher legislation →	Protect environment against people
		Institutional → Weakness	Integration of Min. of the Environment →	New and more efficient ways of avoiding problem

Most of the headings in Baker's list correspond to the headings of PACERR, as displayed in Table 9.11.

Table 9.11: A comparison of PACERR and Baker's "The technocratic perception: environmental protection"	
PACERR Framework	**Baker (1981)**
Problem and Area	Problem
Cause	Causes
Effect	Symptoms
Response	Solutions
Recommendations	Consequences

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[94] Baker, n.p. as cited by Piers Blaikie, *The political economy of soil erosion in developing countries* (London: Longman, 1985), p. 57.

Blaikie[95], however, used Baker's table to illustrate not just the linear cause and effect relationships, but to show how such tabulation reflects the analytical framework that informed the environmental analysis used. In this particular instance, the tabulation was used to illustrate the weaknesses of a colonial or classic approach to analyzing environmental problems. This approach according to Blaikie, who specifically studied soil erosion, perceives environmental problems as merely biophysical problems that require only environmental solutions. He continued that this approach result in the view that these environmental problems are the result of a lack of environmental awareness, ignorance and laziness, therefore require environmental education to increase knowledge coupled with tougher laws to change behavior. Furthermore, the classic or colonial approach views overpopulation as a cause and therefore sees family planning as a solution. All these are evident in the tabulation prepared by Baker in Table 9.10 based on the Kenya study.

Based on the above comparison, one can conclude that the PACERR framework is very similar to the simplistic classic or colonial approach to analyzing environmental problems. The main intention of PACERR was to illustrate through a simple table the direct interrelationships between problems, causes, effects and responses to environmental problems across ecosystems. In hindsight, it is not surprising how such a simple PACERR table may result in the interpretation that CEC was promoting a classic or colonial analysis of environmental problems. While the PACERR framework as a visual aid achieved its purpose of illustrating a synthesis of the interrelationships of ecosystems and environmental problems, the previous discussion has shown how such an educational tool may result in a very limited analysis of environmental problems.

Working with the basic sectors on the SEED Program facilitated the process of challenging both the ecological concepts and the tools of analysis used in our education work. One example is the inclusion in the RENEW of a module on the classification of the components of the environment into living and non-living things which the participants from indigenous people's organizations questioned. Later, the farmers and the fishers raised similar concerns. Their argument was that anything

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[95] Blaikie, *The political economy...* , p. 53-57.

that gives life, like the soil and the sea, must be alive. To the indigenous participants, on the other hand, everything in our environment is alive.

In response to this comment, CEC examined its use of this concept. It came to the conclusion that

> … the interrelationship of things can be discussed not by dichotomizing the living and non-living components of the environment, but by another classification such as the social environment vis-à-vis the biophysical environment.[96]

After all, the main goal of facilitating an understanding of the interrelationships between the different parts of the environment and the larger social system was not dependent on the classification of living and non-living things. Therefore, the CEC decided that educators could delete this whole discussion or simply present it as one way that scientists look at and classify the environment.

The ideological rift within the progressive movement in the mid-1990s resulted in a further contextualization of the framework of analysis used in CEC's work. It was within this period that an internal evaluation of CEC's education work concluded that

> … although the grassroots environmental education curriculum was systematically developed and effectively implemented, its analysis and therefore solutions to environmental problems was constrained by the ecological framework it was using.[97]

As a result, CEC's education work had a tendency to promote an environmentalism that was not grounded on the issues and struggles of the marginalized sectors in Philippine society. After the internal consolidation between 1995-1997, CEC decided

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[96] "Education and Training Department, Internal Summing-up" (Iba, Zambales: CEC, 28 February – 1 March 1996), p. 7 [unpublished document].

[97] "Education and Training Department, Internal Summing-Up", p. 5.

to apply and be more explicit about the use of a mode of production analytical framework.[98]

The mode of production analytical framework emphasizes the links of local environmental problems to the semifeudal and semicolonial nature of Philippine society. Jose Maria Sison explains that,

> …the Philippine political system has been semicolonial since 1946, under the direct rule of US imperialism through the parties and politicians of the local exploiting class. The Philippine economic system has been semifeudal since the first decade of the 20th century, exploited by the homegrown comprador big bourgeoisie and landlord class in the service of foreign monopoly capitalism.[99]

The following quotation from the CEC Newsletter Feedback, illustrates how CEC applies this analytical framework in examining the current state of the Philippine environment.

> Under the present social set-up, the country's rich resources were exploited, abused, and have become the source of huge, consistent profits of foreign capitalist and bourgeoisie compradors. The environment crisis in the Philippines, as in most countries in the Third World, is a direct consequence of an import-dependent and export-oriented economy.[100]

It is outside the scope of the thesis to examine further the mode of production analytical framework itself. However, it is essential to describe the development and influence of the analytical framework on the organizational context, as described in

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[98] CEC identified the following article as the key reference used in studying this approach. Juliet de Lima, "Jose Maria Sison on the Mode of Production" in J.M. Sison and J. de Lima, *Philippine Economy and Politics* (Philippines: Aklat ng Bayan Publishing House, 1998), pp. 19-64.

[99] Jose Maria Sison, "An Update: Qualitatively Unchanged Conditions" in J.M. Sison and J. de Lima, *Philippine Economy and Politics* (Philippines: Aklat ng Bayan Publishing House, 1998), p.3.

[100] Zelda Soriano, "The state of the Philippine Environment", *Feedback*, vol. 10, no.1 (December 1999), p. 30.

chapter 5. In particular, the shift in CEC's Mission Statement as detailed in section 5.2.2. And more importantly, it is essential to identify the influence of this analytical framework on CEC's curriculum. The mode of production analytical framework is revisited in chapter 10, where it is examined in relation to the development of CEC's analytical approaches in linking the local to the global.

The application of this analytical framework to CEC's curriculum development is attributed to the People's Faculty. This analytical framework for curriculum development, quoted below, was formulated during the launching of People's Faculty in 1995 and was formally ratified in 1996.

> Grassroots Environmental Education must address the fundamental issues causing environmental destruction. Specifically, the influence and control of First World countries on the Philippine economy; the concentration of land on a few elite families, and the culpability of the national government in the degradation of the environment through the enactment and implementation of policies and programs inimical to the interest of the Filipino People. Grassroots environmental education must raise the consciousness of the community in terms of integrating the environmental situation with the socio-economic, political and cultural situation of the country. [101]

Two specific educational outcomes of this sharpened analytical orientation were the development of problem or issue-based modules and area-based modules, each of these are studied in the succeeding sections in the context of a sharpened analytical framework.

9.4.2 Issue-based module on Mining

The issue-based modules were mainly on the environmental impacts of mining, an issue CEC had been tackling since the 1991. The focus on mining was further motivated by the perceived impact of the Mining Act of 1995 to the country. These modules were also an integral component of CEC's area-based work in Southern

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[101] "People's Faculty Orientation Paper" (QC: CEC, 2 May 1996), p. 1 [unpublished document].

Negros, since 1997 and in Mindoro, since 1998, which is examined in the next section.

The education modules on mining continue to be guided by the practice of progressive contextualization using a creative and participatory approach. According to Queenstein Banzon[102], then CEC Education Coordinator, since 1998 the discussion of ecological concepts (see Table 2.1) has remained a core component of most workshops, however it has been substantially reduced in time. She emphasized that more time is spent on the analysis of the political and economic causes of the problem, and the semi-feudal and semi-colonial nature of Philippines society within a context of globalization. This change is an example of one of the key changes in the curriculum that was the result of the review and organizational consolidation conducted by CEC from 1995-1997.

The tension surrounding the question of what aspect – ecological concepts, local situation or the broader national analysis – to emphasize in the workshops was experienced as early as 1996. One particular example of this tension between CEC and another NGO is documented and analyzed by CEC educator Ma. Cresencia Ines-Comia in her article "Baler Experience: A case of content versus method in training design and implementation."[103] Community organizers and local leaders from Baler, Aurora requested for a one-day training workshop on mining and its potential impacts on the environment. The workshop was to help prepare them for the perceived influx of applications for mining exploration permits called in the Mining Act of 1995 as Financial or Technical Assistance Agreement (FTAA). CEC was requested to conduct this training with another Manila-based NGO experienced in working with indigenous peoples, which was expected to constitute a fair proportion o f the workshop participants.

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[102] Queenstein Banzon, CEC Education Coordinator (Quezon City: 7 October 1999) [interview].

[103] Ma. Cresencia Ines-Comia, "Baler Experience: A case of content versus method in training design and implementation" in *Liberalization of the Philippine mining industry, A road to industrial development?* (Quezon City: CEC, 1997), pp. 46-49.

The CEC educators' assigned to design and conduct the training suggested

> … that a workshop on community mapping be done to set the context of the training as well as to determine the real condition in the area. This activity will likewise clarify the local situation. From there, the history of the mining industry and the mining technology can be discussed. A synthesis of this information can help in the formulation of their courses of action, individually or as an organization.

It is important to briefly describe the community mapping activity, as it is critical in this particular experience. This activity is often associated with farmer first approaches and methods[104] that were widely used in the Philippines among NGOs. The main objective of these approaches is

> … to empower farmers to learn, adapt and do better, [and where the] analysis is not by outsiders – scientists, extensiontists or NGO workers – on their own, but by farmers and farmers assisted by outsiders.[105]

The use of visual devices for analysis, such as drawing maps, helps outsiders "understand the way poor people perceive their environment,"[106] by asking them to draw their village and tailoring the symbols and conventions used to their own local culture.[107]

The suggestion of the facilitators from the other NGO was

> … to immediately discuss the national situation to be followed by a presentation of the relationship of the Philippines mining industry to

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[104] Robert Chambers, Arnold Pacey and Lori Ann Thurpp (eds), *Farmer First: Farmer innovation and agricultural research* (London: Intermediate Technology Publications, 1989).

[105] Robert Chambers, "Reversals, institutions and change" in Chambers and others (eds), *Farmer First: Farmer innovation and agricultural research* (London: Intermediate Technology Publications, 1989), p. 182.

[106] Anil Gupta, "Maps drawn by farmers and extensionists" in Chambers and others, p. 87.

[107] Gordon Conway, "Diagrams for farmers" in Chambers and others, pp. 77 –86.

globalization and liberalization. The method suggested was pure lecture/discussion because of the limited time available. Only a day was allotted for the training, thus the other group insisted that the day be optimized for education and advocacy.[108]

Both suggestions were considered and prior to the training, a compromise design, shown in Table 9.12, was agreed on.

Table 9.12: Compromise Mining Module[109]

I.   Acquaintance, Expectations check, orientation
II.   Local situation: Community mapping workshop
III.   The Philippines Mining Industry: Liberalization, Philippines 2000 and Globalization Issues: Input and discussion
    -    Minerals and the mining process
    -    Global historical trends in mining
    -    The Philippine mining industry
    -    Philippines 2000 vis-à-vis mining
    -    Impact of mining
    -    Class contradiction
IV.   Vision to Action: Workshop projecting the impact of the proposed mining on the community map and what they could do to avert the situation
V.   Synthesis: The National Mining Campaign

However, after the training, the partner NGO argued that the community mapping workshop

> … ate up so much time that topics on globalization and Structural Adjustment Program were not fully discussed. The Center, on the other hand, remarked that there was too much information given in a very limited time and that there is a need for a continuing education program."[110]

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[108] Ines-Comia, "Baler experience…", p. 47-48.

[109] Ines-Comia, "Baler experience…", p. 48.

[110] Ines-Comia, "Baler experience…", p. 48.

The participants however mentioned that the mapping workshop "helped them to reflect on their local situation and facilitated a synthesis of their experiences."[111]

Behind the design tension was the more serious tension regarding the approach in presenting or advocating for a particular analytical framework. Ines-Comia felt that by immediately presenting the national situation and its links to mining industry and globalization an "analysis was being forced on the participants" by the other educators.[112] She narrated that through the community maps,

> … the participants identified their present problems and formed their own analysis, such that, the interconnectedness of the Philippines development framework and the presence of trawls in the province's fishing areas and logging companies, which contribute to the degradation of their environs were clearly established. Their experiences and knowledge contributed to their meaningful and contextualized analysis."[113]

This is not the first time that such a tension expressed itself in CEC's educational experience. However, this kind of tension became more evident during and after the 1995 internal consolidation phase when CEC decided to take a particular stance within the progressive social movement, which in effect meant that it had to be more explicit about its analytical framework. It also became more pronounced due to the shift in CEC's focus of environmental work, from grassroots environmental education to environmental advocacy.

These experiences suggest that the ideological sharpening of CEC as an institution continue to play a critical role in influencing its educational practice, in this particular instance in terms of the analytical framework it applies and advocates. The two area-based modules studied in the following section further illustrate this situation.

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[111] Ines-Comia, "Baler experience…", p. 49.

[112] Ines-Comia, "Baler experience…", p. 49.

[113] Ines-Comia, "Baler experience…", p. 49.

9.4.3 Area-based modules

The partnership with local organizations and federations in Southern Negros and Mindoro Occidental has given CEC the opportunity to re-contextualize its existing grassroots environmental education curriculum to the new advocacy framework. Each of these experiences is discussed below, with emphasis on the effect on curriculum development of CEC's shift to environmental advocacy and the sharpened analytical framework.

(a) Southern Negros

CEC's involvement with organizations in Southern Negros began in November 1996 when floodwaters carrying mine waste from the damaged tailing ponds of both Philex Mining Corporation and Maricalum Mining Corporation ruined more than 455 hectares of productive agricultural land in Sipalay, Negros Occidental.[114] This is not the first time that mine spillage has occurred in Sipalay, similar accidents have affected irrigated fields and bodies of water like the Sipalay River since the 1980s.[115] Since 1997, CEC has conducted a RENEW and a CBEM series of workshops in the area together with an local NGO, the *Paghida-et sa Kauswagan Development Group* (PDG) and the federation of farmer's groups in Southern Negros called MAPISAN. PDG was established in 1987 in Kabankalan, Negros Occidental,

> … to empower rural communities to sustain their own initiatives and meet
> their basic needs and aspirations, to protect and rehabilitate ecosystems, and
> to work toward a just and sustainable future through social transformation.[116]

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[114]Allan Mesina, A *Primer on Philippines Environmental Data* 1996 edition (Quezon City: CEC, 1996), p.14.

[115] EMB-DENR, *Philippine environment quality report 1990-1995* (Quezon City: EMB-DENR, November 1996), p. 219.

[116] "The Southern Negros Sustainable Agriculture Demonstration Project: Project Proposal" (Negros: Pahida-et sa Kauswagan Development Group, 1 April 2001), p.1 [unpublished document].

MAPISAN is a farmer's federation composed of 13 farmer associations with a total of more than 5000 members, which promotes organically based sustainable agriculture.

These education and training programs were very much like the previous RENEW and CBEM, except for changes similar to the revised mining modules described previously that placed greater emphasis on the analysis of the problem in the broader context of a semi-feudal and semi-capitalist nature of society. Aside from these changes to the modules, an on-going commitment of the local organization and better coordination between CEC's education and research departments have resulted in the individuals who attended the workshops being more involved in sustained environmental monitoring work.

This was made possible because both the education and research efforts were clearly situated within the local community organizing campaigns. It was mentioned in chapter 8 that one of the limitations of CEC's education work has been that it was not able to sustain its involvement with the local participants past the training workshops, given staff numbers. The decision to focus its efforts in specific local areas has allowed CEC to field staff for longer periods of time. A full-time CEC staff member has been deployed to work in the Southern Negros since 1999, while other staff members continue to spend at least a week at various times throughout the year. Two new workshop designs were developed and tested as part of the Southern Negros project that illustrate more the shift of emphasis to environmental advocacy. After the RENEW workshop, instead of a Trainers' Training workshop, an EduCATOR workshop was conducted in 1997. A sample workshop outline is provided as Table 8.1. The objectives of the workshop were to provide the local participants with a range of skills needed in the conduct of a wide range of roles involved in environmental work. It emphasized the key role of education, but included developing skills as a Campaigner, Advocate or Activist, a Trainer, an Organizer and a Researcher, hence the acronym EduCATOR.

As mentioned in chapter 8, this training was further modified to focus on the Campaigner and Advocate or Activist and was called the Speakers' Training on Mining and the Environment. Its aim was to develop individuals and modules that

could respond to shorter timeframes and with more campaign-focused sessions as part of a province wide mining campaign. An outline of this workshop is provided as Table 8.2.

(b)   *Mindoro Occidental*

The initiative in Mindoro Occidental was the result of a request by the *Bagong Alyansang Makbayan – Kanlurang Mindoro* (Bayan-KM), a multi-sectoral umbrella organization, to conduct a study and assist in educating the local community on the potential impact of corporate mining on the province. Between 1995-96 six FTAA applications were filed totaling of 474,336 hectares, approximately half of the land area of the whole island of Mindoro. The island is divided into two provinces, Mindoro Oriental and Occidental. One of the mining companies that has applied for an FTAA is a Norwegian mineral exploration company called Mindex Resource Development, Inc. Mindex proposes to use open-pit mining and deep submarine waste disposal processes to mine for nickel and cobalt deposits.[117] A one-year environmental investigation mission was conducted by CEC in 1999, which concluded that the activities of the six corporate mining firms would

> … spell destruction of a total of 261,622 hectares or sixty percent of the province's remaining forest cover and prime agricultural lands. This is putting at risk the remaining economic-resource base of the local community.[118]

The proposed mines will result in the physical and economic displacement of almost 300,000 people and threatens the local indigenous and farming communities on the island the report stated.

In the same year, a series of environmental education workshops were conducted to support the on-going environmental investigation mission. A revised and shortened RENEW, similar to the mining module described in the previous section, was

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[117] "Mindoro Occidental: Once upon an island", *Feedback,* vol. 11, no.1, (January-June 2000), pp 3-5.

[118] "Mindoro Occidental…", pp. 6-7.

conducted in two days instead of three. The method was participatory and creative; the local environmental situation as used as the entry point, there was a brief discussion of ecological concepts followed by a discussion of the national situation as linked to economic globalization. Another distinction is that while the original RENEW drew out individual commitments to environmental action, this revised RENEW focused more on organizing efforts to support community or sectoral campaigns.

The three new training programs conducted in Mindoro provides evidence to what CEC identified as the need

> … to broaden the approach of environmental education as a tool to try other areas of people's environmental advocacy work to protect and defend their local resource base.[119]

Instead of a Trainers' Training, a Speakers' Training was conducted in response to the demand for speakers on mining and other related issues. The emphasis on developing the capacity of the local people in environmental advocacy was complemented by additional workshops on Mass Campaign Planning and Administration (MCPA) and the Training on Research and Documentation.

In concluding this section, the influence of the sharpened depth of analysis on the curriculum was closely associated with the shift of CEC's focus to environmental advocacy. While the use of participatory and creative educational approaches was maintained the framework of analysis was more explicit about the relationship of environmental problems, like mining, to the semi-feudal and semi-capitalist nature of Philippine society. In addition, while there was no over-all change in the strategy of training the trainers, the workshops were more focused on a particular kind of education work, more specifically advocacy and propaganda work. This explains the design and conduct of workshops that develop skills for environmental advocates, campaigners, and speakers.

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[119] "CEC 1999 Annual report" (QC: CEC, 2000), p. 6.

9.5   Chapter summary: Progressive contextualization trends

Six aspects of progressive contextualization can be established from the previous discussion. These trends are summarized in Table 9.13.

Table 9.13: General progressive contextualization trends observed in CEC's grassroots environmental education curriculum from 1989-1999.	
Characteristics	**Trends**
Learners	Multi-sectoral → sector-based → area-based
Aims and objectives	General awareness-raising → problem-focused skills development
Trainers' Training component	RENEW Trainers' training → Advanced Trainers Training → EduCATOR training → Speakers Training
Workshop content	General environment → sector-specific, problem-focused, and area-based
Learning methods	Continues to utilize participatory and creative approaches but these are more locally-sensitive to local culture, knowledge and ways of learning
Analytical framework	Ecological framework → holistic framework → class analysis framework

First, in terms of the learners or the participants, there has been a shift from a multi-sectoral composition to a more sector-based composition, which was ushered in by the SEED Program. This program resulted in the development of workshop designs like RENEW Plus modules and approaches like the integration of an environmental perspective into existing sector-based workshops. More recently, aside from a sector-based composition, the participants have also been from a specific location, hence the area-based modules developed for Southern Negros and Mindoro Occidental. Second, the workshop aims and objectives have also shifted from developing an awareness and understanding of environmental problems in general to more skills-based training workshops in response to specific environmental issues. CBEM and CORETECH were the two workshops designed with to respond to these needs.

Third, this shift to skills-based training could also be observed in the shifts in the trainers' training component of the curriculum. What began as a RENEW-based trainers' training workshop in 1990, followed by the Advanced Trainers' Training workshops from 1993-1997, then the EduCATOR workshops developed in Negros in

1997 has become a Speaker's Training in response to the advocacy needs in both Negros and Mindoro in 1999.

Fourth, the workshop content has been influenced increasingly by the local context. What began with a general awareness of the local, national and global environment has shifted to be more problem-focused, sector-specific and area-based. The IKSER project and modules highlight this shift, even more specifically in terms of local knowledge and ways of learning. Fifth, creative and participatory approaches continue to be relevant, although the amount of games and the nature of some of the activities have been tempered to respond to be more culturally sensitive. But in general the learning methods have changed little.

Finally, the deepening of the framework of analysis has been the key development that affected more than the education modules, but the whole nature and scope of CEC's environmental work. While education and research continue to be the main activities of CEC, these have all been placed under an environmental advocacy umbrella. Furthermore, there has been a more explicit acknowledgement of the relationship of environmental problems to the semi-feudal and semi-colonial nature of Philippine society.

The experiences examined in this chapter have given further support to the previously raised argument regarding the key role of the institution, in this case CEC in the progressive contextualization of the curriculum. However, this chapter has expanded this role of the institution to include other institutions, in particular the progressive people's movement as represented in the study by the sectoral organizations involved in the SEED Program and the People's Faculty, and the local organizations and federations in Negros and Mindoro. This institutional dimension, the evidence suggests, continues to be a key influence in CEC's practice of progressive contextualization.

The previous chapters have shown that the researcher's initial descriptions of progressive contextualization were too limited to adapting the module to the local context. This approach and focus, on developing new environmental education modules, can be traced back to the objective of the SEED Program, of building up

"curricular and pedagogical experiences towards a grassroots environmental education curriculum, and to evolve mechanisms for sustained environmental action."[120] The same is true for the objectives of IKSER that identified *"to develop an indicative training module"* as a major objective of each of the case studies.[121]

This focus can be traced back to the strategy that CEC decided to take, of using a grassroots environmental education approach to achieve socio-ecological rehabilitation. This emphasis on curriculum development is reflected in the statement found in the concluding section of the *RENEW Manual* It states that

> … while we have reached a good number of participants and educators in the various Non-Governmental Organizations, sectoral organizations and people's organizations, there is still a clear need to **push** RENEW or environmental education down to the grassroots.[122]

It is important to acknowledge that this approach has facilitated the development of a wide range of locally responsive workshop designs, however, this pre-occupation with curriculum development can also be seen as a weakness. It shifted the focus of the educational outcomes from the development of responses to the broader contextual issues to a focus on the curriculum as an outcome. This shift partly explains the observed tendency towards narrow environmentalism of the curriculum.

Aside from the focus on curriculum development CEC's practice of progressive contextualization has also tended to focus on localization and or indigenization, which were key strategies recommended and adopted after the 1993 RENEW evaluation. While the emphasis on localization has resulted in a wide-range of locally contextualized education workshops, there has been a complimentary tendency towards a very generalized approach to the broader context. This again explains the observed weakness of CEC's framework of analysis, particularly of its reading of Philippine society.

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[120] Guevara, "Planting the Seed…", p. 30.

[121] Padilla, "Indigenous knowledge…", p. 17.

[122] Guevara, *Renewing RENEW*, p.156 [emphasis in original].

Andrew Vayda's progressive contextualization situated human activities or people-environment interactions in "progressively wider or denser contexts,"[123] the workshops and learning processes that we have discussed has shown that CEC tended to focus more on the denser or the local context. CEC has also attempted to deal with the wider contexts, to go beyond the local and national contexts, and include the global context. The following chapter describes and examines how CEC dealt with incorporating a global context in its organizational policies and in curriculum development process. The chapter analyzes and evaluates the nature of the global CEC incorporated in the context of popular environmental education in a globalizing world.

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[123] Vayda, p. 265.

Chapter 10

Wider contexts: building on the 'here and now'

The local or the "here and now"[1] which Freire described as "the situation within which [people] are submerged, from which they emerge, and in which they intervene"[2] has been the emphasis of CEC's practice of progressive contextualization. As the previous chapters have illustrated the emphasis in developing CEC's grassroots environmental education curriculum can be described as localization. However, environmental problems are not limited to the here and now. Its causes and impacts transcend to encompass the global. Thomas Princen and Matthias Finger emphasize that "humankind has never before faced environmental problems of this sort, problems that are at once biophysical and social, and that have global dimensions."[3] Vayda's progressive contextualization[4] acknowledged the need to examine not just denser (or more local) but wider contexts, as well. It is the influence of these wider contexts, particularly the national and the global contexts, and how these were linked to CEC's localized educational practice that is examined in this chapter.

This chapter begins with an examination of organizational documents of CEC to examine CEC's organizational thinking about the global nature of environmental problems and identifies possible influences to this thinking. It then proceeds to describe CEC's own involvement at the global level, specifically its educational networks, and how these links contributed to CEC's understanding of the global. It then examines other related educational practices like environmental education, environmental adult education, popular education, local education and global education to identify possible influences to CEC's educational practice of linking the

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[1] Paulo Freire, *Pedagogy of the Oppressed.* (New York: The Continuum Publishing Corporation, 1993), p.66.

[2] Freire, *Pedagogy of the Oppressed*, p.66.

[3] Thomas Princen and Matthias Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 10.

[4] Vayda, p. 265.

local and the global. Finally it analyses CEC's own construction of the global as reflected in its educational practice.

Data for this chapter was gathered from CEC's documents, such as its VMG statements; documentation of RENEW and other CEC workshops, and outcomes of both the 1993 RENEW evaluation and the 1999 CEC@10 national evaluation. In addition, documents from the Asian and South Pacific Bureau of Adult Education and its Environmental Education Program (ASPBAE-EEP) and the Learning for Environmental Action Program (LEAP) of the International Council of Adult Education (ICAE) were studied as part of establishing the local and global connections.

10.1   CEC's acknowledgment of the global nature of environmental problems

"A major global concern that confronts every Filipino today is severe environmental degradation."[5] This is the first sentence of the proposed research framework, entitled, "Action-Research on Environmental Degradation in the Philippines" that was sent out for comments by CEC to prospective partner organizations in 1989. This statement is the earliest reference in the CEC documents examined that acknowledged the global nature of environmental problems. Even the CEC concept paper, dated October 1988, that initiated the discussion to establish CEC had no mention of the word global or any reference to global environmental problems in its detailed rationale. The closest reference to the global in earlier documents is the proposal in the October 1988 draft concept paper to set-up an International Relations Department that would

> … seek the formulation of a regional environment agenda to serve as a general framework for the conduct of common environmental protection activities and campaigns among various countries.[6]

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[5] "Research Framework: Action Research on Environmental Degradation in the Philippines" (QC: CEC, 14 August 89), n.p. [unpublished document].

[6] "Draft Concept Paper" (QC: CEC, October 1988), p. 7 [unpublished document].

The first vision statement of CEC, formulated in 1989, went further when it stated that its vision for the Philippine environment was inextricably linked to the broader context of the biosphere. This vision statement reads that CEC envisions

> … a productive, diversified, abundant and stable Philippine environment, but are aware that such cannot exist independently of the biosphere. Thus the quality of the environment we are working for extends beyond territorial boundaries, encompassing the whole of Mother Earth.[7]

The statement was not limited to a vision for the Philippine environment but went on to identify that for this vision to be achieved the Philippines needs to be "a nation free from foreign domination or any form of external intervention in our socio-political-economic-cultural life."[8]

These statements establish that early on, CEC understood that its environment work in the Philippines had a global dimension -"beyond territorial boundaries" – that was situated within a political dimension – "a nation free from foreign domination." This complex relationship between global power and environmental destruction is further clarified in 1991 when prior to describing its revised vision statement CEC identified that,

> … in Third World countries like the Philippines, environmental degradation is the byproduct of a major developmental problem: the unmindful exploitation of the country's natural resources by multi-national corporations and local businessmen for profits to be derived from the international and local markets.[9]

While it acknowledged the inter-play of global political and economic forces on the environment, CEC has always seen that its primary area of work was at the local level. This focus on the local was identified in the 1995 VMG document that

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[7] "CEC Brochure" (QC: CEC, 1990), n.p. [photocopied material].

[8] "CEC Brochure", n.p.

[9] MASAI, "An Evaluative Report of the CEC-Philippines" (QC: MASAI, 1991), p. 6.

emphasized "locating action at the community through NGOs/POs translates an environmentalist dictum of *thinking globally and acting locally*.[10]

In the same 1995 VMG document, CEC elaborated on its global thinking.

> The global concerns of biodiversity destruction, pollution of land, air and water, atmospheric warming and depletion of ozone layers will remain as major problems. The UNCED agreements have yet to be substantially addressed by governments. Capitalists will be extra creative to belie the fact that they are the culprits of environmental destruction. Globalizing environmental concerns is an astute economic and political direction. Meanwhile, market-driven economies will continue the ecocide. The Medium Term Philippine Development Plan (MTPDP) is export-oriented development and certainly, profit motivated. There seems to be no deterrent at the global scale. But veering towards local, nationalists efforts, we see hope and could anticipate more substantive solution to even global problems in the years ahead as wider sections of our civil society have taken further revolutionary actions. A classic case of local vs. global ecologism.[11]

The increased emphasis on the global and its links to the root causes of local environmental degradations statement is consistent with the sharper political analysis that developed as a result of the internal consolidation conducted by CEC in 1995. This emphasis is further reflected in the People's Faculty Orientation Paper, a product of a series of consultation processes from 1994 to 1996, which identified the "influence and control of First World countries on the Philippine economy"[12] as one of the fundamental issues causing environmental destruction.

Finally, Challenging the Future of the Center for Environmental Concerns – Philippines, the document that synthesized outcomes of the evaluation of ten years of

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[10] "Orienting the CEC-Philippines into a proactive politico-ecologist" (QC: CEC, 1995), p. 3 [unpublished document] [italics in original].

[11] "Orienting the CEC…", p. 3-4.

[12] "People's Faculty Orientation Paper" (QC: CEC, 2 May1996), p.1.

environmental work of CEC and identified future directions for CEC makes the sharpest statement as to CEC's analysis of the global. It describes that one of the four main tasks of CEC is to forecast

> … together with other partners in the social movement, the environment with a socio-ecological analysis --- framework of analysis that identifies class contradictions and has an anti-imperialist perspective.[13]

From the organizational documents examined, CEC, since 1989 has continued to incorporate a global perspective in its analysis of environmental degradation. The development of this analysis is consistent with what CEC staff members observe as the sharpening of its analytical framework.

The initial vision established a link between the Philippine environment and a biosphere - "that extends beyond territorial boundaries, encompassing the whole of Mother Earth."[14] This holistic and female view of the earth was probably influenced by the then popular *Gaia* hypothesis, proposed by biologist James Lovelock, which is named after the Greek Earth goddess.[15] Similarly, the traditional or indigenous perspective of the environment or the earth as female and nurturing would have influenced the reference to Mother Earth.

The 1991 vision statement takes a more political stance that links environmental degradation and development problems. Aside from CEC's inherent holistic understanding of the nature of environmental problems, it would be amiss not to mention the influence of the concept of sustainable development proposed by the Brundtland Commission in their report to the World Commission on Environment and Development (WCED) called *Our Common Future*. They defined sustainable

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[13] "Challenging the Future of the Center for Environmental Concerns – Philippines" (QC: CEC, 1999), p. 1 [unpublished document].

[14] "CEC Brochure", n.p.

[15] James Lovelock, *Gaia; A New Look at Life on Earth* (Oxford: Oxford University Press, 1979).

development as "development that meets the needs of the present generations without compromising the ability of future generations to satisfy their own needs." [16]

However, CEC did not adopt the concept of sustainable development in its official documents. This critical view of the concept is due to its very ambiguous definition that has allowed it to be interpreted by different groups and individuals to suit their various needs. William Rees[17] gives an example of this ambiguity. He illustrated how environmentalists and the political left focused on the 'sustainable' part, while the economists and the political right and center emphasized the 'development' component. Huckle describes a similar contradiction,

> … between sustainable growth, or the greening of capitalism, and sustainable development, or the greening of socialism. Sustainable growth is a reformist concept based on 'business as usual' but with greater attention to reproducing the conditions of production. On the other hand, real or ecologically sustainable development is a revolutionary concept.[18]

Rees adds that the political mainstream acknowledges that the current development practice puts pressure on both the environment and people's lives. However, he continues that despite this acknowledgment the sustainable development concept is still deficient because it does not "pause to examine the systemic roots of either poverty or ecological decay [and he asserts] that the solution to these crises reside with the same socio-economic structures from which they sprung."[19] Fien and Trainer summarize this contradiction as follows: "How can continued economic growth solve the problems of global poverty and environmental degradation when

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[16] WCED, *Our Common Future*, (Oxford: OUP, 1987), p. 8.

[17] William Rees, "Understanding Sustainable Development: Natural Capital and the New World Order" (Vancouver: The University of British Columbia, School of Community and Regional Planning, 1992) [unpublished paper].

[18] John Huckle, 'Environmental education and sustainability: A view from critical theory" in John Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), p. 56.

[19] Rees, p. 5.

even present levels of resource use are sustainable?" [20] These are just a sample of the contradictions and the critiques of the concept that have been published, not to mention the numerous alternative proposals that have been put forward.

While CEC did not adopt the language of sustainable development, it did mention the agreements of the 1992 United Nations Conference on Environment and Development (UNCED) in the 1995 VMG document. It qualified that these agreements "have yet to be substantially addressed by governments"[21] within the context of specific global environmental issues, while emphasizing the links between the local and global ecology.

The environmental dictum "Think globally. Act locally." did not appear in CEC's organizational documents until 1995, despite its popularity with the environment movement. Recently, this dictum has been criticized as being outdated and limited. Nicholas Low argues that this statement suggests that,

> … action can be mounted effectively *without* changing our global institutions, yet those institutions are already in transformation as a result of global ecology and global economy.[22]

Robert Beauregard, on the other hand, argues that,

> … global actors hardly begin at the global scale; … they work outwards from the local, at least initially. Such a theoretical position would reverse the assertion that the local is mediated by the global. … Instead, one should "think locally and act globally. [23]

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[20] John Fien and Ted Trainer, "Education for sustainability" in J. Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), p. 14.

[21] "Orienting the CEC…", p. 3.

[22] Nicholas Low, *Global Ethics and Environment* (London: Routledge, 1999), p. 1.

[23] Robert Beauregard, "Theorizing the global-local connection" in Paul Knox and Peter Taylor (eds), *World cities in a world-system* (Cambridge: Cambridge University Press, 1995), p. 242-243.

To Beauregard's proposal Michael Peter Smith adds two more revisions, which according to him would allow more room to explore this dynamics. He suggests that we need to be "living bifocally: i.e. thinking transnationally while acting mutilocally; and thinking and acting simultaneously at multiple scales."[24] Clearly, there is a growing recognition for the need to act globally, as well. And this is not only because of the presence of global environmental problems. It is more due to the realization that there are global institutions that contribute to global environmental problems. Despite these criticisms, it is significant that this dictum is included in CEC's organizational documents, because it situates CEC's local action within a sharpened analytical framework that identifies and challenges even global institutions.

Most of the participants interviewed as part of the 1993 RENEW evaluation agreed that it was important to include a module on the global environment. Plopino quotes some of the participants making the following observations.[25]

- "We should not be confined with the Philippines only. We have to know also what is the situation in the First World."
- "The spirit of internationalism remains when it comes to environment as a global concern."

However, Plopino notes that despite the support for a module on the global environment, one participant made it clear that "the discussion of situationers depends on the audience."[26] Therefore, although the participants thought that a module on the global environment was important, it still had to be adjusted to the level of the learners. Thus, it can be observed that CEC has continued to give importance to the need for a local and a global perspective in its environment work. This local and global perspective was not limited to the biophysical environment, but emphasized the socioeconomic and political relationships. This emphasis on the

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[24] Michael Peter Smith, "The disappearance of world cities and the globalization of local politics" in P. Knox and P. Taylor (eds), *World cities in a world-system* (Cambridge: Cambridge University Press, 1995), p. 259.

[25] Ramiro Plopino, "The Contexts of RENEW" (QC: CEC document, 1993), p. 10 [unpublished report].

[26] Plopino, p. 10.

socioeconomic and political relationships became even more explicit, as is identified in the remainder of this chapter.

10.2   CEC's involvement at the regional and global platform

These approaches, of linking the local and the global, and biophysical to the socioeconomic, political and cultural, influenced CEC's participation and leadership of regional and global activities during the period under study. Some of these key regional and global events were the International NGO Forum (INGOF) the alternative forum to the Official UN Earth Summit in 1992, and alternative conferences to the official APEC meetings in Manila in 1996 and Vancouver in 1997. Duhaylungsod attended the Earth Summit representing both CEC, as Executive Director and PEAN, as Secretary General. In both APEC meetings CEC advocated the issue on the impact of corporate mining on local communities. This issue was the current concern in the Philippines due to the passage of the Mining Act of 1995. The ideological rift, however, resulted in at least three alternative APEC conferences in the Philippines in 1996, two of which were attended by CEC representatives. In 1997, Engineer Efren Fabila and the then Executive Director Melissa Bengullo-Morales attended the alternative APEC conference in Vancouver. Prior to the alternative APEC conference in Vancouver, Fabila and Bengullo-Morales conducted a series of seminars in a number of major cities in Canada, which was supported by both Canadian funding partners, Inter Pares and CCODP.

10.2.1 CEC and ASPBAE

There has been a more substantial involvement of CEC at the regional and global level in the field of adult and community education through the Asian and South Pacific Bureau of Adult Education - Environmental Education Program (ASPBAE-EEP). This involvement traces back to early 1991 when CEC was requested to convene a regional consultation to explore the viability of ASPBAE setting up a program on environmental education for sustainable development. The consultation decided in favor of establishing such a program. A proposal to establish and

environmental education program was put forward during ASPBAE's First General Assembly in December 1991, and it was approved.

In 1992, CEC was requested to nominate a staff member to act as sub-regional coordinator for Southeast Asia. I was appointed to the position from 1992-1993. From 1994- 19995, while I was on study leave, Duhaylungsod, who was still CEC's executive director, took over the task of sub-regional coordinator. On my return to CEC in 1996, I was appointed as ASPBAE-EEP Regional Coordinator (1996-1998) and later that year elected as executive council member for Southeast Asia (1996-2000). Involvement with ASPBAE included work for the International Council of Adult Education (ICAE) the international network of regional adult education groups, like ASPBAE. In particular, ASPBAE-EEP was associated with the Learning for Environmental Action Program (LEAP) of the ICAE.

10.2.2 CEC's contribution to regional and global treaties

This section describes the involvement of CEC in the development of major regional and global adult and community environmental education treaties, frameworks and declarations from 1991 – 1997.

CEC's earliest involvement was to assist the ICAE-LEAP, through ASPBAE, in the distribution and gathering of feedback towards the drafting and ratification of what is now called the Treaty of Environmental Education for Sustainable Societies and Global Responsibility.[27] The NGO and civil society representatives ratified this Treaty at the INGOF in Rio de Janeiro, Brazil on 9 June 1992. Being an NGO drafted treaty it is a private agreement and is only binding among the different non-government organizations that signed these agreements. However, according to Hector Soliman, a supervising lawyer of *Tanggol Kalikasan, Haribon Foundation*, an environmental law NGO in the Philippines,

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[27] "Treaty on Environmental Education for Sustainable Societies and Global Responsibility", *LEAVES* (September 1992), p. 2-3.

We realize the importance of these agreements as a lobbying instrument or tool so that in the future we can say to our government and their governments, as well, that a big segment of the international NGO community had a consensus on these particular items.[28]

This particular treaty was part of what was called a Journey of Environmental Education that was initiated by the ICAE-LEAP a year before the Rio Summit. According to Budd Hall, "the treaty process created new language and concepts for conceptualizing the relationships between the environment and adult learning."[29] There were a total of 29 alternative treaties and agreements signed at INGOF. These were debated and signed because of the "different positions of NGOs at the international level on matters that were being sidetracked or that were not being discussed at the UNCED." [30] These treaties and agreements covered a range of issues that included militarism, nuclear energy, nuclear waste, consumption and lifestyles, and foreign debt. The official documents signed during the Rio Summit were Agenda 21, the Rio Declaration, a Convention on Climate Change, a Convention on Biodiversity, and a Declaration on Forest Principles.[31]

Upon ratification, the Treaty was translated by CEC into Filipino and promoted during workshops conducted in late 1992 and 1993, including the National Evaluation Workshop of the Sectoral Environmental Education Program. The Treaty explicitly identified that environmental education requires "individual and collective responsibility at local, national and planetary level."[32] Within the Treaty, one of the identified plan of action options was to "work on the principles of this treaty from the

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[28] Hector Soliman, "Reaction" in Joseph Sedfrey Santiago and Edna May Grecia (eds), *The United Nations Conference on Environment and Development: Myths and Realities (A Round Table Discussion),* (QC: University of the Philippines Institute of International Legal Studies, 1992), p. 71.

[29] Budd Hall, "The International Council of Adult Education", *Convergence*, vol. 33, nos.1/2 (2000), p.48.

[30] Soliman, p. 70.

[31] Marvic Leonen, "An Overview of the United Nations Conference on Environment and Development" in J. S. Santiago and E. M. Grecia (eds), *The United Nations Conference on Environment and Development: Myths and Realities (A Round Table Discussion),* (QC: University of the Philippines Institute of International Legal Studies, 1992), pp, 3-6.

[32] "Treaty…", *LEAVES*, p. 2.

perspective of local situations, necessarily relating them to the state of the planet, creating a consciousness for transformation."[33]

Having been a signatory to the Treaty, ASPBAE through its Environmental Education Program decided to support the conduct of 13 in-country experimental projects of its members between 1994 -1995. The aim of the projects was to further contextualize the Treaty to local realities and eventually develop a framework for environmental education in the Asian and South Pacific regions. All project proponents attend a regional workshop in the Philippines that was hosted by CEC in January 1994. Based on the nine in-country projects completed, a regional framework called the Principles of Adult and Community Environmental Education[34] was formulated by this researcher. Feedback was gathered from the project proponents and changes were made to the draft through a regional workshop in Fiji in 1996. Except for the in-country project in Vietnam, which was conducted by a government department, it was local NGOs that conducted the projects in Sri Lanka, Solomon Islands, South Korea, Fiji, Hong Kong, and the Philippines.

An example of the reflection of CEC's experience on the Principles can be seen from the first principle of the regional framework, quoted below, which includes the phrase 'progressively contextualized' to refer to an integrated and holistic approach to studying ecological problems within local, regional and global contexts.

> Environmental education recognizes that ecological problems cannot be addressed separately from the historical, political, economic, social and cultural realities. These problems have to be understood with their local, regional and global contexts, making it necessary for environmental education to be progressively contextualized.[35]

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[33] "Treaty…", *LEAVES*, p. 2-3.

[34] "Principles of Adult and Community Environmental Education", *LEAVES* (July 1998), p.1-4.

[35] "Principles of …", *LEAVES* July 1998 p. 4.

This regional environmental education framework informed the formulation of the Darwin Declaration, which was ratified by members from more than thirty countries during the Second General Assembly of ASPBAE in Darwin, Australia in 1996.

> ASPBAE asserts that environmental education is a life-long process, recognizing that ecological problems should be seen and addressed within a socio-economic and cultural context.[36]

The Darwin Declaration in turn was critical in informing the Hamburg Declaration on Adult Learning approved during the Fifth International Conference on Adult Education conducted by UNESCO in 14-18 July 1997 in Hamburg, Germany. Note the similarity between the Darwin Declaration and the Hamburg Declaration that states that

> … education for environmental sustainability should be a lifelong process that recognizes that ecological problems exist within a socio-economic, political and cultural context.[37]

This section demonstrates CEC's regional and global involvement in the area of adult and community education. While it some of the educational principles of CEC, such as progressive contextualization, were reflected in the regional framework, it would be difficult to attribute this influence solely to CEC. I would argue that the similarity is more an indication, not of influence but of evidence that other educators from the Asia and Pacific regions share CEC's experience of progressive contextualization. Although the phrase progressive contextualization was not found in other regional and global documents that followed, the essence of this practice within a socio-economic, political and cultural context is evident in these documents. These contexts were identified as local spatial factors that influence the progressive contextualization of the module, which was described in chapter 7. This section adds to these spatial contexts a vertical dimension that builds on the local, of the national, regional and the global.

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[36] ASPBAE. *Darwin Declaration* (Darwin: ASPBAE, 1997), n.p.

[37] UIE, *The Hamburg Declaration on Adult Learning.* (Hamburg: UIE, 1997), p. 5.

10.3   Global educational responses

> Environmental education should treat critical global issues, their causes and inter-relationships in a systemic approach and within their social and historical contexts. Fundamental issues in relation to development and the environment, such as population, health, peace, human rights, democracy, hunger, degradation of flora and fauna, should be perceived in this manner.[38]

The above quotation is one of the principles of the Treaty of Environmental Education for Sustainable Societies and Global Responsibility, ratified by NGO and civil society representatives at the INGOF in Rio in 1992. This quotation is not the first acknowledgement of the global nature of environmental problems and its implications to education, specifically in fields related to environmental education. The global has been a major concern in the growth and development of the theory and practice of environmental education.

10.3.1 Global environmental education documents

During the 1972 United Nations Conference on the Human Environment held in Stockholm Peter Fensham noted that

> … the global nature of so many environmental problems was seen to need quite new forms of international cooperation. There was a call for education to focus its resources on the situation.[39]

Russell Linke further contextualized this statement when he said that

> … the aims of environmental education have not always held a place of great importance - nor indeed has there been a need for this, for the major problems

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[38] "Treaty…", *LEAVES*, p. 2.

[39] Peter Fensham, "Stockholm to Tbilisi – the evolution of environmental education", *Prospects*, vol. 8, no. 4 (1978), pp. 446-455 in Greenall Gough, p. 62.

have remained until recent years in a relatively localized state. It is only the present realization of global repercussions of human interference that demands an urgent reappraisal of the current status and philosophy of environmental education.[40]

This development of an understanding of the global implications of environmental problems is evident in other UN documents related to environmental education. The Belgrade Charter in 1975 was the first international document that was the outcome of a series of International Environmental Education Programme conferences that were hosted by UNESCO and UNEP. This Charter was followed by the Tbilisi Declaration in 1977, a Moscow conference in 1987 that gave support to the previous two documents, and most recently the Thessaloniki Declaration in 1997. Note that this series of conferences is related to, but distinct from, the Stockholm and Rio UN Conferences in 1972 and 1992, respectively. According to John Fien the Belgrade Charter

> … located environmental education within the global movement for a 'new international economic order' directed at solving the social and environmental problems, which flow from poverty, hunger and exploitation.[41]

The Charter specifically identified in its preamble that

> … there is growing evidence of increasing deterioration of the physical environment in some form on a world-wide scale … It is within this context that the foundations must be laid for a worldwide environmental education program.[42]

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[40] Russell Linke, *Environmental education in Australia* (Sydney: Allen & Unwin, 1980), pp. 24-37, 208-11 in Greenall Gough, p. 82.

[41] John Fien, "'Education for the environment: a critique' – and analysis " *Environmental Education Research*, vol.6, no.2 (2000), p.51.

[42] UNESCO-UNEP, "The Belgrade Charter" (1976), pp, 1-2 as cited in Fien, *Education for the environment*, p. 51,

The Tbilisi Declaration built on the Belgrade Charter and included two out of twelve principles relevant to this section's discussion of the global nature of environmental problems to environmental education. The Declaration identified that environmental education should

> … examine major environmental issues from local, national, regional and international points of view so that students receive insights into environmental conditions in different geographical conditions. [It should also] promote the value and necessity of local, national and international cooperation in the prevention and solution of environmental problems.[43]

Prior to the Thessaloniki Conference, the UN Earth Summit was held in Rio in 1992, which formulated what is called Agenda 21. Chapter 36 of Agenda 21 covered all actions related to education for sustainable development.

In light of this, the Thessaloniki conference had two main objectives, to mark the 20th anniversary of the Tbilisi Declaration and to identify strategies to attain the goals and objectives of Chapter 36 of Agenda 21. The Thessaloniki Declaration states that

> … environmental education, as developed within the framework of the Tbilisi recommendations and as it has evolved since then, addressing the entire range of global issues included in Agenda 21 and the major UN conferences, has also been dealt with as education for sustainability. This allows that it may also be referred to as education for environment and sustainability.[44]

While Doug Knapp is alarmed by the recommendation that "environmental education be referred to as education for environment and sustainability"[45] this shift seems to be initiated by Agenda 21. Despite this shift in the term, the Thessaloniki

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[43] UNESCO-UNEP, "The Tbilisi Declaration" (1978), p. 3 as cited in Fien, *Education for the environment*, p. 53.

[44] UNESCO-EPD, "Declaration of Thessaloniki: Statement 11"in Doug Knapp, "The Thessaloniki Declaration: A wake-up call for environmental education?" *Journal of Environmental Education,* vol. 31, no. 3 (2000), p.39.

[45] Knapp, p. 32.

Declaration identifies the need to address the entire range of global issues within a broader context of education for environment and sustainability. The Thessaloniki Declaration further states that

> … while the basic content and action framework for environment and sustainability is largely in place, the translation of these parameters into action for education will need to take into account particular local, regional or national contexts.[46]

From this review of international documents, it is evident that the global nature of environmental problems has continued to be a key factor in the development of environmental education as a response at the local, national, regional and global contexts. While most of these global documents have placed a greater emphasis on formal education, there has been a growing recognition, as stated in the Tbilisi Declaration that environmental education is "a continuous life-long process, beginning at the pre-school level and continuing through formal and non-formal stages."[47]

The Thessaloniki Declaration goes further to recommend that

> … non-governmental organizations be given adequate institutional and financial support in order to further mobilize people on issues of environment and sustainability, within communities and at national, regional and international levels.[48]

It is within these areas of non-formal and community education that CEC's educational practice can be situated. These areas are closely related to the field of environmental adult education that equally acknowledges the implications of the global nature of environmental problems to its educational practice. Darlene Clover

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[46] UNESCO-EPD, "Declaration of Thessaloniki: Statement 13" in Knapp, p.39.

[47] UNESCO-UNEP, "The Tbilisi Declaration"(1978), p. 3, as cited in Fien, *Education for the environment*, p. 53,

[48] UNESCO-EPD, "Declaration of Thessaloniki: Statement 22" in Knapp, p.39.

describes this educational practice as one that "considers the environment in its totality, natural and built, technological and social, and it assists people to make global and local links."[49]

10.3.2 The local –global link in educational practice

CEC has also acknowledged the influence of the field of popular education, which is "part of a current in adult education" often described as "education for critical consciousness" that equally emphasizes the link between "local experiences to historical and global processes."[50] Clearly, the roots of CEC's practice come from educational fields that have strongly identified with the importance of linking the local and the global. In reviewing literature related to CEC's practice, the fields of local and global education were examined, as they strongly supported similar global and local links in educational practice.

Mark Smith[51] in his book, *Local Education: Community, conversation, praxis* emphasized the importance of establishing links between the local and the global. He echoes Clifford Geertz as saying that local educators have to adopt the same mode of thinking, namely

> … a continuous dialectical tacking between the most local of local detail and the most global of global structure in such a way as to bring them into simultaneous view.[52]

Such a view is equally reflected by David Selby who describes a biocentric or life-centered global education as a

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[49] Darlene Clover, "From words to action: Environmental adult education", *Adult Education and Development* Special Issue: Background Papers CONFINTEA V, (1997), p. 121.

[50] Rick Arnold, Deborah. Brandt and Bev Burke, *A New Weave: Popular education in Canada and Central America* (Toronto: Ontario Institute for Studies in Education and Ottawa: CUSO Development Education, 1985), p. 16.

[51] Mark Smith, *Local Education: Community, conversation, praxis* (Buckingham: Open University Press, 1994).

[52] Clifford Geertz, *Local Knowledge. Further Essays in Interpretative Anthropology* (New York: Basic Books, 1983), p. 69 in Mark Smith, p.16.

> … genuinely multi-leveled global curriculum, within which the local, provincial, bioregional, national and planetary would be perceived of as in dynamic and enfolded relationship.[53]

He proposes to move beyond the slogan 'Think Globally, Act Locally' as the basis for educational work. Instead he used the word 'glocality' "to refer to the radical interconnections or enfoldedness between the local and the global" [54] This is very similar to Robertson's glocalization, identified in chapter 4, which recognizes that globalization and localization are essentially "complementary and interpenetrating."[55]

The focus of global education on the enfoldedness of the spatial dimension of the local and the global was further expanded Selby and Graham Pike in describing civil global education. They identified a "Four-Dimensional Model of Global Education"[56] that added to the spatial dimension, an issues dimension of socioeconomic and political issues and a temporal dimension. Furthermore, they identified the core of the model as the inner dimension.

> While the journey outwards leads learners to discover and understand the world in which they live, the journey inwards heightens their understanding of themselves and their potential. Both journeys constitute a necessary preparation for personal fulfillment and social responsibility in an interdependent and rapidly changing world.[57]

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[53] David Selby, "A darker shade of green: Importance of ecological thinking in global education and school reform", *Theory into Practice*, vol. 39, no. 2 (Spring 2000), pp. 88 + (Academic Search Elite, Item no. 3170145) http://ehostvgw12.epnet.com (17 October 2001).

[54] David Selby, "Global education: Towards a quantum model of environmental education", *Canadian Journal of Environmental Education*, vol. 4 (1999), pp. 125-141.

[55] Ronald Robertson, "Glocalization: Time-space and homogeneity-heterogeneity" in Mike Featherstone, Scott Lash and Ronald Robertson (eds), *Global modernities* (London: Sage, 1995), p. 38.

[56] David Selby and Graham Pike, "Civil global education: Relevant learning for the twenty-first century", *Convergence*, vol. 33, nos. 1/2 (2000), pp. 138 – 149.

[57] Selby and Pike, p. 140.

In a paper delivered at "Education 21, Learning for a Fair and Sustainable Future"[58] by Klaus Seitz from the Development Policy Association of German Non-Governmental Organizations (VENRO) described the aims of global learning as,

> … a way of learning and thinking which enables local circumstances to be seen in the context of their global implications, and local action to be matched to global requirements.[59]

Most of these authors have moved away from a problem-based rationale for linking the local to the global. Such a rationale, that emphasizes understanding the links of local environmental problems to the global is an important starting point, however, there are other links and dimensions, as identified by Selby and Spike, that need to be studied. Robert Beauregard in his article criticizing the global-local connection gives as an example popular responses to the dominance of global economic forces and emphasizes, "it is not enough to organize locally when the forces fuelling dissatisfaction come from outside the community."[60] Thomas Princen goes further by arguing that "to the extent that global environmental problems are at once global and local, interventions must occur at all levels and must cross levels."[61]

The issue is not whether the links between the local and the global need to be established in grassroots environmental education, but rather how these links are established. The next section examines the five approaches that were used and developed by CEC in dealing with progressively wider contexts, specifically, the national and the global contexts, in its educational practice.

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[58] "Education 21, Learning for a Fair and Sustainable Future" was a conference held on 27-30 September 2000 by the Development Policy Association of German Non-governmental Organizations (VENRO) in Germany that was attended by 700 participants from Germany, Europe, Africa, Asia and Central and South America.

[59] Klaus Seitz, "Global learning – challenges for education in school and outside school", *Adult Education and Development*, no.57 (2001), p.74.

[60] Beauregard, p. 233.

[61] Thomas Princen, "NGOs: creating a niche in environmental diplomacy" in T. Princen and M. Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 41.

10.4   CEC's approaches to progressively wider contexts

CEC's educational practice of linking the local and the global has been reflective of its experiences of sharpening its analytical framework. This observation is consistent with the quotation from Selby about how educational practice is merely the expression of one's analysis of the global nature of environmental problems. As with its attempts to localize its curriculum, this process can be described as progressive contextualization, however, this time it places the curriculum in "progressively wider contexts"[62] from the local.

This process of progressing from the local, national and to global is best described in a ladder, or step manner, which is how it is conducted during CEC workshops. Five approaches can be identified from CEC's practice, namely, *an ecosystem/ecological approach*, *a holistic approach*, *a geographic approach*, *a business continuum approach* and most recently a *mode of production approach*. This section examines these approaches further and illustrates the strengths and limitations of each approach.

10.4.1 Ecosystem and holistic approaches

The *ecosystem approach* focuses on interrelationship across ecosystems within a particular local area. (A more detailed discussion can be found in chapter 9.) It is very much based on using an ecological framework based on the Ecosystem Concept that the different components of a natural system are all interrelated and interconnected to each other. This approach identifies a local environmental problem and lists the causes and effects of this problem to nearby ecosystems. It is uses the PACERR (Problem, Area, Cause, Effect, Response and Recommendations) framework to tabulate the observations of the participants such as the example given in Table 9.9.

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[62] Vayda, p. 265.

The strength of this approach is that it helps to illustrate the connections across the different ecosystems. It illustrates that the effect in one ecosystem, such as soil erosion from the forests, maybe the cause of the problem in the other ecosystem, such as siltation of rivers. This approach helps to highlight the need for a more comprehensive approach to understanding the nature and scope of the immediate problem and in seeking solutions.

Similarly, these relationships between ecosystems were visualized through illustrations of the forest, rivers, rice fields, urban, coastal and marine environments linked to one another. An example is the illustration (Figure 10.1) on the cover of one of the work sheets called *"Understanding our environment: What are ecosystems?"* [63] The work sheets ask the participants to "to establish possible interactions between these components and between the various ecosystems illustrated."[64]

Hence, the *ecosystem approach,* based on an ecological framework demonstrates how wider contextualization is facilitated within the workshop. However, the potential weakness of this approach is when it is merely used to demonstrate the biophysical relationships across ecosystems. This approach, potentially, isolates environmental problems from the complexity of relationships that contribute to and that are impacted by these biophysical manifestations. For example, the loss of rice plants due to the siltation of rice paddies can be viewed in isolation of the impact of a lost harvest on a farmer's income and the associated debt from tilling land that he does not own. This tendency to focus on the biophysical cause and effect can be overcome if the cause and effects are examined in terms of their impact, not only on the ecosystem, but also to the individual and the wider local community. This would include the spatial factors identified earlier that include the socio-economic, cultural and political factors. Hence, the ecosystem approach, depending on how it is used, can potentially facilitate a more holistic analysis of the immediate environmental problem. In the previous chapters, this approach was referred to as a *holistic approach*.

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[63] CEC, *Understanding our environment: What are ecosystems?* (QC: CEC, 1996), p.1.

[64] CEC, *Understanding our environment: What are ecosystems?*, p.3.

Figure 10.1: Cover page of *"Understanding our environment: What are ecosystems?"*[65] worksheet.

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[65] CEC, *Understanding our environment: What are ecosystems?* (QC: CEC, 1996), p.1.

10.4.2 Geographic approach

The other approach applied by CEC, which can be called a *geographic approach*, expands beyond the local environment by studying similar environmental problems in other parts of the country. It builds on the *ecosystem* and *holistic approaches* by widening the context to a more national scope. For example, the golden-apple snail (see section 9.2.2) was introduced in the Philippines in 1983 to 1984. It is a crossbred variety from an exotic tropical species from South America. Being an introduced species, the golden-apple snail did not have its natural predators and therefore soon became a pest feeding on the young rice seedlings. In discussing this problem with the farmers in Antique, a province in the Central Philippines, similar situations of golden-apple snail infestation in other parts of the Philippines were described. In this case, the experience in another province, Mindoro, where a similar workshop was conducted was described.

The discussion was not limited to problem-identification. Local responses to control the snail population were identified. These are mainly through mechanical (manually picking up the snail and its eggs), biological (the introduction of predators like ducks) and chemical (the use of chemical molluscides) means.

It is important to emphasize that like the *ecosystem approach*, the *geographic approach* can be used in a very limited way, to explore only similar environmental problems in different geographic contexts but not including a more holistic, socio-economic, political and cultural contexts.

To continue with the previous example of the snail: Aside from the direct environmental impact, other related concerns were also studied. For example, in terms of health and culture, the snail was introduced to provide additional protein to the local diet. However, local farmers say that the golden-apple snail does not taste as good as native snail called *kuhol* (*Ampullaria luzonica)*. Furthermore, they explain that something that is perceived primarily as a pest is not the something you want as part of a meal.

In terms of its economic impact, the snails feed on the growing rice seedling, resulting in a decline of the harvest and often placing the farmer into more debt. To reduce this impact, the farmers are advised to purchase the pesticides or molluscides. However, there have been reports that the chemicals sold under the brand name of Brestan and Aquatin allegedly attacks toenails and even hooves of the work animals. A news item published in 1991 reported that twenty women working in the rice fields in remote barrios in Isabela and Quirino died after coming in contact with irrigation water previously sprayed with Brestan.[66] Finally, the political issue of why the national government agency recommended the release of the golden-apple snail in the first place is also discussed, to illustrate the connections between the government, local businesses and the multinational pesticide corporations.

10.4.3 Business continuum approach

These political and economic connections are examined further in using a *business continuum approach*. This approach was developed based on CEC's involvement with the local community around the Leyte Industrial Development Estate (LIDE). (Background information on LIDE was discussed in chapter 9.) Duhaylungsod and others called this the "copper business continuum" [67] of environmental destruction. This approach helped CEC to illustrate "that the Isabel phenomenon is the penultimate environmental perturbation from a continuum of destructive activities of mineral copper exploitation."[68]

Two companies, the Philippine Associated Smelting and Refining Corporation (PASAR) that operates the copper smelter, and the Lepanto Consolidated Mining Company (LCMC) that operates the copper roaster and dryer, are both located within LIDE in Isabel, Leyte. The companies within the estate have been under fire for air

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[66] "Banned pesticide kills 20 women" *Feedback,* vo1.2, no.1 (January – February 1991), p. 3, referring to an article from the *Philippine Daily Inquirer* 2 February 1991.

[67] Noel Duhaylungsod, J.R. Guevara and M. Bengullo Morales, "How do you solve a problem like the Leyte Industrial Development Estate (LIDE) pollution of Isabel Bay?: A case of trans-regional ecological destruction of the Philippine environment" (Cebu: National Consultative Assembly for Fisherfolk Empowerment, 16-18 January 1991) [unpublished paper].

[68] Duhaylungsod and others, p. 1.

and water pollution and health-related concerns. The *business continuum approach* begins with the identification of the direct impact of the operations of these companies and traces it back to the source of the copper ore, specifically mining in Mankayan, Benguet in Northern Philippines. A flow-chart (Figure 10.2) and a map (Map 10.1) of the copper-business continuum in the Philippines establishes this interrelationships within the copper industry and explains the "protectionist attitude of these businesses against any form of attempts at weakening the linkage network."[69]

> There is a defined input-receiver relationship in the business continuum. For instance the logging / sawmill company of LCMC and Heald Lumber Company are the sole suppliers of specified logs needed by LCMC as support poles for its copper tunnel mines. … After dry copper concentrate is produced by the LCMC plant located in Mankayan, this is hauled by the trucking facilities to the Poro Point of San Fernando, La Union. … The concentrate is shipped to the Roasting Division of LCMC at LIDE. … The LCMC processed copper is accordingly smelted and refined by PASAR.[70]

The paper identified three LCMC operations that cause environmental problems, this included tunnel mining, milling and drying. Duhaylungsod and others noted that LCMC operations have resulted in protests by residents of Mankayan and nearby towns, like Cervantes, Ilocos Sur, due to logging of the last remaining forest of the municipality, siltation and chemical poisoning of their rice fields and fishing grounds from mine tailings and air and water pollution from the drying process. The copper concentrates are then transported to Isabel, Leyte where Duhaylungsod and others identified four physical categories of pollutants, namely: particulate matter / dust, gases / fumes, liquid acids and heavy metals from the combined operations of PASAR and LCMC.

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[69] Duhaylungsod and others, p. 2.

[70] Duhaylungsod and others, p. 3.

Figure 10.2: A copper business continuum in the Philippines[71]


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┌──────────────────┐            ┌──────────────────────┐        ┌──────────────────────┐
│  Heald Lumber    │            │ Pheschem Hydrated    │        │ Gypsum Pelletizing   │
│   Company        │            │   Lime Plant         │        │ Plant (Tolingon,     │
│   (Bontoc)       │            │ (Palumpon, Leyte)    │        │   Leyte)             │
└──────────────────┘            └──────────────────────┘        └──────────────────────┘
         │                                                               ▲
  Poles and lumber              Lime        Lime              Gypsum
         ▼                         ▼          ▼                    │
┌──────────────────┐      ┌──────────┐  ┌──────────────────┐  ┌──────────────────┐
│ Lepanto          │      │ LCMC     │  │ Philippine       │  │ Philippine       │
│ Consolidated     │─────▶│ Roasting │  │ Associated       │  │ Phosphate        │
│ Mining Company   │Copper│ Plant    │  │ Smelting and     │  │ Fertilizer       │
│ (LCMC)           │concen│          │─▶│ Refining         │─▶│ Corporation      │
│ (Mankayan,       │trate │          │Cal│ Corporation     │Sul│ (PHILPHOS)      │
│  Benguet)        │      │          │cine│ (PASAR)        │furic└──────────────────┘
└──────────────────┘      └──────────┘  └──────────────────┘acid
         ▲                                                               
   Shipped through        All three companies are part of the Leyte Industrial
   Poro Point, La Union   Development Estate (LIDE) located in ISABEL, LEYTE
         │
┌──────────────────┐
│ LCMC's sister    │
│ logging company  │
│ (Mankayan and    │                  ┌──────────────────┐
│  Cervantes,      │                  │ International    │    Copper cathodes
│  Ilocos Sur)     │                  │ Mineral Products │
└──────────────────┘                  │ (Isabel, Leyte)  │
                                       └──────────────────┘
                    ┌──────────────────┐               ┌──────────────────┐
                    │ Philippines      │◀──────────────│ Japanese copper  │
                    │ (imports prod-   │               │ manufacturing    │
                    │ ucts, i.e. TV,   │               │ companies        │
                    │ stereo, cars,    │               └──────────────────┘
                    │ etc.)            │
                    └──────────────────┘
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[71] Duhaylungsod and others, n.p.

Map 10.1: Map illustrating the business continuum approach

This *business continuum approach* provides also an easy entry into the global situation. For example,

> … the copper cathodes are transported to Japan for specific goods manufacturing. This same copper will end as components of a wide range of imported items from Japan under the import liberalization scheme of the present Philippine government.[72]

However, in addition to the economic aspect, Duhaylungsod and others identified that

> … it is becoming clearer that the Japanese interest in LIDE is part of their 'relocation scheme' of pollutive industries from Japan to countries like the Philippines. In Japan, similar industries like PASAR are getting too expensive to maintain because of the stringent rules.[73]

Applying the *business continuum approach* to the golden apple snail problem helps to illustrate the local and global interrelationships between the Philippine company that developed the hybrid snail from South American species, the Philippine government policy that propagated the snail, and the transnational company the manufactures the molluscides. However, as with the previous approaches, using this approach in isolation tends to focus on the more economic and political interrelationships between the local and the global.

Problems, like the golden apple snail infestation have global implications from an ecosystems or ecological view that need to be highlighted. This concerns the global trend of introducing exotic or non-endemic species that has been proven to have major risks, particularly for the biodiversity of the local environment. The EMB-DENR explains that

> … the introduction of alien species disturbs the stability of ecological relationships within given habitats and ecosystems, and is thus a threat to

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[72] Duhaylungsod and others, p. 3.

[73] Duhaylungsod and others, p. 3.

biodiversity. The problem lies in the influence of introduced species to the diversity of native organisms. They have wide-ranging effects from elimination of indigenous species due to predation … and …drastic changes in the ecological character if ecosystems.[74]

To illustrate this, the native *kuhol* is not as prolific as the golden snail. The small black *kuhol* only grows to about 1.5 inches in diameter compared to the golden snail that can grow to the size of an apple, hence the common name. The local variety is said to have meat that is tough and rubbery, while the golden snail has creamy and tender meat, hence the idea of it becoming an alternative protein source. But aside from these differences, the local snail lays only 20 –60 white eggs at a time; the golden snail lays 50 – 300 pink eggs, which explains the massive infestation that has resulted.[75] Finally, as mentioned previously, the golden snail may not be considered a pest in South America because, like the local 'kuhol', it has natural predators and diseases that controls its population.

The above examples demonstrate how each of the four approaches, namely, the *ecosystem/ecological*, *holistic*, *geographic*, and *business continuum* approaches, when used in isolation narrows the scope and depth of the analysis. This narrowing itself is contrary to the objective of developing an understanding of the wider context of these local environmental problems, such as the golden apple snail infestation. However, the four approaches described were essentially not used in isolation but built on each other's analysis. To summarize, it begins with the examination of the causes and effects of a local, often biophysical, problem across different ecosystems. Establishing the relationships of the biophysical problem with the socioeconomic, political and cultural environment follows. Similar problems in other parts of the country are then identified. This *geographical approach* is expanded to include the examination of the environmental destruction caused by related businesses at the local level. Finally, links to the global economy and the global environment are established.

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[74] EMB-DENR, *Philippine environment quality report 1990-1995* (QC: EMB-DENR, November 1996), p. 176.

[75] "A Report on the Environmental Investigative Mission on the Golden Apple Snail Infestation" (QC: CEC, August 1988), pp 2-3 [unpublished document].

10.4.4 Mode of production analysis

However, after the internal consolidation between 1995-1997, CEC decided to apply a mode of production analysis. As mentioned in the previous chapter, CEC identified the Juliet de Lima's paper entitled, "Jose Maria Sison on the Mode of Production" [76] as the key reference CEC has used in studying this approach. The emphasis on linking local environmental problems to the semifeudal and semicolonial nature of Philippine society was described in the previous chapter. On the other hand, links to the global emphasize global economic concepts like imperialism and globalization. The mode of production analysis, according to CEC "identifies class contradictions and has an anti-imperialist perspective."[77]

The following is a description of how the mode of production analysis is applied in linking the problem of local environmental degradation and the global economic order. Delilah Padilla, then CEC staff member, explained this during a round-table discussion conducted by the researcher in July 2001.

> The local environment is first established as the economic resource base. The use, access, control and management of this resource base are identified as dominated by a small economic elite or local capitalists. Furthermore, these resources are considered as raw materials for export. Such a condition has resulted in the commodification of these local resources for profit not only by local capitalists but also by foreign capitalists in cooperation with the Philippine government. This cooperation is established through legal impositions such as the structural adjustment programs of the IMF-WB and the neo-liberal policies of the Philippine government. Imposition of these

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[76] Juliet de Lima, "Jose Maria Sison on the Mode of Production" in J.M. Sison and J. de Lima, *Philippine Economy and Politics* (Philippines: Aklat ng Bayan Publishing House, 1998), pp. 19-64.

[77] "Challenging the Future...", p 1.

policies is often accompanied by abuse of state control and power through militarization.[78]

One example of a neo-liberal economic policy is the Mining Act of 1995. The Act allows 100% foreign owned companies to set-up operations in the Philippines. These companies are given logging, water and easement rights, plus they are assured the repatriation of all investments before paying taxes to the Philippine government. All these benefits despite the dismal history of foreign mining companies in the Philippines, such as mine spill in 1996 by the Canadian-owned Marcopper in Marinduque.

From the previous example, the application of a mode of production analysis establishes a link between local environmental problems to the global economic order, rather than to the global environmental situation. This is a logical conclusion given that the starting point of the analysis is the establishment of the environment as an economic resource base. This trend of linking local environmental problems to more global economic and development issues is not solely the result of the ideological rift and CEC's internal consolidation. Broad and Cavanagh cite a similar observation in the context of the development of POs and NGOs in the Philippines in the nineties. They observed that

> … most of these groups started with ecology and natural-resource issues as their foremost concerns and built from there to a more expansive understanding of sustainable and equitable development."[79]

This observation, they explain, is particularly true for groups that began, like *Haribon,* as a bird-watching group in 1972, but "a decade later has metamorphosed into a leading advocate of natural-resource conservation issues."[80] However, unlike

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[78] Delilah Padilla, former CEC staff, "Training notes" (photocopied for J.R. Guevara, July 2001) [personal notes].

[79] Robin Broad and John Cavanagh, *Plundering paradise: The struggle for the environment in the Philippines* (Berkley: University of California Press, 1993), p. 135.

[80] Broad and Cavanagh, p. 135.

Haribon, CEC was established to "address not only environmental issues but also economic issues that shape people's lives and affect the environment."[81] In a 1991-planning document, CEC emphasized that

> … unlike other environmental organizations, the focus of CEC's work is on environmental rehabilitation, which was defined in the context of socio-economic work.[82]

While there seems to be an absence from CEC documents reviewed of the phrase sustainable development, the Brundtland Report is identified as one of the key external factors when CEC listed the global opportunities and threats as part of a strategic planning workshop in 1991.[83] Therefore, while CEC did not use and promote the concept of sustainable development, it would be hard to deny the influence of this concept in its environmental work.

However, in a 1999 newsletter CEC challenges the Brundtland Report's concept of sustainable development. It defined that CEC had an

> … environmental commitment that drew the boundary from pseudo and narrow environmentalists from the peddlers of an environmentalist cause and sustainable development without transforming the neo-colonial and semi-feudal social set-up.[84]

In another article, it criticized the Brundtland report for leading "government and private efforts to simply clean and 'green the development process' without fundamental changes in the social structures." [85]

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[81] "Draft Concept Paper", p 4.

[82] "Documentation of CEC Planning for 1991" (QC: CEC, 10 – 11 January 1991), n.p.

[83] MASAI, "An Evaluative Report…", Appendix 1.

[84] "Editorial: 10 years", *Feedback,* vol. 10, no.1. (December 1999), p. 1.

[85] "The influential Brundtland Report", *Feedback,* vol. 10, no. 1(December 1999), p. 3.

From the above discussions, it can be said that the sustainable development concept that established the link between the dominant development paradigm and the continued destruction of the environment has contributed to the observed links between the local environmental problems with the global development paradigms. However, in terms of CEC's education work, while the emphasis of linking the local environmental problems to the global development issues has always been present, the post internal consolidation phase has made this analysis more explicit.
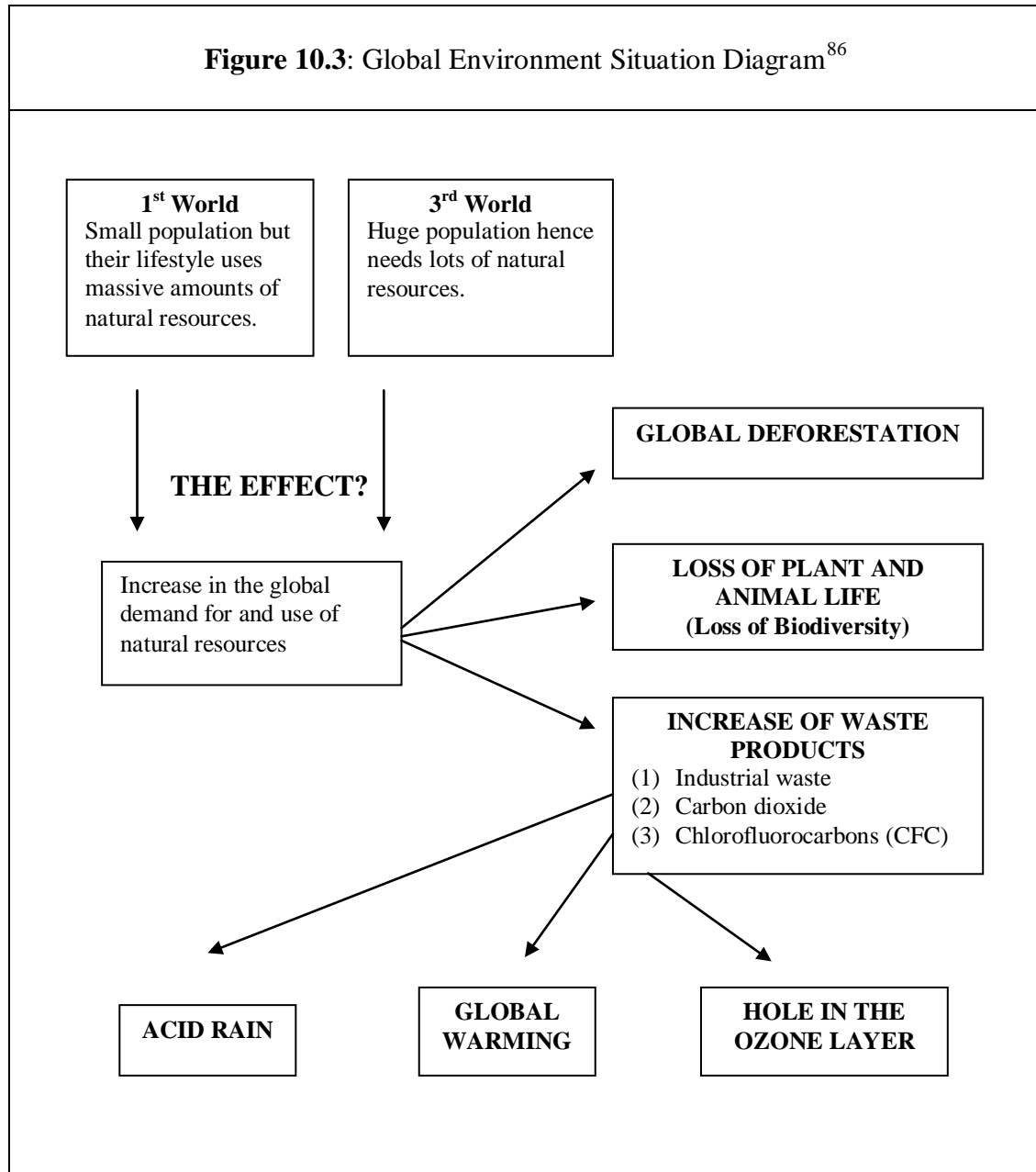
10.5 CEC's construction of the global

In practice, the national environment situation discussions were followed by a separate discussion that introduced the major global problems of loss of biodiversity, global warming and the depletion of the ozone layer. A review of CEC's workshop documents from 1990 –1996 reveals a very linear approach to discussing global environmental problems.

The following is one example of a typical discussion on global environmental problems, based on the documentation of a workshop conducted in August 1992 in Mindanao. The flow chart, Figure 10.3, is the illustration that accompanied this particular discussion. Similar flow charts were used in the other workshop documents examined. The following is a summary of how these discussions are conducted.

> The discussion begins with the presentation of the world as being divided into First and Third Worlds. The First World is characterized as having a small population that consumes large amounts of resources and correspondingly produces huge amounts of waste. Third world countries, on the other hand, have large; growing populations that have large demands but very little access to resources. In the future, both First and Third World populations will continue to exert pressure on already stressed natural resources and habitats that in turn contributes to the decline in the global biodiversity. Furthermore, this increasing demand for resources by both First and Third world countries results in an increase in the amount of waste produced, like carbon dioxide,

which contributes to global warming. The two major global problems of loss of biodiversity and global warming are introduced and discussed in greater detail. This is followed by a discussion of the depletion of the ozone layer.

Figure 10.3: Global Environment Situation Diagram[86]

1st World Small population but their lifestyle uses massive amounts of natural resources.	**3rd World** Huge population hence needs lots of natural resources.

THE EFFECT?

Increase in the global demand for and use of natural resources

GLOBAL DEFORESTATION

LOSS OF PLANT AND ANIMAL LIFE
(Loss of Biodiversity)

INCREASE OF WASTE PRODUCTS
(1) Industrial waste
(2) Carbon dioxide
(3) Chlorofluorocarbons (CFC)

ACID RAIN

GLOBAL WARMING

HOLE IN THE OZONE LAYER

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[86] "Documentation of Kalimudan sa Ranao RENEW Workshop" (Lake Lanao: CEC, August 1992), n.p. [unpublished document].

Note that these discussions were based on a synthesis of recent publications consulted by CEC as listed in Table 10.1. Furthermore, they were supplemented with the use of two work sheets prepared by CEC as part of the *Understanding our environment* series, one on the depletion of the ozone layer depletion and the other on global warming.

A major concern with this linear approach is that it can promote the notion that population growth is the root cause of resource depletion and global environmental problems. While population growth is an important factor that is acknowledged in studying global environmental problems, it is emphasized that it is not the root cause, which a linear approach like the one presented tends to imply. Furthermore, unlike in the local and national discussions, the global environmental problems discussed were limited to distinctly environmental problems.

Table 10.1: List of publications consulted by CEC
in developing its module on global environmental problems

- MacEachern, Diane, *Save our planet: 750 Everyday ways you can clean up the earth* (New York: Dell, 1990).

- Miller, G. Tyler, *Living in the environment: An introduction to environmental science*. 6th edn. (Belmont, California: Wadsworth Publishing Co, 1990).

- Naar, Jon, Design *for a liveable planet* (New York: Harper and Row, 1990).

- Prescott, Bill, "Global Warming" in Brad Erikson (ed), *Call to Action: handbook for ecology, peace and justice* (San Francisco: Sierra Club Books**,** 1990), pp. 27-32.

- Sagan, Carl, "The Hole in the Ozone Layer" in B. Erikson (ed), *Call to Action: handbook for ecology, peace and justice* (San Francisco: Sierra Club Books**,** 1990), pp.22-26.

One relevant comment during the internal summing-up conducted in February 1996 by the CEC Education and Training Department highlights this observation.

The issue of population and consumption is not merely an issue of who consumes more. The handling of such topic should be elevated to the role of foreign intervention - capitalism – and show the features of imperialism. There should be a clear and/or defined framework of analysis on global issues and concerns. The discussion should not be focused on the issue of global warming and ozone depletion but tackle other pressing issues, e.g. GATT, Biotechnology, etc.[87]

A similar critique can be leveled at an example used to illustrate the concept of nutrient cycling. The following is a summary of how this discussion is conducted.

The export of logs from the Philippines to foreign countries like Japan is used to show how loss of nutrients happens. It is explained that nutrients needed to make a tree grow comes from the richness of the soil in the Philippines. Once these nutrients, in the form of logs are exported, they are gone from the Philippines, forever. This is because the nutrients eventually decompose in the foreign country.[88]

The internal summing up document criticized this approach as follows:

The use of log exportation as contributory to loss of nutrients in the country [as and] explanation and/or example should be contextualized into a bigger framework. That is, first world extraction of resources rather than exportation of nutrients.[89]

CEC's approach to discussing both local and global environmental problems from 1990 - 1995 was described during the internal summing up as having "a tendency towards narrow environmentalism, populism and reformism."[90] The reason given

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[87] "Education and Training Department, Internal Summing-Up", p. 8.

[88] A summary of the typical discussion based on workshop documentations.

[89] "Education and Training Department, Internal Summing-Up", p. 7.

[90] "Education and Training Department, Internal Summing-Up", p. 5.

was that the education work of CEC "dichotomized the issue of environment from the basic issue of the masses and was instrumental in the formation of environmental groups of the same framework."[91] Criticisms similar to the ones identified above within the context of the ideological rift, resulted in CEC deciding to adapt a mode of production analysis in the conduct of its environmental work.

10.6   Linking the local and the global

The use of a linear approach in discussing global problems is similar to what Michaela Hordijk described as the "cumulative effects of pollution"[92] and "the transfer mechanisms over different geographic scales."[93] She explains that

> … the causes of many environmental problems are to be found in the transfer mechanisms underlying the current development pattern both at the very local scale for the home and the neighborhood and on a larger scale.[94]

This approach establishes a clear link between the local to the global, by tracing environmental impacts as they accumulate from the household, the neighborhood, city, regional and then finally the global. However, there is a danger that the unidirectional representation of such a cumulative effect, from household to global, may give the impression that the root causes of global environmental problems and therefore the solutions can be found in the household or locally. Ruth and Roger Guzman, writing in the Philippine context, exhibit this tendency when they state, "the cumulative effect of many small initiatives at the local level will have a marked influence on minimizing/solving global problems."[95]

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[91] "Education and Training Department, Internal Summing-Up", p. 5.

[92] Michaela Hordijk, "A Dream of green and water: Community based formulation of a local agenda in peri-urban Lima", *Environment and Urbanization,* vol. 11, no.2 (1999), p.28.

[93] Hordijk, p.28.

[94] Hordijk, p.28.

[95] Ruth Guzman and Roger Guzman, *Environmental education for sustainable development* (QC: Wisdom Advocates Publishing, 2000), p. 11.

An additional concern is that the transfer of mechanism analysis, beginning from the household, may overlook questions, such as, who the major producers of these greenhouse gases and ozone-damaging chemicals are in the first place? It also has a tendency to define the environment as an isolated system, purely biophysical, which it is not. Therefore, we can conclude that a linear, transfer mechanism approach can be misleading because it puts more emphasis on the issue of scale, the biophysical components and the ecological processes.

The *Environmental Education Guide* prepared by the Philippine government is an example of this approach to linking the local to the global that emphasis the issue of scale. It suggests "environmental problems should be seen first in their local context to appreciate their relevance, then in a global context to impress on people the magnitude and the pervasiveness of the problem."[96]

Beauregard presents an additional challenge in linking the local to the global. He advocates a

> … theoretical reformulation of our current global-local thinking" that will "helps us turn our gaze away from ecological processes that reify space and towards the social relations among actors who make space or more precisely, who fragment and reconstitute space.[97]

The Earth Summit in 1992 is a good example of how social and cultural relations shape the construction of the global. Reflecting on the event two years after, a publication of the South-South Solidarity from India wrote,

> In recent years, when there has been talk of a global concept of environment, we have referred more to the British notion than to that which is intrinsic to Hindustani culture. This has been reinforced by the Northern industrial

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[96] DECS-DENR, *Environmental Education Guide* (QC: DECS and DENR, 1999). p. 8.

[97] Beauregard, p. 244.

countries' own perceptions with respect to their environment. We cannot afford to look at global environment from a narrowly cultural vantage.[98]

Vandana Shiva strongly believes that

… the image of planet Earth used as a visual in the discourse on global ecology hides the fact that, at the ethical level, the 'global' as construct does not symbolize planetary consciousness.[99]

She argues that the global environmental problems identified by the Global Environmental Facility has in fact narrowed the environmental agenda and correspondingly has limited the appropriate solutions to a "transfer of technology and finance."[100] She calls for the democratization of the global, particularly the global institutions, that have long dominated the global discourse.

10.7 Chapter summary

This chapter identifies that progressively wider contexts, specifically the national and the global contexts have always been a key consideration of CEC. This consideration has been reflected in CEC as an organization, as evidence from its organizational documents suggests, and its educational practice, as sample workshop designs indicates. This global perspective has been strongly influenced by the growing awareness of the finiteness of the earth, the earth as alive – *Gaia*, of environmental problems are not limited by political or geographic boundaries and of environmental problems that are inherently global, such as climate change. In addition, there were major global events such as the publication of the Brundtland Report in 1987, the Earth Summit in 1992 and a strengthening global environmental movement that

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[98] Jill Carr-Harris (ed), *A global view of the environment: Two years after Rio* (New Delhi: South-South Solidarity from India, n.d.), p. 2.

[99] Vandana Shiva, "The Greening of the Global Reach" in Jeremy Brecher, John Brown Childs, and Jill Cutler (eds), *Global visions: beyond the new world order* (Montreal: Black Rose Books, 1993), p. 58.

[100] Shiva "The Greening…", p. 57.

further underscored the importance of these wider contexts. This local-global thinking was not limited to the field of ecology or environmental science but extended to a number of educational practices, such as popular education, environmental education and environmental adult education, which were the main influences of CEC's practice.

The chapter documents CEC's involvement in within the Asia and Pacific regions and at the international level, particularly within the field of adult and community environmental education. The evidence indicates that CEC's practice influenced the discourse in this area, as shown by the inclusion of progressive contextualization in the regional framework of adult and community environmental education. While progressive contextualization as a term was not picked up by the other declarations, the concept of addressing environmental problems within a broader socio-economic, political and cultural context was present. This observation is not mentioned to identify who influenced whom but rather the evidence suggests that there is a convergence of views and practices of an environmental education that views environmental problems within wider contexts, not just within a local to global context, but in a holistic and integrated manner.

Five approaches were identified from CEC's practice of progressive contextualization to wider contexts, specifically an *ecosystems/ecological approach*, *a holistic approach*, a *geographic approach*, a *business continuum approach* and a *mode of production approach.* It was observed that the development of these approaches could be viewed as part of the sharpening of CEC's own analytical framework. The chapter emphasizes that none of these approaches can be applied in isolation; otherwise they tended to narrow rather than widen the context being examined. Even the *mode of production approach*, which is currently what CEC applies, tends to focus on a global that was primarily the global economic order.

Despite these sharper approaches and analysis, CEC's discussion of the global was strongly influenced by the narrow construction of the global that was prevalent during these times. This influence is a reflection of a progressive contextualization that begins with the local, develops a holistic and integrated approach within the

local and the national contexts, but stops as it approaches the global and adopts the dominant, narrow and linear construction of the global.

Chapter 11

Localization of popular environmental education

The transformation of CEC's educational practice into the research text in this thesis, has involved engaging CEC's experience to dialogue with the relevant theoretical guides. Prior to bringing the research text into closure, this chapter reviews the research objectives, methodology and theoretical guides, that have informed the examination of CEC's grassroots environmental education experience. The examination has shown that progressive contextualization of CEC's educational practice focused primarily on localization. The factors, processes and structures, identified in the previous chapters that contributed to this process of localization are synthesized in this chapter. Whenever necessary, additional data needed to support these observations regarding localization are provided. The chapter concludes with the finding that the extent and depth of the localization process, however, was not equally applied to the global context.

11.1   Research objectives and methodology

In 1995, Noel Duhaylungsod identified, as one of the lessons in the development of CEC's grassroots environmental education work, that, "the education module has to be progressively contextualized."[1] This thesis has sought to understand this particular lesson in relation to the growth and development of CEC's educational practice and to situate it within the context of a globalizing world. As mentioned previously, it was Andrew Vayda who formulated the phrase "progressive contextualization"[2] as a research methodology in human ecology. He described progressive contextualization as a methodology in human ecology research that

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[1] N. Duhaylungsod. "Preface from the Executive Director" in J. R. Guevara, *Renewing RENEW: A Restoration Ecology Workshop Manual.* (Quezon City: CEC, 1995), p. 8.

[2] A. Vayda. "Progressive contextualization: Methods for Research in Human Ecology", *Human Ecology: An Interdisciplinary Journal,* vol.11, no.3, (1983), pp. 265-281.

… involves focusing on significant human activities or people-environment interactions and then explaining these interactions by placing them within progressively wider or denser contexts.[3]

I have previously attempted to describe progressive contextualization twice, once with Duhaylungsod, in unpublished papers written in 1996 and 1997, respectively. These definitions are revisited in the next chapter.

The thesis examined progressive contextualization of the local practice of popular environmental education of the Center for Environmental Concerns - Philippines within the context of a globalizing world. Specifically, the thesis interrogated the following:

(a) The progressive contextualization conducted by CEC of its practice of popular environmental education

(b) The factors, structures, and processes that contributed to the progressive contextualization of CEC's educational practice.

(c) CEC's construction of, and the links between, the local and the global in its practice of popular environmental education

(d) The theories and practices of popular and environmental education, and progressive contextualization in a globalizing world.

(e) The literature on a globalizing world, specifically in terms of economic globalization and a global civil society, and its implications on environment and education work.

(f) The constructions of, and links between, the local and the global in the areas of popular and environmental education

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[3] Vayda, p. 265.

At the conclusion of the next chapter I shall propose a theory of progressive contextualization that facilitates the grounding of popular environmental education within the spectrum of the local and the global, in a globalizing world.

The thesis has drawn from a number of disciplines and employed a combination of research methods within the research tradition of qualitative educational research: primarily case study methodology, participatory action research, narrative inquiry and grounded theory. The research involved three distinct processes: the field experience, the field texts, and the research text.[4] The field experience consisted of the ten years of experience of the CEC and the field texts were the numerous documents, both published and unpublished, within the CEC collection that was made available for the research. The transformation of the field experience and the field text into the current research text was guided by "driving force of the inquiry,"[5] which is the progressive contextualization of educational practice in globalizing world.

Analyzing the experience was not a distinct phase conducted after the field experience, but rather has been an on going process that was conducted by CEC as evidence of its action-research approach during the ten years under study. It was from this on going analysis that progressive contextualization, or what is referred to in terms of grounded theory as the "overarching explanatory scheme," [6] was identified. Similarly, the literature reviewed prior to the writing of this thesis was revisited and updated based on the themes that surfaced from the research text. Hence each of the previous chapters has featured a dialogue between that research text and current texts from the disciplines of popular and environmental education, and globalization studies, which have been identified as theoretical guides for the study.

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[4] F. M. Connelly and J. Clandinin, "Narrative inquiry" in J.P. Keeves (ed), *Educational research, methodology and measurement: an international handbook,* 2nd edn. (Oxford: Elsevier Science, 1997), pp. 83-85.

[5] Connelly and Clandinin, p. 84.

[6] A. Strauss and J. Corbin, *Basics of qualitative research: Techniques and procedures for developing grounded theory* (California: SAGE, 1998), p. 25.

This chapter therefore weaves the main observations and insights that have surfaced from each of the previous chapters with the hope of identifying further threads and trends that could contributed to the development of a theory of progressive contextualization of popular environmental education in a globalizing world.

11.2   Revisiting the theoretical guides

The theoretical guides in chapters 2, 3 and 4 are now revisited to identify the key threads to weave a synthesis of the analysis conducted within each of the previous chapters of CEC's experiences.

11.2.1 Grassroots environmental education as popular environmental education

In the thesis, I have examined CEC's practice of grassroots environmental education as popular environmental education to acknowledge that CEC has drawn from a number of fields of practice. The thesis has demonstrated that its association to popular education is due to its being an alternative form of education that works with people within the poorer sectors, focused on people's empowerment, and action within a social movement, and liberative. Similarly, the thesis illustrated that its influence from environmental education has primarily been in terms of its environmental content.

However, the decision to use the term popular environmental education is based on the need to situate CEC's practice not merely as a combination of popular and environmental education but to acknowledge similar related practices. These related areas have used different sequences and combinations of the words 'popular', 'environmental', 'adult', 'critical', and 'education'. Hence there are writings on popular environmental education, environmental popular education, environmental adult education, adult environmental education, and critical environmental adult education that were examined.

Based on this examination, I proposed that popular environmental education be described as being based on three shared characteristics:

(i)   a holistic approach,

(ii)   working primarily with adult learners within the context of the social movement, and

(iii)   a focus on action.

Popular environmental education is described, in chapter 2 as, an alternative form of education that works with people within the poorer sectors of Philippine society. These poorer or marginalized sectors are what CEC referred, as did other educators, to as the grassroots.[7] Its goal is the empowerment of people to respond to environmental problems, individually and collectively, within the framework of a wider social movement for change. Hence it has a liberative dimension to its goals. It is holistic because it acknowledges the importance of situating environmental problems and solutions within socio-economic, political, cultural and scientific contexts, recognizing the issues of power relationships within these contexts.

The thesis has focused on the two of the three shared characteristics identified - namely, the holistic approach and the education of adults from the grassroots within the context of a social movement for change in the Philippines. While it acknowledges the importance of the third aspect, that of environmental action as the intended result of the educational intervention, however, the focus of the thesis has been the progressive contextualization of CEC's curriculum. Therefore, a study of environmental action as an outcome is beyond the boundaries of the current thesis.

In chapter 3 a holistic approach was defined as the analysis of environmental problems as interdependent and interrelated to the social, economic, political, cultural and historical aspects of society, which was one of the early analytical frameworks used by CEC. It has been noted that the CEC staff argue that this has been sharpened to employ a mode of production analysis based on a reading of Philippine society as semi-colonial and semi-feudal. This sharpened analysis has

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[7] R. Aramendy, "Learning to Fly", *Adult Education and Development*, no. 53 (1999), p. 278.

surfaced within CEC's educational practice in terms of the decrease in the emphasis and the time spent on discussing ecological concepts and the focus on more environmental advocacy rather than environmental skills, as illustrated by the most recent education modules on mining. This sharpened analysis is one example of the influence of a particular sector of the progressive social movement on CEC. This further provides evidence of the interrelationship of the two aspects of popular environmental education being studied, the development of the holistic analysis and the educational practice within the social movement. The complimentary relationship between the educational and organizational aspects of progressive contextualization is one of the themes that surfaced from the analysis.

In addition to a sharpened holistic analysis of environmental problems, the Philippine social movement's experience identified a popular education framework, which was applied in examining CEC's educational practice. This is the Context-Content-Method (CCM) Framework. As described earlier, the CCM framework acknowledges that popular education programs are the result of a blending of context, content and methods. I have identified three tensions from CEC's educational practice of progressive contextualization. These three tensions, as they relate to the CCM framework are between, the context of the local and the global; the educational content of the biophysical and the political, and a methodology that is participatory and prescriptive. The CCM framework and the three key tensions are used in the following chapter to synthesize CEC's educational practice.

11.2.2 Situating CEC's educational practice in the context of a globalizing world

I have earlier in the thesis acknowledged the multi-dimensional causes, effects, and nature of globalization. Therefore, I found it necessary to limit the concept of a globalizing world examined to economic globalization and global civil societies, and their influence on environment and education work.

The thesis in section 3.1 identified that emphasis of economic globalization on trade liberalization and deregulation has not resulted in the promised development. Instead, it has widened the income gap between the rich and the poor, which

Friedman described as the phenomenon of "winners take all".[8] Furthermore, its policies have also resulted in the massive environmental destruction. Chapter 3 identified examples of these detrimental impacts on the Philippine economy and environment.

Economic globalization has also influenced the practices of education, as evidenced by the adoption of the language of marketplace in adult education programs[9], which have traditionally had close links with the liberative principles of social movements. It is these close links with social movements that has resulted in the questioning of educational programs, such as popular and environmental education programs in terms of their roles within a globalizing context. Finger and Asun clearly identified these questions as whether education programs have become "a mere tool that either promotes turbo-capitalism or repairing its most blatant negative effects"?[10] Or within this same context whether adult education as awareness-raising on social and environmental issues is still enough, given the perspective of a 'dead-end industrial civilization'?"[11]

These questions were further studied through the examination of the role of civil society organizations, more specifically NGOs like CEC, within a globalizing world. Princen, Finger and Manno identify a critical feature of NGO as more than just a lobby group, in fact, they are "agents of social learning"[12] who manage to link the biophysical with the political, while simultaneously acting at various levels along the spectrum of the local and the global. Princen, Finger and Manno conclude that the distinctive role of NGOs is more than educational, more than raising environmental awareness, but rather about "politicizing the biophysical and linking the local and the

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[8] T. Friedman, *The Lexus and the olive tree* (London: Harper Collins, 2000), p. 306.

[9] O. Korsgaard, "The impact of globalization on adult education" in S. Walters (ed), *Globalization, adult education and training: Impact and issues* (London: Zed Books, 1997), p.18.

[10] M. Finger and J. M. Asun, *Adult education at the crossroads* (London: Zed Books, 2001), p. 136.

[11] Finger and Asun, p. 5.

[12] T. Princen, M. Finger and J. Manno, " Transnational linkages" in T. Princen and M. Finger, *Environmental NGOs in world politics: Linking the local and the global* (London: Routledge, 1994), p. 228.

global."[13] This role identified two of the three key tensions that the thesis examined, specifically the tensions of the local and global and the biophysical and political. The third tension on participatory and prescriptive methods, cannot be separated from the two tensions, because inherent to addressing the tension of context and content is the need to identify methods - how this will be addressed. CEC's early education work was described as having an emphasis was on awareness raising. However, the progressive contextualization trends identified in CEC's mission statements (see Table 5.2) and its curriculum (see Table 9.13) indicate a shift away from the narrow focus of awareness raising.

Finally, I have observed that CEC's strength in progressive contextualization has primarily been in the localization of its popular environmental education curriculum. I present a synthesis of the localization factors, processes and structures in this chapter. However, CEC's educational approach in addressing the global environmental context was not shaped by a process similar to localization. In fact, I have observed that on the contrary it was greatly influenced by the dominant construction of the global, as described in sections 3.1.2 and 10.6. This approach of tackling the global is also further examined in this chapter.

11.3   Progressive contextualization as localization

The thesis shows that the CEC's practice of progressive contextualization can be described as localization. This is consistent with CEC's attempt to localize or indigenize the RENEW syllabus, a major recommendation of the 1993 Renewing RENEW National Evaluation. Chapters 7 and 8 have previously identified the local factors and processes that contributed to progressive contextualization based on CEC's initial experience with designing and conducting RENEW and the resulting grassroots environmental education curriculum. This section summarizes these factors and processes and relates them to the CCM framework and the key tensions identified by the thesis.

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[13] Princen, Finger and Manno, p. 226.

11.3.1 Localization factors

The local factors identified were time, space and the learners. Time as a factor included the workshop duration, the observed changes over time, and the urgency of a local environmental problem. The spatial factor, such as the workshop location or venue, was expanded to include the biophysical environment, and the social, political, economic and cultural environments. The characteristics of the learners that were identified to contribute to progressive contextualization included language and literacy, gender and the level of awareness and organizing. However, the thesis has also shown that these factors did not equally influence CEC's educational practice and curriculum. In particular, I have argued that improvements can be made in addressing the issues of language, literacy and gender.

11.3.2 Localization trends

Table 9.13 identified the overall trend, including the result of the progressive contextualization of CEC's grassroots environmental education curriculum. Applying the CCM framework to classify these trends further highlights the emphasis that CEC placed on the local context. It was the local context that played a major influence in the development of the curriculum. The local context has primarily meant addressing the needs of a particular locality, hence the focus on the needs the local learners and the skills needed to address local environmental problems. However, it has been clear that the local context has not focused as much on the learner as an individual, but the learner within the context of an organized sector or group within the community or the wider social movement.

The educational content has equally been informed by the local context, such as the local environmental problem. More particularly, the content was adjusted to the level of the learners or participants, and the particular needs of the local host organization. Finally, the educational methods continue to focus on creative and participatory methods. However, particular cultural contexts of the learners and the urgency of an environmental problem are examples of specific contexts that were considered in adjusting the methods used.

11.3.3 Localization processes

Taking into consideration the tension between a participatory and a prescriptive approach in terms of methods, CEC has, and continues to implement, organizational and educational processes that are participatory. It has been these participatory processes that have facilitated the process of localization. Furthermore, localization was made possible because the contextualization processes were ongoing. The adjective progressive is appropriate because as the thesis has documented, these processes occurred before, during, and or after a workshop.

The thesis identified a number of organizational and educational processes that contributed to the development of the educational practice of progressive contextualization. I have argued that it was the combination of both the organizational and the educational processes that facilitated the development and grounding of CEC's educational practice. The main organizational processes identified were CEC's adoption of an action research approach and its emphasis on a participatory and partnership arrangement in conducting its environmental work. These two approaches have contributed to the progressive contextualization of CEC's educational practice.

The strategy of training the trainers' is both an organizational and an educational strategy that facilitated progressive contextualization. The thesis described as an example (see section 8.1.2) how the RENEW trainers training was changed to the EduCATOR training and then most recently the Speakers Training. These changes were mainly due to the changing needs of the local organization within the context of CEC's own organizational shift to environmental advocacy. Another educational strategy was called renewing RENEW, which was the application of a creative and participatory approach in the development and conduct of CEC's educational activities. A common thread identified from these educational strategies is a commitment to work with the needs of the learners and the host local organization, together with the local context, hence the observed emphasis on localization.

These participatory organizational and educational strategies were initiated by CEC, hence the interpretation of it being prescriptive. However, the thesis has shown that

while the RENEW module was initially prescribed, its growth and development into CEC's grassroots environmental education curriculum is an example of how this prescription has continued to become more participatory in terms of process.

11.3.4 Localization structures

Through the thesis I have identified a number of organizational structures and have argued that these structures have contributed to the development of CEC's educational practice of progressive contextualization. Chapter 5 identified CEC itself, in particular its decision to become an NGDO, as a key turning point in the process of progressive contextualization. This argument was further explored and strengthened by evidence provided in chapters 7, 8 and 9. These chapters identified and described the roles of organizational structures, such as the People's Faculty and the progressive peoples' movement in the development of its educational practice.

This section synthesizes the different roles these organizational structures have played in contributing to the process of localization. This is similar to what Sterling identified as the need for environmental education "to be far more critically aware of the nature of the influences upon it."[14] This section examines one of these influences, specifically of organization, on CEC's educational practice.

(a)   *CEC as an intermediary organization*

In chapter 5, I explored the argument that CEC's role, as an intermediary organization, was a critical factor that drove the educational practice of progressive contextualization. As an intermediary organization, CEC had to often negotiate between its own convictions and those of the organizations it worked with. Each of these key organizations and their contribution to CEC's educational practice are further examined in the succeeding sections. This section synthesizes the evidence presented regarding the nature of CEC itself as an intermediary organization.

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[14] S. Sterling, "A View from holistic ethics", in J. Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), p. 74.

Three factors have been identified from chapter 5 that have contributed to this intermediary role. First, CEC's decision to define itself as an NGDO instead of a support group and service center. This contributed to the second factor, CEC's decision to take a proactive approach instead of a reactive approach to its environmental work. The third factor is CEC's decision to adopt a partnership approach in working with local organizations. These factors are intimately connected with each other, as examples from CEC's education experience illustrate.

CEC's shift from a *support group and service center* to an environmental NGDO allowed it to adopt a more proactive approach to its environmental work. As an NGDO it was not limited to providing support and service or merely being reactive to the needs of its partner local organizations. This decision drew criticisms from sections of the progressive social movement, as this shift was perceived as turning away from the ideological stance and commitment of NGOs to "serve the masses."[15] However, this was not the intention of CEC. In fact by defining itself as an environmental NGDO, CEC hoped to distinguish itself from other environmental groups by being an organization committed to broader sociopolitical change through its environment and development work. However, as the thesis described in chapter 5, this distinction was not sufficient, and CEC had to later re-think its role as a result of the ideological rift within the progressive movement.

Aside from the shift in the organizational nature of CEC, the 1991 mission statement expanded the realm and goals of its environment work. From the original mission of "raising environmental consciousness and improving the socioeconomic capabilities through grassroots education," it became more comprehensive, which included "grassroots education, research, ecosystem rehabilitation and protection and environmental advocacy."[16]

Therefore, the intermediary role and the broader scope of environmental work allowed CEC to expand the basic environmental awareness to action workshop,

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[15] PUP. "Development divergence: Reformism in the Philippine NGO community", http://www.etext.org/Politics/MIM/fil/ngo.html (10 May 2000).

[16] "CEC@10 Highlights of the Internal Review" (QC: CEC, July 1999), p. 2 [unpublished document].

which was RENEW. As a result, a range of skills-based, problem-focused and area-based workshops was developed. For example the integration of education and research work, specifically in environmental monitoring, assisted in the development of the CBEM workshop in Isabel, Leyte. The combination of upland rehabilitation and education resulted in the Mt. Pinatubo CORETECH workshops. And most recently, the shift to an environmental advocacy approach combined with education work resulted in the development of the mining modules and the speakers training workshops. These new workshops, I argue, are examples of the outcome of mediating between the new aspects of environmental work identified in 1991 and CEC's continuing mandate of grassroots environmental education.

Other experiences that illustrate CEC's intermediary role involve having to balance between the use of scientific concepts and local knowledge, the urban-based CEC and the rural-based partners, and the application of different analytical frameworks. The tension between using the scientific concept of living and non-living things, and the view of indigenous peoples, peasants and fishers that everything that supports life is living, is one example of the need to mediate between scientific concepts and local knowledge. Addressing this tension did not mean having to decide between science and local knowledge. Instead it motivated CEC to develop and conduct the Indigenous Knowledge Systems in Ecology Research (IKSER), which was discussed in chapter 9.

Lalage Bown identified a similar intermediary role for NGOs based on her work in Africa. She identified that NGOs contributed to the sustainability of adult education programs through the use of a language of partnership with local communities. These situations make them " intermediaries between those communities and the outside world and often the state."[17] Mediating in terms of location involved dealing with the tension of being a Manila-based NGDO and working with mostly groups outside of the capital city, mostly in the rural areas. This situation raised other tensions such as dealing with a range of cultural sensitivities and languages. The following quotation

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[17] L. Bown, "Dialogue across frontiers: Perspectives from the developing world", *Adult Education and Development*, no. 52 (1999), p. 154.

from the unpublished work *Purposive Education* gives an example of this tension within CEC.

> Being an environmental non-government organization based in Quezon City, composed of technically-equipped individuals who had strong historical links with the church sector and the Southern Tagalog region, says a lot about who we were and who we worked with. … This was CEC in the early 90s.[18]

Rick Arnold and others writes "as educators, when we get involved with an organization, it 's a package deal. With our affiliation comes entry into a subculture."[19] To continue the previous quotation,

> … it is essential that we are made aware and sensitive to what we bring with us and what we find where we go. For example, at the end of each workshop we always have a celebration: to celebrate the end and a new beginning, our newfound learnings, new friendships, and of course, our environment. Often this involves dancing in the workshop venue or a local disco. During such occasions we are often reminded [by some participants] about our tendency to bring a 'middle-class Manila Pop culture' when we travel.[20]

In response to these issues CEC has focused on developing local trainers as a key educational strategy. This potentially reduces the need for CEC educators to continue to conduct local workshops, but instead work with the local educators, as was envisioned through the People's Faculty.

Another example was when CEC had to mediate between a range of political perspectives and frameworks of analysis, particularly within the period of the ideological rift within the peoples' movement. These examples have been extensively described in the thesis. All these situations, as described in the previous

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[18] Duhaylungsod and Guevara, "Purposive Education", Chapter 3 p. 7.

[19] R. Arnold and others, *Educating for a Change* (Toronto: Between the Lines and Doris Marshall Institute for Education and Action, 1991), p. 16.

[20] Duhaylungsod and Guevara, "Purposive Education", Chapter 3 p. 7.

chapters, resulted in changes within the different education modules and strategies, and the analysis that informed CEC's education work.

The experiences identified above support the argument that CEC's intermediary role was a key factor in its educational practice of progressive contextualization. But as the succeeding sections elaborate, CEC did not do this by itself. Another organizational structure that facilitated this mediation process for CEC was the People's Faculty.

(b)   *People's Faculty*

This section I provide evidence to support my argument that the People's Faculty contributed to the progressive contextualization of CEC's educational practice. The previous chapters have outlined the basic information about the formation and nature of the People's Faculty, such as that it was initially proposed during the 1993 ATT. It was formally launched during the 1995 ATT, after a consultative meeting in 1994. The previous chapters described the People's Faculty as a body that was conferential in character, national in scope, with constituents called partners and decisions made by consensus.[21] It also mentioned that the People's Faculty played a critical role in the re-orientation of CEC's grassroots environmental education program during the internal consolidation period in 1995-1996. This resulted in an analytical framework (quoted in section 9.4.1) that was to inform and guide the development of grassroots environmental education, which acknowledged the semi-feudal and semi-colonial nature of Philippines society based on a mode of production analysis.

The annual conference-workshop of the People's Faculty, which became a component of the ATT, was a key process in progressive contextualization of CEC's educational practice. For example, it was during the conferences in 1994 and 1995 that the analytical framework mentioned was discussed and debated, and finally ratified in 1996. The People's Faculty again met in 1997 to discuss the draft of a publication entitled, *Purposive Education,* which was an attempt to develop a theoretical foundation from CEC's educational practice. To date, *Purposive*

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[21] "People's Faculty Orientation Paper" (QC: CEC, 2 May1996), p. 2 [unpublished document].

Education remains unpublished, but has been a critical resource in this research. The People's Faculty has not met as a conferential body since 1997, but most of its partner organizations continue to work with CEC.

On reflection, the People's Faculty served the purpose that Duhaylungsod envisioned as "a conferential body of educators … [that would] serve as a focal body to pursue the education framework on a much broader coverage and impact."[22] It was this broader coverage, due to its constituency, that shaped its role in the process of progressive contextualization. Within the People's Faculty, the individual educators were exposed to the broader national context by virtue of the different organizations represented. The People's Faculty valued each educator's experience and context, given that they were all encouraged to present their respective experiences during the annual ATT workshops. However, it was their coming together and the sharing of their experiences that resulted in the "much broader coverage" that Duhaylungsod identified. Therefore, People's Faculty conferences were venues where the individual educators, representing different organizations, negotiated between their local organizational contexts, and the broader national context that the gathering created.

Therefore, a gathering of individuals, representing particular contexts, agenda and interests, results in each one negotiating between their own context and the wider context. Instances such as these, I argue, were critical processes in the progressive contextualization of CEC's education work. The experience of the People's Faculty is replicated in other networks that CEC was involved with. These experiences are further examined in the following section that focuses on the contribution of the wider social movement to CEC's educational practice.

(c)   A progressive people's movement

The thesis documented that CEC was established with the support of the progressive block of the people's movement. In particular, it was the support of the organized groups of peasants, workers, women, indigenous peoples, fishers and the urban poor, closely associated with the national democratic movement that established CEC.

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[22] Duhaylungsod, "A curricular development design…", p.12.

These same groups actively contributed to shaping CEC, as an organization and its educational practice. This section further examines the role of this social movement in advancing the practice of progressive contextualization and CEC's own contribution to this growing social movement.

Duhaylungsod identified a key factor that determined the role of the progressive social movement in shaping CEC and its educational practice. He observed, "the essence of the task had to be evolved primarily because environmentalism had little attention from the workers of the social movement for change and development."[23] CEC was one of the first environment groups within this "social movement for change and development," which resulted in having to engage and negotiate with this movement. Duhaylungsod described this engagement as the need for "internal environmental advocacy,"[24] which was to involve a massive education program within the social movement aimed at developing a people-based agenda for environmental action.

One concrete internal environmental advocacy approach was the development and conduct of RENEW. In 1990, three RENEW workshops resulted in the formation of three local networks. (see Map 11.1) These networks were the *Kilusang Bayan para sa Karapatan at Kalikasan* (People's Movement for Rights and the Environment) in Infanta, Quezon, the Central Luzon Environmental Action Network (CLEAN), and Green Alert Environmental Network in Bacolod, Negros Occidental. In 1992, the network *Tago-O-Ranao* (Keepers of the Lake) was established after a RENEW workshop in Marawi City.[25] Each of these networks adopted and implemented different aspects of RENEW, and their local educators were involved in the establishment of the People's Faculty. However, the members of these networks were organizations from different political persuasions that came together to confront environmental issues. Hence these were considered as politically broad alliances, which were very popular in the early 1990's within the Philippine social movement.

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[23] Duhaylungsod, "Preface…", p. 6.

[24] Duhaylungsod, "Preface…", p. 6.

[25] Guevara, *Renewing RENEW*, p. 154.

Map 11.1: Environmental networks organized

after a RENEW workshop (1990-1992)

However, most of these networks did not survive the ideological rift described earlier. In a national context, CEC from 1990 to 1992 served as the secretariat of the Philippine Environmental Action Network (PEAN) and was a member until its demise in 1996. It was CEC's membership and role in PEAN that gave it the opportunity to work with the more than 77 member organizations in the Philippines, an opportunity that facilitated progressive contextualization. Since 1996, CEC has been an active member of a new network called *KALIKASAN*- People's Network for the Environment.

The SEED Program, described in section 9.1, is one illustration of the relationship between CEC, the progressive contextualization of its education practice, and the social movement. Four examples are identified. First, the SEED Program resulted in the development of what has been identified as RENEW Plus modules, because the additional module that was suggested by each of the specific sectors consulted. Examples of these additional modules are the sustainable agriculture module for the peasant sector, the nature sensitivity module for the urban poor, and the gender and environment module for the women. Second, is the identification of the integration of environmental concerns into current sectoral education programs as a possible approach, like the inclusion of an environment module in the Basic Occupational Health and Safety workshop for the agricultural workers (see Table 9.3).

Third, the integration of environmental concerns within the political campaigns of each specific sector, which is illustrated by the following quotation from a fisherfolk leader,

> …*"mas kailangan pa ng sectoral campaign dahil hindi mo rin makukuha sa education kahit na sabihin natin ito ang susi ng paggagap sa environment."* [26] ("There is a greater need for a sectoral campaign because education alone cannot address the issues, even if we say that it is the key to understanding the environment.")

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[26] "Documentation of the Evaluation of the Project: Development of a People-based Environmental Education Curriculum through RENEWs, February 11-15 1992" (Los Banos: CEC, 1992), p. 1 [unpublished document].

Finally the fourth example is CEC's decision not to impose the classification of living and non-living as one of the basic ecological concepts in RENEW. This decision was in response to the report of the sectoral educators that the indigenous people, peasant and fisher participants felt that everything was living because they all contributed to life.[27]

One final illustration of the relationship between CEC's education work and the progressive social movement is CEC's response to the ideological rift that swept through the movement from the early 1990s. The thesis documented that CEC decided in 1993 to "come up with a posture (not a stand) in working with groups or sectors in the National Capital Region."[28] However, chapter 5 noted that in 1996 CEC realized that despite this posture, it

> … was not able to implement community-based environmental work because the regions were not yet ready at that time to engage in environmental work since the priority then was to consolidate their respective organizations.[29]

CEC, at the time, conducted its own organizational consolidation. And as the previous chapters have described, this resulted in a number of major changes within CEC and its environmental work. Two major changes were the shift from a focus on grassroots environmental education to environmental advocacy and the use of a mode of production analysis in studying environmental problems. Both these changes have had significant effects of CEC's educational practice as identified in the previous chapters.

These experiences illustrate the social movement contributed to the development of CEC and its educational practice, while contributing as well to the growth of this social movement.

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[27] Guevara, *Renewing RENEW*, p. 30.

[28] "Documentation of 1993 CEC Evaluation" (QC: CEC, 1993), n.p. [unpublished document].

[29] "CEC@10 Highlights of the Internal Review", p. 2

The preceding discussions have provided ample evidence to support my argument that organizational structures, like CEC itself, the People's Faculty, and the local progressive social movement, played a key role in the localization of CEC's educational practice. The intermediary nature of CEC as an NGDO appears to be the major factor that allowed it to negotiate with other organizational structures and influence its educational practice. The preceding evidence suggests that these organizational structures did not only contribute to localization of CEC's educational practice but were equally influenced by CEC and its educational practice. This observation is further examined in the succeeding sections.

11.3.5 Localization outcomes

(a)   Educational outcomes

The educational outcomes of localization have been described, particularly the variations of the RENEW module and the resulting grassroots environmental education curriculum. As mentioned in chapter 9, the emphasis of CEC's experience on educational outcomes is consistent with the objectives that CEC formulated for itself. These objectives focused on curricular and pedagogical outcomes, such as education and training modules. This section synthesizes the educational outcomes and identifies related outcomes, such as the sharpened analytical framework and the fine-tuning of CEC's strategy of training the trainer.

Progressive contextualization as localization was based on the influence of the key local factors of space, time and the participants. The resulting curriculum was developed based on one or a combination of specific localization factors, as described in chapter 9. Examples of these educational outcomes are the SEED Program, which was based on the identification of an *entry point* in working with different sectors. The CBEM and CORETECH were based on the *nature of the action proposed*. The IKSER workshops focused on *local knowledge and ways of learning*. And the advocacy modules, both the area-based and issue-based modules, emphasized a sharper *depth of analysis* through adopting a mode of production analytical approach.

A sharpened analytical framework is another outcome that has been identified throughout most of the thesis. The ideological rift within the social movement has been identified as a major factor that hastened this process, but it is important to acknowledge that the development of CEC's analytical framework began prior to the 1995 organizational consolidation. Example of this was the development of the PACERR framework (see section 9.4.1 and Tables 7.4 and 9.9) of reporting environmental problems, from PACE to PACER to PACERR as early as 1990.

All these may be considered as educational outcomes, including the analytical frameworks identified, because these were all developed as they were applied to education work.

(b)   *Organizational outcomes*

Preceding sections of this chapter have alluded to the suggestion of a complimentary relationship between localization and the organizations that have contributed to this educational process. Three kinds of organizational outcomes are identified as having been influenced, to varying degrees, by localization. These outcomes are changes in CEC itself, as an organization and its policies, in the People's Faculty, and in the people's movement.

Examples of the complimentary influence of localization factors, processes and structures on CEC as an organization are described below. First, the shift of CEC's initial mandate from research to grassroots environmental education was the result of what Duhaylungsod described as the "failed attempt."[30] Negative feedback from local organizations on a proposed action-research framework (Figure 5.1) resulted in CEC rethinking its mandate and deciding to focus on grassroots environmental education. Second, the change in the nature of CEC from a *support group and service center* to an NGDO was the result of the recognition of the need for both reactive and proactive responses to environmental problems. Third example is the organizational strategy of training the trainer. While the organizational strategy has remained, it has been the implementation of the strategy has continued to develop

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[30] Duhaylungsod, "Preface…", p.6.

and change. Localization of the strategy has meant shifting from a RENEW based training of trainers to an EduCATOR training and most recently to a speakers training.

As for the People's Faculty, it was during the 1993 ATT workshop that the idea of the People's Faculty was suggested. It's growth and influence to CEC's practice, as discussed earlier has been a complimentary relationship ever since. Finally, while CEC identified the need for internal advocacy within the progressive social movement, it seems that the movement has had a major influence on CEC and its educational practice. But despite what Duhaylungsod identified earlier as the minimal experience of the movement in environment work, the fact that CEC continues to relate to the progressive block within the social movement in the Philippines indicates some success in this aspect of internal advocacy. However, it is beyond the scope of this study to further examine these.

Suffice to say that all these indicate that the practice of progressive contextualization was not a one-way process as originally anticipated by the researcher, where the context shaped the education module. But together with an action research approach, the practice of developing and testing the module itself became an opportunity for CEC as an institution itself to become one of the outcomes of the practice of progressive contextualization. Even the educators that were involved in the process can themselves be considered as outcomes, as the process itself changed them, as it did me, the researcher.

11.4   Localization in a globalizing world

This final section examines the application of the lessons learned from localization in the context of a globalizing world.

11.4.1 Localization factors in a globalizing world

The localization factors of time, space and the learners, described in section 7.2, are not all equally significant in examining the impact of localization of the education module in a globalizing world.

I have identified the time factors of change through time and urgency as significant to the context of a globalizing world. In particular, during the ten years under study, it was observed that there has been an increase in environmental concern, which has often been attributed to the 1992 Earth Summit. However, within the same ten years, the modules on global environmental problems (ozone layer and greenhouse effect) are no longer basic components of RENEW. According to Queenstein Banzon[31], the then CEC Education Coordinator, since 1998 the global problems are discussed mainly in workshops with teachers but rarely with local community groups. She said that more time is spent on the analysis of the political and economic causes of environmental problems, and the semi-feudal and semi-colonial nature of Philippines society within a context of globalization. Clearly, while there seems to have been a growth in the awareness of global environmental problems, this has not been reflected in the RENEW modules, which is evidence that it was not seen as relevant.

The factor of space, in particular the tension between the local to global contexts and the socioeconomic, political and cultural contexts in a globalizing world have been extensively examined in the thesis. These spatial factors are revisited in this section, particularly as it relates to the development of an analytical framework that links the local to the global.

The nature of the learners has not significantly changed within the context of the globalizing world. Since 1997, CEC has primarily focused on a more specific group of learners, which is directly the result of the organizational consolidation. First, while CEC continues to identify its primary constituency as the grassroots, since 1997, this has focused on the progressive section of the people's movement, in particular, those associated with the national democratic forces. Second, the area-based focus has dictated that CEC education efforts are focused on Negros and Mindoro. It has been these narrowing of the nature of the learners that has determined the Banzon's observations of the deletion of the global environmental problems and the focus on globalization, instead.

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[31] Queenstein Banzon, CEC Education Coordinator (Quezon City: 7 October 1999) [interview].

Extending the nature of the learners to the networks at the regional and international level that CEC continues to associate with, chapter 10 identified that CEC has been more involved with the adult education networks, rather than the global environment movement. However, since 1998, CEC as an organization has minimized its involvement with regional and international bodies, in particular with ASPBAE-EEP and the ICAE-LEAP. The only sustained involvement has been my involvement as ASPBAE executive council member until 2000. Since 2000 CEC has ceased to be a member of ASPBAE. This development in a way supports my earlier argument that CEC's regional and global networks played a minor role in the progressive contextualization of its educational practice. This is understandable given the observation that the emphasis of progressive contextualization has been on localization, hence the demonstrated greater influence of the local partner organizations and networks.

In fact it was CEC and its experience that informed the discourse on adult and community environmental education at the regional and global level. This is evident from the fact that progressive contextualization as a concept found its way into the regional framework of adult and community environmental education. This observation was noted during the 1999 CEC@10 National Evaluation where CEC's education department report stated that the "international significance of CEC's experience continues to be acknowledged"[32]

11.4.2 Linking the local to the global

CEC's educational response to the global nature of these environmental problems was examined in chapter 10. The chapter identified five approaches that CEC utilized in moving from local to global contexts. Four of these approaches were the *ecosystems/ecological approach*, a *holistic approach*, a *geographical approach*, and the *business continuum approach*. It was emphasized that each of these approaches was not used in isolation but rather was used in combination with each other. These combinations assisted in the analytical progression of the education module in terms of developing from a focus on the biophysical environment to a more holistic and

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[32] "CEC@10: final documentation" (QC: CEC, 1999), p. 34 [unpublished document].

integrated view of the environment, coupled with the development from a local view to a broader national perspective. One example discussed was the golden apple snail infestation of rice fields, which was then linked to national agricultural policy and the growing dependence on pesticide use.

However, the thesis observed that this analytical progression that attempts to further link the local to the global is concluded after the discussions on the national environment situation, when a separate module that tackles global environmental problems is introduced. It is at this juncture where the global environmental problems of climate change, ozone layer depletion and biodiversity loss are discussed from a global perspective. As previously illustrated, the RENEW module, had a tendency to introduce global environmental problems using a linear and narrow approach. It is linear because it tended to follow a sequential cause and effect logic. For example, a common approach was to begin with identifying how population growth contributed to increased resource consumption, which in turn contributed to an increase in waste production, such as carbon dioxide, whose accumulation, contributes to global warming. Furthermore, this linear approach was described as narrow because it tended to emphasize the biophysical aspects and relationships of these global environmental problems. The concern is that such a discussion of global environmental problems tends to perpetuate what Shiva called "a false causality, such as poverty causes environmental problems, [and] a view that environmental problems are technical problems needing technical solutions and foreign aid."[33] Evidence of this false causality can be seen for the use of a flow chart (see Figure 10.3) that displayed the roots of global environmental problems to population pressures.

While the documented experience indicate that CEC had a very strong emphasis on progressive contextualization from the local to the national, the same grounded contextualization process was not observed in dealing with the global context. It was only recently, that CEC applied a fifth approach, a mode of production analysis, consistently from the local, national and global contexts. In this approach the focus

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[33] V. Shiva, "The Greening of the Global Reach" in J. Brecher, J.B. Childs, and J. Cutler (eds), *Global visions: beyond the new world order* (Montreal: Black Rose Books, 1993), p. 58.

has been on linking the local and national environment not only to the social, economic, political and cultural realities in the Philippines, but to the semi-feudal and semi-colonial nature of Philippine society and its links to economic globalization.

Applying this analytical approach helps to go beyond the ecological discussion of the dangers of introducing exotic species, the concerns with massive use of pesticides, and its connection with biodiversity principles. It assists in helping to question why in the first place was there a need to provide additional protein source to supplement the farmers' diet? Why is the farmers' diet protein deficient? What is the connection between malnutrition, rural poverty and landlessness? Why is the government, who introduced the golden apple snail, promoting the use of imported pesticides? What are the links between the breeders of the golden apple snail and the multinational corporations who produce the pesticides? How is this particular situation an example of failed agricultural government policy and its dependence of foreign technology? These are just some of the questions that can be explored that consistently link the local environmental problem to the national and eventually to the global.

However, the tendency of the mode of production analysis is to emphasize the links of the local situation to the nature of Philippines society and its links to the global economy, at times at the expense of establishing the links to other related global environmental problems. As the previous paragraph has illustrated, it does not need to be limited to establishing the link between the golden apple snail problem with rural poverty and the corporations that promote the use of pesticides. It is important to establish these links to the global economy, as most of the authors have emphasized in terms of the challenges that face popular and environmental education. But limiting the discussion to the global economy equally results in a narrow analysis. As the previous paragraph has illustrated, it is possible to establish links between the golden apple snail problem and how the practice of species introduction contributes to the problems of loss of biodiversity. Furthermore, it is also possible to establish links between the golden apple snail problem with the global civil society's response against the dumping and use of pesticides in developing countries.

The above approach addresses two of Vandana Shiva's fears identified earlier regarding the construction of global environmental problems that promote a false causality and a view of environmental problems as technical problems. For as the previous paragraphs have demonstrated, it is possible to establish links between a local environmental problem not only to global environmental problems but to economic globalization and global civil society as well. This development of CEC's analytical approach is an example of one outcome of the educational practice of progressive contextualization that addresses the challenges of a globalizing world.

11.5   Chapter summary

In this chapter I revisited the main research aims, methodologies and the theoretical guides that informed the research. I then proceeded to analyze the progressive contextualization of CEC's popular environmental education practice based on the argument that it was primarily a process of localization. In this chapter I gathered some of the key observations and findings from the previous chapter and synthesized them to identify the factors, trends and processes that contributed to localization. However, I identified and described in greater detail the organizational structures that facilitated this process of localization. These organizations were CEC itself, the People's Faculty, and the wider progressive people's movement in the Philippines. I argued that CEC's decision to become and environmental NGDO, as opposed to a support group and service center, was a turning point in the progressive contextualization experience being studied. This decision allowed CEC to become an intermediary organization. As an intermediary organization, CEC was able to negotiate between other local organizations and the wider social movement. This process of negotiation, I argued was in essence localization. Furthermore, I argued that the process of localization was a complimentary process that shaped both CEC's educational practice and CEC itself as an organization. Finally, I examined the process of localization in a globalizing context, specifically CEC's attempts at linking the local to the global. I argued that the lessons learned from the process of localization were not applied to the global context, as demonstrated by CEC's narrow view of the global. In the final chapter I synthesize the research findings and integrate them with the previous descriptions of progressive contextualization.

Chapter 12

Progressive contextualization in a globalizing world

Progressive contextualization, more particularly localization, has been identified as an approach conducted by CEC whereby its popular environmental education practice was adapted to the local context. This chapter synthesizes the research findings on progressive contextualization by integrating them with the original definitions and descriptions of progressive contextualization, which were identified as the starting points of this research.

In addition, my study of progressive contextualization has identified three educational tensions that have surfaced from CEC's experience. These three tensions have served a number of purposes. First, they provided a way to synthesize the theoretical guides based on the examination of the literature in the areas of popular and environmental education and a globalizing world. Second, they provided an analytical tool for narrating and examining the educational practice and process of progressive contextualization. And finally, in this chapter these tensions provide a framework for synthesizing and reporting the results and recommendations of the study. This synthesis informs my conclusions and recommendations that contribute to developing a theory of progressive contextualization of popular environmental education in a globalizing world.

12.1   Revisiting Vayda's description of progressive contextualization

Andrew Vayda described progressive contextualization as a methodology in human ecology research that

… involves focusing on significant human activities or people-environment interactions and then explaining these interactions by placing them within progressively wider or denser contexts. [1]

It is based on a "holistic premise that adequate understanding of problems can be gained only if they are seen as part of a complex of interacting causes and effects."[2]

CEC's grassroots environmental education experience illustrates that Vayda's definition of progressive contextualization when applied to educational practice can be further expanded. It currently covers the basic understanding of people-environment relationships as holistic relationships, and it identifies two interrelated approaches in achieving this holistic understanding. These approaches involve studying environment-people relationships in terms of their cause and effect relationships within wider and denser contexts. However, based on CEC's experience, this description can be expanded to include the role of institutions in the process of progressive contextualization, a broadening of the meanings of wider and denser contexts, and the move away from cause and effect relationships.

12.1.1 Progressive contextualization and the role of institutions

Vayda's description does not specifically identify the relationship of the institution in his description of process of progressive contextualization. However, he did mention that progressive contextualization was his response to the "research unit question"[3] within the Man and the Biosphere Program (MAB). The early history of MAB identified that the use of ecosystems as research units "might impede rather than facilitate research contributing to improved management of natural resources."[4] This question is based on the observation that people and environment interactions are not

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[1] A. Vayda, "Progressive contextualization: methods for research in human ecology", *Human Ecology: An Interdisciplinary Journal*, vol.11, no.3 (1983), p. 265.

[2] Vayda, p. 266.

[3] Vayda, p. 266.

[4] Vayda, p. 267.

limited within an ecosystem, and therefore there was a need to find the appropriate unit of research for human ecology.

> Rather than waiting for these more specific applications, [Vayda argued] for progressive contextualization as an alternative to having units of research as tribes or islands, … which have their boundaries already demarcated before the research actually begins.[5]

Clearly, Vayda's proposal was responding to an institutional need of the MAB and more widely the need for appropriate methods in human ecology research. Therefore, while not explicitly incorporated in his description, Vayda did acknowledge the institutional context within which this methodology was developed and applied.

The value of the institutional context is significant in describing progressive contextualization. I have argued in the thesis, that the progressive contextualization of CEC's practice of popular environmental education was continually affected by the organizational context of CEC as an NGDO, its partnership with local organizations, and its links with the progressive people's movement. However, I have also argued that it was not a unidirectional process of curriculum development, but it was equally an organizational development process, too. This further highlights the importance of including the context of the institution, as it acknowledges the wider scope of the potential outcomes of the process, in this instance beyond educational outcomes.

12.1.2 "Wider and denser contexts"

Vayda's "wider or denser contexts"[6] have been translated for the purposes of this study to mean the global and local, respectively. Based on the study of CEC's experience, I have argued that the local and the global need to be expanded to include not just the context of space or scale. The thesis identified the key local factors time, space, and the local participants as significant in the progressive

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[5] Vayda, p. 267.

[6] Vayda, p. 265.

contextualization of educational practice. All these aspects, as described in the thesis, incorporate aspects of the local context beyond space and scale.

I can only begin to illustrate this idea of a view of denser and wider contexts beyond space and scale. For example the vertical axis as the local to global and the horizontal axis with enlarging concentric circles as the local biophysical environment expanding to include the social, economic, cultural and political environments (in no particular order). Furthermore, each of these circles is not homogenous, because of the diversity of social, economic, cultural and political relations. Add to this the dimension of time, makes the degree of complexity involved obvious. This is the challenge of a holistic and integrated approach to examining the environment and in preparing the appropriate educational approaches to address this complexity. The problems of illustrating this complexity are evident in Figure 12.1.

Figure 12.1: My attempt to capture the complexity in a diagram.
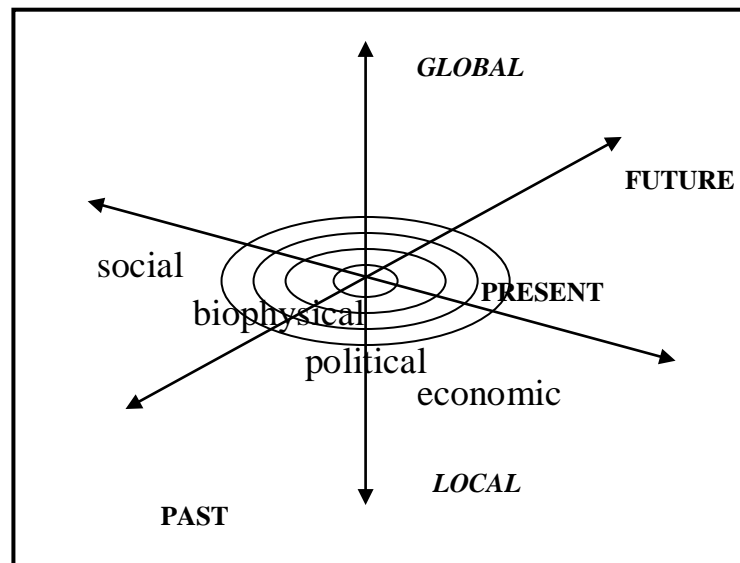
The diagram shows how a representation limited by scale, space and hierarchies is inadequate in illustrating a holistic and integrated view of the environment. However, it may work when focused on a single dimension, such as scale, as the following example, previously described in section 4.1, illustrates. Fensham describes a teaching model presented at Tbilisi.

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In it learners throughout their schooling explore a succession of widening environments. In the first years pupils would learn about their homes and the range of possibilities home environments can take. Then they study the village or part of the town their school is set, then its countryside, then a region of which it is a part, then the nation and finally other related or more distant countries. This concentric approach is attractive because it makes it easier to decide what environments are, or can be made meaningful at what stages of schooling, and how the skills of choosing can be steadily developed.[7]

But this concentric approach needs to include more than just the concept of widening space and scale. However, what the above teaching model supports is my argument that the biophysical environment at the local level provides an effective entry point into understanding the complexity of relationships, in this case, of wider contexts.

The *EE Guide* agrees "environmental problems should be seen first in their local context to appreciate their relevance."[8] However, it continues by saying that this local context must be followed by "a global context to impress on people the magnitude and the pervasiveness of the problem."[9] This illustrates the dangers of viewing the global context as merely the wider context, where the problems only increase in magnitude and reach. This approach can hide the reality of economic factors, such as the globalizing reach of corporations and their contribution to local and global environmental problems.

Translating this concept to educational practice, particularly for popular environmental education, it is essential to begin from the *here and now* of the learners. A *here and now* that is not limited to biophysical space and scale. However, the *here and now* needs to be flexible, depending on the context of the educational intervention. Although a regional Asia-Pacific workshop would have to deal with a

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[7] P. Fensham, "Stockholm to Tbilisi – the evolution of environmental education", *Prospects*, vol. 8, no. 4 (1978), pp. 446-455 in Greenall Gough, p. 66.

[8] DECS-DENR, *Environmental Education Guide* (QC: DECS and DENR, 1999), p. 7.

[9] DECS-DENR, *EE Guide*, p. 7.

different approach to contextualization, I would argue that there is still a need to refer back to the *here and now,* the local reality, of the individual participants. This is because the local is where they come from and the local is where they will return to, specifically in terms of implementing what they have learned. However, the regional view becomes as real to them because of the coming together of the different local views and experiences. From CEC's experience, this situation is similar to the annual ATT, or the coming together of the People's Faculty, which facilitates the establishment of such wider contexts as the national or even sectoral environmental situations for the local educators.

In addition, I have argued that a narrow view of the local and global, limited to space and scale results in an equally narrow definition of environmental problems. Vayda advocated for a more holistic understanding of people-environment relationships. This view is consistent with the development of the understanding of environmental problems, from being very limited to biophysical problems, to more ecological yet still dominated by scale, to a more socio-ecological and holistic analysis.

12.1.3 Beyond a linear, cause and effect relationship

This analytical development identifies the third aspect of progressive contextualization. This aspect involves moving away from cause and effect, and linear analysis, to identifying the dynamic and interactive relationships that contribute to environmental problems. An example is the development of CEC's framework of analysis from ecological to holistic to mode of production. In the latest discussion with CEC, conducted in July 2001, the staff argued that the mode of production analysis is capable of linking the local and the global consistently. However, I pointed out that their analysis, as described in section 10.4, currently ends up with linking the local to the global economic order. While this link is essential, there is a need to do further work and make the connections with the global environmental problems as well. I have proposed how such a link can be established in the previous chapter.

Furthermore, while the concept of space has broadened, there is a need also to rework the whole idea of being limited by scale, specifically a linear approach to

scale. This approach was evident in CEC's practice of linking the local to the global. Recent studies have proposed a move away from linear hierarchies to a greater emphasis on multiple relationships across a "heterarchy."[10] These non-linear relationships have also been described as "embeddedness" or "nestedness" which is a way of describing

> … interrelated scales without privileging the global scale. Thus a heterarchy of scales would suggest that while one scale might be important at one time, place or circumstance than another but that analytically none could be ignored.[11]

Global civil society is one such example of a "system composed of collective actors at multiple levels, with overlapping authority, linked through various kinds of networks."[12] NGOs, in particular, because of their

> … rootedness in the local community and their increasing capacity to intervene at the national and global levels, are in a good position to generate the new forms of social learning necessary.[13]

It is the kind of social learning that looks beyond linear, cause and effect relationships in studying the links between local and global environmental degradation.

The identification of progressive contextualization as one of the lessons learned from CEC's experience in educational development complements and expands Vayda's original definition of progressive contextualization as a research methodology. It complements Vayda's definition because the essence of it being a holistic approach

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[10] Stefan Immerfall and others, "Disembeddedness and localization: The persistence of territory" in Stefan Immerfall (ed), *Territoriality in the globalizing society: One place or none?* (Heidelberg: Springer, 1998), p. 198.

[11] Immerfall and others, p. 198.

[12] Ronnie Lipschutz, *Global civil society and global environmental governance; the politics of nature from place to planet* (New York: SUNY, 1996), pp. 240, 250-252.

[13] Isagani Serrano, "Learning sustainability from crisis", *Convergence*, vol.33, nos. 1/2 (2000), p. 99.

to studying people-environment relationships by placing them in wider and denser contexts has been supported by CEC's experience. However, it expands on the definition by proposing three modifications, specifically the acknowledgment of the role of institutions in the process, a broader definition of wider and denser contexts that are not limited by space and scale and the re-thinking of the use of linear cause-effect relationships. These proposals are further examined in the next section within the context of the practice of popular environmental education.

12.2   Progressive contextualization and CEC's practice of popular environmental education

Revisiting the descriptions, that I proposed in 1996, and that Duhaylungsod and I proposed in 1997, I now argue that these descriptions were very narrow in scope and were focused too much on educational processes and outcomes. It is important to note that these descriptions were proposed prior to having read Vayda's definition of progressive contextualization. In the same way that the preceding section has proposed a broadening of Vayda's definition when applied in the context of popular environmental education, this section re-examines these descriptions of progressive contextualization. This re-examination is conducted in the light of the findings of the thesis and the literature on popular and environmental education.

These descriptions are once more presented below. A chapter submitted for publication in 1996 described progressive contextualization as

> … the on-going process of adjusting learning objectives and training modules, revising frameworks and approaches, and reflecting on practice and experience in response to the particular context of the learners.[14]

A year later it was again described in the draft CEC publication entitled *Purposive Education*.

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[14] J. R. Guevara, "Facilitating community environmental adult education in the Philippines: Transformation in Action" (1996), p. 4 [unpublished manuscript].

Progressive connotes an action that is on-going or dynamic and that becomes better after each action. Together, progressive contextualization indicates a positive dynamism of the education module in terms of changing with the times or the broader context. Progressive contextualization is about a dynamic movement for the better, in terms of, designing educational activities that are influenced by time, space, our organizational identity[15] and by our learners. This can be translated into actually influencing the educational content through a local problem as entry point, the depth of analysis to be conducted and the nature of the action proposed. [16]

Comparing and analyzing these descriptions, I have identified three common components of progressive contextualization in the context of popular environmental education work.

First, both descriptions identify the on-going nature of the process.

Second, both identified the outcomes of this on-going process, specifically the education module as the main outcome. However, the 1996 statement identified revising frameworks and approaches, and the process of reflecting on, and therefore improving practice, in addition to the education module as outcomes.

Third, both identified the particular local contexts that influenced the progressive contextualization of the education module. While the 1996 description focused more on responding to the particular context of the learner, the 1997 description considered the broader and dynamic context as the main factor influencing the educational practice of progressive

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[15] The 1997 description identified "our organizational identity" as one of the local factors. However, I have opted in the thesis to incorporate this factor as part of the context of the learners, which included the organizational contexts of CEC, the local host organization and the people's movement as well.

[16] N. Duhaylungsod and J.R. Guevara, "Purposive Education: An Examination of Context, Content and Process of Grassroots Environmental Education Experience in the Philippines" (Quezon City: CEC, December 1997) Chapter 3, p.6 [unpublished manuscript].

contextualization. The 1997 description further detailed this broader context, such as time, space, our organizational identity and the learners, and further identified what aspects of the education module were influenced.

Although progressive contextualization has not been used as a phrase in the literature on popular and environmental education, the concept is not alien to these disciplines. Each of there components identified in the previous descriptions is further examined in the context of popular and environmental education.

12.2.1 Progressive contextualization processes

The on-going nature of the process is very similar to Paulo Freire's own description that "education is thus constantly remade in the praxis. In order to *be*, it must *become*."[17] Freire establishes a critical connection between this on-going nature and the educational methodology. He describes that the "banking method emphasizes permanence and becomes reactionary."[18] On the other hand,

> … a problem-posing education – which accepts neither a 'well-behaved' present or a predetermined future – roots itself in the dynamic present and becomes revolutionary.[19]

There are two interdependent dimensions to this on-going nature or progressive contextualization. One dimension is the need to consider and address the dynamic context, while the other dimension addresses the improvement of educational practice. Vargas identifies both he argued that one of the challenges of popular education was "more than just the revision of concepts [but] involves our capacity to

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[17] P. Freire, *Pedagogy of the Oppressed.* (New York: The Continuum Publishing Corporation, 1993), p. 65 [italics in original].

[18] Freire, *Pedagogy of the Oppressed*, p. 65 [quotations in original].

[19] Freire, *Pedagogy of the Oppressed*, p. 65.

adjust our practice to *new* contexts."[20] This new context, which the thesis examined, is the context of a rapidly globalizing world.

Freire continues that this on-going process has to be viewed as part of a movement, and that "the point of departure of the movement lies in the people themselves."[21] This acknowledges two more aspects of this on-going process. First, is that the site of this process is situated within people's movements, which was one of the key organizational structures identified in the thesis that contributed to progressive contextualization. This aspect supports the argument that institutions, such as CEC within the progressive people's movement, play a key role in the on-going process of progressive contextualization. The other aspect relates to the people as "the point of departure."[22] More specifically, from CEC's experience it has been the CEC, its educators and the local educators - essentially the People's Faculty - who provided the starting point and who sustained the process of progressive contextualization. This role of the educators and their host organizations is often identified in the education literature as the reflective practitioner,[23] a particular stream of action research[24] that has been closely associated with adult education. Furthermore, this association between progressive contextualization and action research identifies that progressive contextualization could be also described as a research process. Robottom and Hart describe a research situation that is very similar to the progressive contextualization of CEC's educational practice.

> There is a need, in participatory research in environmental education, for the methodology to be continually negotiated with participants as the substantive environmental and educational politics change and as joint understandings of

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[20] J. O. Vargas, "Rethinking popular education – An interim balance", *Adult Education and Development*, no. 48 (1997), p. 11[emphasis added].

[21] Freire, *Pedagogy of the Oppressed*, p. 66.

[22] Freire, *Pedagogy of the Oppressed*, p. 66.

[23] Donald Schon, *The reflective practitioner: How professionals think in action?* (New York: Basic Books, 1983).

[24] B. Atweh, S. Kemmis and P. Weeks (eds), *Action research in practice: partnership for social justice in education* (London: Routledge, 1998).

the substantive issues and the relationships of the research to these issues become clearer.[25]

There is clearly more than one dimension involved in describing progressive contextualization as an on-going process. More of these dimensions are explored as part of the discussion of outcomes in the next section.

12.2.2 Progressive contextualization outcomes

All the outcomes, the modules, frameworks, approaches and practice identified in the 1996 and 1997 descriptions were also identified as outcomes in the thesis. Initially though, these outcomes were viewed narrowly within the context of educational outcomes and process. I have illustrated that this view was influenced by the nature of the objectives that were formulated by CEC that emphasized curricular and pedagogical outcomes. Writing about environmental education, Sterling identified the situation just described as one that illustrates the tension between environmental and educational goals, which he argues, "have to be held in balance and seen as necessary to each other. Seen holistically, they illuminate and advance each other synergistically."[26] However, Robottom and Hart have also argued that there is a need to recognize that "the pressing research issues in environmental education are educational rather than environmental in character."[27]

However, even if progressive contextualization was described and studied within the framework of educational research, it need not limit itself to the education module or the curriculum as the outcomes. And as I have argued in the thesis progressive contextualization is not a unidirectional process, but is a complimentary or reciprocal process. Hence, there are a number of outcomes that can be identified, such as the educational, environmental, institutional and individual outcomes. These outcomes

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[25] I. Robottom and P. Hart, *Research in environmental education: engaging the debate* (Geelong: Deakin University and Griffith University, 1993), p.69.

[26] S. Sterling, "A View from holistic ethics", in J. Fien (ed), *Environmental education: a pathway to sustainability* (Geelong: Deakin University and Griffith University, 1993), p. 89.

[27] Robottom and Hart, *Research in...* p. 65.

are themselves, factors that contribute to the process of progressive contextualization, hence the reciprocity described.

12.2.3 Progressive contextualization contexts

There has been an expansion of the context that has been identified that informed the process of progressive contextualization. Initially, the 1996 description was limited to the context of the learner, which in 1997 was expanded to include the wider context, based on a broader definition of time and space. However, I have argued and illustrated that the progressive contextualization of CEC's educational practice has been primarily influenced by the local context. Hence, I included a chapter on localization as an example of progressive contextualization. While the local context considered began from the biophysical environment, I have demonstrated that this starting point developed to encompass the social, economic, political and cultural environments. I have also argued and demonstrated why the local context or the *here and now*, is an effective entry point for progressive contextualization. However, as the thesis has shown, this localization process did not extend to CEC's early construction and approach to discussing the global context.

The importance of linking the local and the global is present in the theory and practice of both popular education and environmental education that have been examined. Both emphasize the importance of placing the education within the context of the links between the local and the global. More specifically in the area of popular environmental adult education, there is a greater emphasis on establishing the local as the starting point in making these links. From the other end of the spectrum, globally ratified environmental education treaties, as the thesis has illustrated, equally emphasize the importance of linking the local and the global.

Attempts at exploring how these links are established were found specifically for the context of schoolchildren in environmental education. For example there are "school twinning" programs involving the exchange of letters between schools from different

contexts, such as India and Italy as described by Elena Camino.[28] A popular education program that has been conducted with both schoolchildren and adults in Canada involves a story entitled "Tomasita the Tomato"[29] follows the journey of the tomato from the farm in Mexico to the dinner table in Canada. This, according to Brandt, was a response to the challenge of showing the "interrelationships of global and local processes, of the North and the South, of production and consumption, and of shifting economic and political structures and the conditions and practices of our daily lives."[30] This is very similar to the use of "commodity chains"[31] that involve tracing a particular consumer item, such as coffee from source to sale.

While the three examples described may appear holistic, they tend to be linear as they only establish the connections across the different scales and spaces. Furthermore, they also tend to be effective in more developed and urbanized environments, hence while they may work with urban middle-class children in Manila, they need to be re-examined in the context of grassroots groups who are often at the start of these "commodity chains.' These approaches are very similar to the mode-of-production analysis that CEC currently conducts, that begins with the view of the environment as a resource. However, instead of consumption it traces the production and the inequality that results as the product moves from the one level of the economy, and at times eventually back to the producer. These examples raise a key aspect in the experience of CEC, regarding the development of an analytical framework that is applicable for grassroots environmental education in a country like the Philippines. The challenge according to Sterling is "to be locally rooted with a planetary vision – community rather than insularity."[32] Therefore, contextualization begins from an understanding of one's own position within this wider and denser

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[28] Elena Camino, "I have a friend on the other side of the Earth: Twinning classes from different cultures to introduce environmental and development education", *Environmental Education Research,* vol.2, no. 3 (October 1996), p.331

[29] Deborah Brandt, "Tracing the Trail of Tomasita the tomato", *Alternative Journal* (January/February 1996), p. 24-29.

[30] Brandt, "Tracing the …", p. 24.

[31] Eldon Kenworthy and Eric Shaeffer, "Coffee: The most teachable commodity", *Journal of Environmental Education* vol. 31, no. 4 (Summer 2000), p.46.

[32] Sterling, p. 80.

context. This position determines a reference point in constructing the local and the global.

CEC's local was shifting, in space and scale, when its local was the small barrio, an entire province, a region, or the Philippines. At other times, what was local was not spatially defined, but was a characteristic common among the learners, such as a specific sectoral group they were members of (e.g. labor, women, peasants, or indigenous peoples).

However, one context that was not emphasized by CEC's educational practice, as much as it has been in other educational practices described, such as Selby and Pike's "Four-Dimensional Model of Global Education"[33], is the personal or inner dimension. While the context of the learners' was a key context for progressive contextualization identified by the 1996 description, it was still focused on the learners as part of an organized group or sector. While there were activities in RENEW for drawing out individual visions and actions, these activities were discouraged after the internal consolidation. Instead emphasis was placed on collective responses, rather than individual ones. I identified in the thesis that a focus on the collective rather than the on the individual was a reaction to the predominance of individualistic and behaviorist tendencies in many of the environmental education programs, particularly from overseas. Furthermore, the focus on the collective is understandable given CEC's commitment to the progressive people's movement in the Philippines.

12.2.4 Rethinking the original descriptions of progressive contextualization

The three common characteristics of progressive contextualization as on-going, focused on educational outcomes and based on the local context are still valid. However, I suggest the following modifications based on the research results.

> First, progressive contextualization is an on-going process that drives popular
> environmental education practice to respond to the dynamic contexts. This

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[33] Selby and Pike, pp. 138+.

on-going process is facilitated and sustained by educators and their organizations. Furthermore, this on-going process is both an education and a research process.

Second, progressive contextualization is a reciprocal process. Hence, in the practice of popular environmental education, aside from the educational and the environmental outcomes, there are organizational or institutional outcomes that can be identified. Therefore, progressive contextualization is also an organizational development process.

Third, progressive contextualization in the practice of popular environmental education addresses the local and the global contexts. These contexts are not limited to the biophysical environment, nor are they limited to space and scale. The starting point of this contextualization process is often the local environment. However, this local starting point is flexible. It may begin with the location of the learners and the organizations involved along the spectrum of the local and the global, but also begin from a shared characteristic of the learners.

12.3   Summary of findings using the educational tensions

The three educational tensions were identified as tensions between, the context of the local and global, the educational content of the biophysical and political, and the methodology of being participatory and prescriptive. While these tensions appear as dualities, I have argued that these are not opposite forces. I have illustrated through CEC's experience that the practice of progressive contextualization has made possible negotiating between these tensions. Initially, I referred to these tensions as educational tensions, because they were identified from the progressive contextualization of CEC's educational practice. However, I have also argued that these tensions were equally organizational tensions that shaped both organizational policies and educational practices. These tensions have informed the synthesis of the theoretical guides and the writing and analysis of the research narrative. I use these

same tensions, together with the Context-Content-Method framework, to summarize and synthesize the findings of the research.

12.3.1 Context: Local and global

(a)　　*CEC's experience as localization*

The progressive contextualization of CEC's practice of popular environmental education was primarily a process of localization. The local factors of time, space and the learners have shaped this localization process, which have been facilitated by both educational and organizational processes that valued participation.

(b)　　*CEC's construction of the global*

However, from the examination of CEC's experiences, the lessons learned from localization, I have argued were not translated into linking the global from the perspective of the local. Instead the construction of the global continued to be narrow and limited to the four global environmental problems identified by the global institutions.

(c)　　*Wider and denser contexts*

Andrew Vayda's description of wider and denser contexts was applied in the thesis as the global and the local contexts, respectively. However, I have argued and demonstrated that these local and global contexts need to be expanded beyond the common notions of space, such as the biophysical environment. Both the local and the global contexts, I have argued, require a more holistic understanding of the relationships between the biophysical and the sociopolitical, economic, and cultural environments. Such an understanding also needs to address the issue of change over time. Therefore wider and denser contexts are not limited by space and scale, but include time as well.

(d)　　*Linear, cause and effect relationships*

Furthermore, CEC's discussion of the global utilized a linear, cause and effect relationship. This linear approach demonstrated a tendency to attribute global environmental problems to population growth. I have argued that these holistic relationships are not limited to hierarchical relationships of scale. I identified in the

thesis new concepts of "embeddedness", "nestedness" and "heterarchy" that have been used as an alternative to linear and hierarchical approaches in understanding environmental problems and solutions.

(e)   ***Local as the starting point***

However, I have also argued that within the local-global spectrum, the local – as defined by the learners, the educators or their institutions – is still the starting point of progressive contextualization. I have referred to the local starting point in the thesis as the *here and now,* which is a very dynamic local.

(f)   ***Local in a globalizing world***

While educators need to contextualize the global from this local, there is a need to be flexible in what constitutes the local. Local in a globalizing world, as CEC's experience has demonstrated varies. It could be where the institution and educator, by virtue of their mandate, are situated within the local-global spectrum or a shared concern or characteristic by groups dispersed in different locations.

12.3.2 Content: Biophysical and political

(a)   ***Developing frameworks***

The development of CEC's analytical framework is one of the outcomes of progressive contextualization. I identified five approaches that CEC adopted that demonstrate the development of this framework. These approaches shifted from a purely scientific and ecological view, to a more holistic and integrated systems approach, to a geographic approach, a business continuum approach and finally to a mode of production analysis approach.

(b)   ***Role of the progressive people's movement***

The development of CEC's analytical framework, I have argued, was facilitated by its close links with the progressive people's movement in the Philippines, in particular the national democratic forces. Through the thesis, I have identified that the period of the ideological rift within the people's movement was a critical stage in the progressive contextualization of CEC's educational practice.

(c)   ***CEC's mode of production analysis, an equally narrow construction of the global***

The people's movement facilitated the progressive contextualization of CEC's analytical frameworks. However, I have argued that the mode of production analysis, as applied by CEC, has a tendency to result in establishing a narrow link that is limited to local environmental problems and economic globalization. In the thesis I proposed, how such a narrow link can be expanded to include global environmental problems.

12.3.3 Methodology: Participatory and prescriptive

(a)   ***RENEW: Prescriptive and participatory***

The Restoration Ecology Workshop, I have argued was initially prescriptive, since its content and methods were design and implemented by CEC for its local partners. However, RENEW emphasized a participatory approach, which was evident in the workshop methodologies used and the resulting curriculum development process that the thesis documents.

(b)   ***Progressive contextualization processes***

In the thesis I identified that both educational and organizational processes that facilitated progressive contextualization were participatory in character. The educational processes identified were the use of a participatory and creative approach and a number of workshop modules such as the local environmental situation. The organizational processes identified were the action research approach and the participatory approaches to people's empowerment.

(c)   ***Progressive contextualization as curriculum development***

The initial descriptions of progressive contextualization characterized it as an educational process that contributed to the development of CEC's grassroots environmental education curriculum. In the thesis I identified the different factors that contributed to the development of CEC's curriculum. Examples of these are the SEED Program, which was based on the identification of an *entry point* in working with different sectors. The CBEM and CORETECH were based on the *nature of the action proposed*. The IKSER workshops focused on *local knowledge and ways of*

learning. And the advocacy modules, both the area-based and issue-based modules, emphasized a sharper *depth of analysis* through adopting a mode of production analytical approach.

(d)   *Progressive contextualization as organizational development*

Progressive contextualization was a reciprocal process that contributed to the organizational development of CEC. In the thesis I identified a number of examples, particularly the influence of the progressive social movement on the organizational nature of CEC as an NGDO, and the shift of CEC's mandate from grassroots environmental education to environmental advocacy.

(e)   *Progressive contextualization as educational research*

In addition to progressive contextualization being an educational and an organizational development process, I have identified, quite later in the thesis, that it was also essentially a research process that was guided by an action research approach.

(f)   *Progressive contextualization structures*

The organizational and institutions structures that were responsible for progressive contextualization were identified in the thesis. These were CEC itself, the People's Faculty, the progressive people's movement and the regional and global networks that CEC was involved with. As I have argued, these organizations and institutions were themselves influenced by the process of progressive contextualization.

(g)   *Who participates?*

CEC has been clear about their bias for the grassroots sectors. However, a number of authors cited in the literature have raised the need for broader participation across interest groups, organizations, and sectors and at different levels. I have demonstrated from the experience of the People's Faculty how networks facilitate progressive contextualization. Therefore, I argue that there is a need for institutions and educators to be linked through networks to that enable them to act on different contexts and different levels.

(h)   *Progressive contextualization as on-going*

Progressive contextualization is an on-going process that allows popular environmental education practice to respond to the dynamic contexts, such a globalizing world. However, I have argued that for this process to be sustained, it is necessary for progressive contextualization to be situated within people's movements.

12.4   Conclusions and recommendations

The progressive contextualization of CEC's popular environmental education practice has primarily been a localization process. It has been shaped essentially by the local factors of time (duration, change over time, urgency), space (venue, biophysical space, and socioeconomic, political and cultural spaces), and the learners (language and literacy, women and gender and level of community organizing).

CEC's approach of linking the local to national context was observed to involve a development from an ecological, geographic and holistic approach to a mode of production framework of analysis. However, these same frameworks were not applied to dealing with the global context, which emphasized the issues of scale and space, rather than holistic relationships. The study shows that while the content of the education programs developed from an emphasis on the biophysical to being more political, it has, however, narrowed its global focus to emphasize the influence of economic globalization on the environment.

Educational and organizational processes that have valued participation were critical to progressive contextualization. Organizationally, it has been CEC's decision to identify itself as an NGDO, as opposed to being a support group and service center, and its links with the national democratic block within the progressive people's movement that shaped the resulting grassroots environmental education curriculum. However, progressive contextualization as a curriculum development process equally influenced CEC and sections of the progressive people's movement, as well.

In concluding, I propose a new description of progressive contextualization of popular environmental education within a globalizing world. The proposed definition is not meant to close discussions, as closure itself runs against the principles of progressive contextualization. Rather, it is more for me to establish what has been achieved within the limitations of the study and open the findings for others to further examine from their own contexts.

Progressive contextualization in a globalizing world is an on-going and reciprocal process of educational and organizational development. It is equally a research process that is closely associated with the practice and principles of action research.

Progressive contextualization of popular environmental education identifies the local as the starting point of contextualization. The local space, as defined by the individual, primarily remains the significant starting point as it is the space that each of the learners return to. However, the local does not need to be defined only by space. The local could be any characteristic that is shared by a particular group of learners or participants. An example is a shared environmental concern of farmers (e.g. the use of pesticides) in different parts of the Philippines or even in different parts of the world. This flexibility in defining local is a response to our ability to occupy multiple local spaces and identities, one result of a globalizing world. Other writers, such as Anthony Giddens[34] and Manuel Castelles[35], have extensively examined the link between identities and space, in a globalizing world. However, there is a need to establish links between these studies of identities and environmental education.

Progressive contextualization involves having a broader perspective of environmental problems across the spectrum of the local and the global beyond just the biophysical or the space, and the scale or the magnitude of the problem. This broader perspective results in a more holistic and integrated analysis of environmental problems that includes the socioeconomic, political, cultural and

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[34] Anthony Giddens, Modernity and Self-identity: Self and Society in the Late Modern Age (Cambridge: Polity Press,1991).

[35] Manuel Castelles, *The Information Age: Economy, Society and Culture (Volume II): The Power of Identity* (Oxford: Blackwell, 1997).

historical contexts. Globalization has pushed an emphasis in analyzing environmental problems from the perspective of economic globalization, while this economic analysis is critical, it is equally important to establish links with the biophysical realities such as global warming, ozone layer depletion and loss of biodiversity. Through the thesis I have illustrated a preliminary attempt to establish this connection using the mode of production analysis that CEC currently employs. However, further research into the integration of these analytical frameworks, possibly within the literature on political ecology, may prove valuable.

Global civil society structures, such as environmental NGDOs and their networks, are ideally placed to assist in this process of progressive contextualization. It is the intermediary characteristics of these NGDOs, like CEC, that allow them to be potentially effective mediators in this process. The ability of these organizations to network across the local and the global, across different interest groups (e.g. government, corporations, and people's organizations), and across different disciplines (e.g. science, culture, and politics) is an example of this intermediary potential. However, in the context of popular environmental education, these NGDOs need to be constantly grounded to their local constituency. The challenge therefore it to remain committed to the local while having the benefit of seeing the global, which is what progressive contextualization as both an educational and organizational development process can contribute to achieving.

Postscript: Tensions, transformation and learning

> One significant realization from this experience is that we are not just catalysts for change. Catalysts, by definition, hasten chemical reactions but are not transformed by these processes. Our experience has shown that as facilitators of transformative learning, we ourselves need to be open to being transformed. This is a humbling, yet empowering, realization.[1]

This quotation was the last paragraph of an unpublished manuscript "Facilitating community environmental adult education in the Philippines: Transformation in action" I wrote in 1996. This manuscript included my first attempt to define progressive contextualization, which was one of the starting points of this thesis. By the same token, I use this quotation as the starting point of my reflections on the research process I have immersed myself in during the last four years.

I revisited the three personal tensions identified in the preface as a possible framework for this postscript, namely between academic and community knowledge, being creative and scientific, and being from Manila and working with people in rural Philippines. However, I decided that these were not the same tensions I dealt with during the research process. While these three personal tensions were significant during the development of CEC's grassroots environmental education curriculum, a different set of tensions surfaced during the last four years. I have chosen to reflect on two research tensions, which have contributed to my own growth and transformation. These two research tensions are not entirely unrelated from the three personal ones I identified earlier. However, the fact that they are different indicates the different personal context that I found myself dealing with. Furthermore, these two research tensions are more related to the research process, and problem I studied.

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[1] J.R. Guevara, "Facilitating community environmental adult education in the Philippines: Transformation in Action" (1996), p. 12. [unpublished manuscript].

An insider and an outsider

When I began my PhD in 1998, I was used to writing in the first person plural, as the quotation above confirms. Writing in the first person plural was an acknowledgment that the experiences I was reflecting on were shared with others. However, a few years into the PhD, I encountered some difficulty, which I attribute to a tension between being an insider and an outsider. I had written and talked about CEC's experiences as an insider. As an insider, critical reflection was part of CEC's organizational practice, hence our reflections would get an immediate response - either in the form of feedback or as proposed actions.

As I mentioned in the preface, I have been reflecting and writing about CEC's experience since the early 1990s. When I started the thesis, I felt that I was continuing what I have been doing previously. The first year and a half confirmed this feeling. I did not have a huge difficulty in narrowing the focus, conducting the preliminary review of literature, and describing relevant dates and events. It was at the stage when I was transforming the field text into the research text, and analyzing it, when I started finding it difficult to be critical - to go beyond being descriptive. I attribute this to essentially being alone in reflecting and writing about CEC's experience. While I did not find this situation a problem when I was writing the *RENEW Manual*, now I was far away from those who shared in creating the experience, being based in Melbourne. And slowly, I was even moving farther away from the experience itself. I lost the intimacy of the people and the experience, and as a result, the confidence to be critical, which came with my being an insider.

I was advised by my supervisors to try to write in the third person. Initially, I did not feel comfortable about using the third person perspective because I felt that by doing so, I was denying my intimate involvement in the process I was studying. Furthermore, it would only add to the already distant space and time factors I was experiencing. I managed to bridge the distant space and time factors through a yearly trip to the Philippines, which immersed me with the people and the field texts at CEC. Furthermore, the conduct of the CEC@10 National Evaluation in 1999 provided me with the opportunity to share my research findings while in process. An

example of this sharing was the article entitled, "Progressive contextualization"[2] that was published in the special CEC@10 issue of *Feedback*. But in reality, I was still reflecting and writing from a distance.

I began with great difficulty writing in the third person. I would often slip back into *we* and *our*, which may still be found in some portions of the thesis. However, in the long run, I have to admit it helped me, not just get through the core chapters, but also more importantly to get to the core of the experience. Ironically, I think that my acknowledgment of the reality of distance in space and time, through writing in the third person, freed me from wanting write as an insider. It gave me that critical distance, without denying access to the people, the experience and the context of CEC and the Philippines. Furthermore, it helped that I decided to set out in the preface my role in the experience I was studying. It further allowed me to resolve my difficulty of writing from a distance, but not to the extent of describing myself as an outsider. Therefore, I did not have to resolve the issue of writing as an insider or an outsider, but I mediated this tension by becoming an insider, from a distance, instead of being a complete outsider.

Being local and global

One of the tensions I identified in the preface related to my being from a middle class urban setting like Manila and working with grassroots people from the rural areas in the Philippines. While an awareness of this particular tension was significant in the development of CEC's grassroots environmental education curriculum, the PhD research highlighted a different tension related to location. The concept of home was shared between times at Carnegie, Melbourne and Sikatuna Village, Quezon City. My place of work, which I considered my community, was equally shared between Victoria University in Melbourne and CEC in Quezon City. I referred to my annual trips to the Philippines as "going home" but also, said the same thing about flying back to Melbourne. This whole sense of *being local* was complicated by my involvement with the Asian-South Pacific Bureau of Adult Education, a regional

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[2] J.R. Guevara, "Progressive contextualization", *Feedback,* vol. 10, no. 1 (December 1999), pp. 7-13.

network. From 1996-2000, I was involved in a number of regional workshops, and was co-director of the ASPBAE 1999 Regional Leadership Workshop, which I hosted in Melbourne. To further illustrate this tension, I flew back to the Philippines in September 1999 to attend the CIVICUS Conference, and the organizational affiliation on my nametag was Victoria University, Melbourne. I was even invited to a lunch hosted by the Australian ambassador to the Philippines for the Australian delegates.

All these experiences illustrate one of the tensions inherent to a globalizing world. Again it was not about having to decide or select between one home, or one level within the spectrum of the local and the global. But rather, I found myself negotiating my concept of home, expanding my local area, and being flexible about my organizational affiliations. But in September 1999, during Special General Assembly of the International Council of Adult Education in Manila, the outgoing president, Lalita Ramdas in her president's report reminded me that,

> If my work and presence at the international level has any meaning or relevance, it derives primarily from the sense of rootedness within the practical context of working with marginalized and minority communities for over half of my life, both at ground level and increasingly at the level of advocacy and policy. Throughout my time in the international context, I have consistently connected through concrete work with the base reality on the ground. It is this that brings integrity, substance and content to the positions one takes at policy levels – be they regional or global. Without the knowledge and the substance that is provided by these micro-level experiences, all other theorizing will remain hollow and superficial. Education is people, and people mean life, and emotion and reality – not theory.[3]

Looking back, the four years of research, and the activities I was involved with at different levels during this period, constantly remind me that it was my 10 years of

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[3] Lalita Ramdas, "Climb every mountain, dream the impossible dream: Global challenges, local opportunities, learning for action" (Manila: ICAE, September 1999), pp. 4-5 [unpublished President's Report].

grassroots environmental work in the Philippines that continues to provide the foundation of my practice as an educator. Lalita Ramdas emphasize that,

> In order to remain relevant at many levels, such a person, I believe fully, must be firmly rooted in his or her own culture, reality and experience; be able to straddle and transcend that reality; build the bridges and make the connections to all those other realities of today's world; and enable the creation of a culture of learning and respect for each others pluralities and realities – however wide be the divergence and disparities.[4]

Indeed, during the last four years, my foundation has been further strengthened and enriched by my involvement at the regional and international level, and my years of living in Melbourne. But "the sense of rootedness," the experience from which the thesis grew out from, and the local from which some of my most defining life experiences have come from, remains to be from the Philippines.

And like a seedling, I will continue to grow.

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[4] Ramdas, p. 8.

A Sample Restoration Ecology Workshop (RENEW) Syllabus[5]

DAY / TIME   ACTIVITY

Day 1:

Module 1: Acquaintance, Expectations Check, and Orientation

(3 hours)   *Tao, Bahay, Bagyo* (People, House, Storm – icebreaker game)
               Sino ang gusto mong mag-alaga..
                       (Who do you wish would care for…. – icebreaker game)
               The Envelope, Please (Vision-setting activity)

               Expectations Check:
               a.   What do I expect to learn from the workshop?
               b.   What do I expect from the
                       -        facilitators/trainers?
                       -        the other participants?
               c.   What can I contribute to the workshop?
               d.   Are there any limitations that may hinder my full
               participation?
               Processing of Expectations
               Orientation/Briefing
               a.   Workshop Process and Design
               b.   House Rules
               c.   Host Teams

               Magagawa Natin (We can do it – action song)

Module 2: Local Environment Situation

(2 hours)   *Noon at Ngayon* (Yesterday and Today – art activity)

               Group Reporting
               Synthesis of Local Environmental Situation
               Option to use PACERR

Module 3: Basic Ecological Concepts

(3 hours)   *Listahan ng mga Bahagi ng Kapaligiran*
               (List the parts of the environment)
               Web of Life
               Discussion: Ecosystem Concept
               "Ang lahat ng bagay ay magkaugany"
               ("All things are interrelated to each other")

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[5] Guevara, *Renewing RENEW,* pp. 161-163.

Day 2:

(0.5 hour)   *Pugad at Ibon* (Nest and Bird – icebreaker game)
               Recap of Day 1

(3 hours)   *Habulan ng Pagkain* (Food chase)
               Experimenting with Worksheets
               Discussion: Food Chains and Energy Flow

               Water
               Experimenting with Worksheets
               Discussion: Chemical Cycling

(2 hours)   Discovering Food Webs
               Discussion: Food Webs and Balance of Nature

(0.5 hours)   Synthesis: Basic Ecology Concepts

Module 4: National Environmental Situation

(3 hours)   *Habulan ng Panyo* (Hanky chase – ice breaker game)
               Audio-Visual Presentation with discussions

Day 3:

(0.5 hour)   Tao, Logger, Puno (People, Loggers, Trees – ice breaker game)
               Recap of Day 2

Module 5: Global Environmental Situation

(2 hours)   Dressed for Global Realities
               Experimenting with Worksheets
               Discussion: Global Warming and Ozone Layer Depletion

Module 6: Vision to Environmental Action

(2 hours)   *Hinabing mga Pangarap* (Woven Dreams – arts activity)
               My Action
               Synthesis: Action Alternatives and
               the Philippine Environmental Movement

(2 hours)   Group/Community Planning

Module 7: Evaluation and Celebration

(1 hour)   Creative Evaluation

OPEN   Celebration

APPENDIX 8.1

A Sample Trainers Training Workshop[6]
(Note that these 2-day workshops often followed a 3-day RENEW)

Learning objectives:
At the end of the training-workshop, the participants will have
1. prepared an environmental education syllabus for a defined group of learners consisting of a set of learning objectives, a content outline, a general training design, and a detailed module or session guide.
2. developed a new environmental education song, activity or game
3. experienced practice facilitation and identified pointers on facilitation

Module 1: Introductory session:

Icebreaker:
Ang gusto kong makasama sa pangangalaga ng kapaligiran ay….
(I want to care for the environment together with…)

Meta-plan:
Identify three things that you remember from RENEW.
Identify one thing you hope to learn from the trainers' training workshop.

Synthesize:
Expectations
Principles of popular education (based on the three things they remember from RENEW)

Module 2: Workshop basics

Brainstorming:
To help you prepare for a workshop, what questions will you ask someone who wants to invite you to conduct an environmental education workshop?

Synthesize:
Use the 5 Ws and 1 H – to identify the workshop givens.

Workshop: (In small groups)
Identify the workshop givens and learning needs assessment for you particular target participants.
Formulate learning objectives and a content outline.

Reporting:
Draw out suggestions based on the reports.
Synthesize the suggestions.

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[6] "Environmental Education Trainers' Training (Bolano, Tabuk: CEC, 29-30 September 1996). [unpublished document].

Module 3: Fleshing out a workshop design

Preliminary activity:
Recall the RENEW workshop design
Examine how the modules are sequenced
Identify the value of Structured Learning Experiences (SLE)

Workshop: (same groups)
Prepare a general workshop design
Flesh out at least one session or module
- identify the module objectives
- develop an activity for this particular module

Reporting:
Draw our comments and suggestions.
Synthesize the suggestions.

Module 4: Facilitation techniques

Practice facilitation (fish bowl method)

Use the activity that each group developed.
Assign each group member a task.
Demonstrate the particular activity with the other participants.
The facilitators will observe the activity.
Draw out comments and suggestions from the practice facilitators.
Synthesize the comments together with the observations of the facilitators.

Additional input on research and materials development.

Module 5: Planning, evaluation and celebration

Planning: What next?
Evaluation
Liturgical celebration

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