Ecology in Education for Peace: Implications for Teacher Education

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ABSTRACT
The theme of this unit is ecological thinking and respect for life. The knowledge, skills, and attitudes stressed in peace education link together through a holistic appreciation for the value of life and the interdependence of living systems on the planet. Teaching about the environment and the notion of environmental responsibility is a crucial component of education for peace. Learning objectives are knowledge, skills and attitude.

WHAT DID WE LEARN?
Sit in a circle and ask students to share one or two things they learned in this activity. The teacher should also share something she or he learned in the activity. The teacher may want to follow up with a summary of the ideas presented by the students. These responses can then be tied back to the teacher’s learning objectives. Sharing learning objectives with students invites them into the teaching process and may help them take more responsibility for their own learning. The teacher’s openness will hopefully encourage students to trust and share in the learning environment. This process of "checking-in" after an activity reinforces the idea that teachers and students are in the learning journey together.

INTRODUCTION
We are committed to educating ourselves ‘in all aspects of the new cosmology with its implications for spirituality, theology, justice and earth ethics’. (Council of the Congregation, 2003).
For a fairly long time now, we have been engaged in the great task of educating the children of India, an independent nation with a rich variegated history, extraordinarily complex cultural diversity, and commitment to democratic values and general well-being. Given the enormity and importance of this task, it is necessary that we create occasions from time to time to sit back collectively and ask ourselves, ‘what are we doing in our engagement with this task? Is there a need to ask ourselves afresh some of the basic questions such as what ought to be the purpose of education?’ The constitution of the focus group on the aims of education is perhaps meant to provide such an occasion. If we look at what the school education system has done in the last decades, perhaps we have much to be satisfied with. Products of this system useful, but, very importantly, have this other expressive aspect. A community traditionally assumes a degree of continuity for itself—continuity of its constituent structures of human relationships, which give it, to a large extent, its identity and meaning. Given this assumption, the aims of education within what might, somewhat misleadingly, be called a communitarian framework, have primarily to do with the community’s idea of well-being and flourishing. The highest value that education within a framework was expected to promote in the community.

Knowledge
Gain knowledge of the process of creating an appeal, know elemental aspects of the environment and begin to see connections between international declarations, the environment and themselves.

Skills
Skill demonstrates a co-operative approach to learning, practice active listening, develop an ability to participate and express their opinions.
Attitudes
Gain ecological awareness and appreciation for Earth as a living system and display care for others and the planet.

SUGGESTED LEARNING ACTIVITY
Introduce the activity in the context of other learning in the class. For instance, this exercise could fit into lessons on science and the environment, reading and communication, civic participation, etc. Because peace education aims to connect learning rather than segment or separate subjects, each activity should be related to previous and forthcoming lessons. Organize students into small groups. The appropriate group size should be determined by the teacher but should ideally be between two and four students per group. Try to make sure that groups are as diverse as possible and gender-balanced (containing an equal number of boys and girls).

However, even though community continues to be a powerful presence in our own times, and despite proliferation of deliberately constructed communities, the world has for a long time been moving away from a community-centric view of human existence in two widely divergent directions: the direction of the individual and the direction of the universal or the global. The well-being of the individual is seen to be more important than the well-being of the community. This perhaps is the genesis of the idea of human rights as of many other central concepts of the modern world. Humanity is sometimes conceived as the ‘community’ of all individual human beings. But this is a serious misconstrue of the idea of a community. Our attachment to the notion of community is profound and persistent. In equating humanity to a community, we not only give expression to this attachment but also invest it with a meaning it does not have. Given the radical change of perspective that has taken place, education must now be seen as fostering.

Values which constitute the well-being of the individual on the one hand and the well-being of humanity on the other. But the difficulty here of course, is to clear about the notion of the independent of the complex matrix of relationships in which an individual is inevitably located? And what is this all – inclusive humanity, as distinct from this or that specific variety of humanity? The lack of clarity about the idea of an individual and humanity as such is bound to create difficulties for us in thinking about the aims of education in our times. Thus, for instance, we have to find a way out of a seeming contradiction such as: We must encourage children to cultivate the ‘scientific temper’ (that is, the tendency to follow their reason beyond the dictates of culture, tradition, and community) and also teach them the unassailable values of humanity. Also, we must find a stable room for the nation between the individual and the humanity.

Our Planet and her peoples are in crisis. We need new ways of being and living. We believe that this begins within each of us as we are called into a deeper consciousness of our identity as members of the one sacred community of life where God is encountered. A developing awareness of the fragility of our planet and of the interconnectedness of all of the community of life has led to the establishment of ‘Care of the Earth,’ Cosmology and Sustainable Living groups throughout the Congregation. Education and practical work with Ecology and Land Care projects are undertaken by a number of sisters. Education programs are developed in the areas of ecology, earth-centered spirituality and earth ethics.

Nowadays human ecology is defined as the interdisciplinary scientific trend, integrating natural, social sciences, the humanities, the science of art and other sciences. This trend studies the interaction between an individual, the social system and the environment from its holistic perspective (Ernests & Jurmalietis, 2000, 44). According to M.M. Bubolz and M.S. Sontag (Bubolz & Sontag, 1993, 419-420), the Professors of Family and Child’s Ecology Department at the Human Ecology College of Michigan State University, the theories of human ecology are unique, because they focus on the studies of the interaction between a human being, as well as the social systems and environment. Nowadays the term ecology is used within various contexts. The meaning of the concept broadens. The scope of ecological research also has become considerably broader. The concept ecology means a complex scientific discipline, which studies the relations between the biosystem of organisms and supra-organisms and the environment, the movements of energy, substances and information, which take place in these systems. When the scope of ecological
research is widened, several trends of ecology develop. On the basis of our research, we can divide them into two basic trends: Bio-ecology and Human Ecology.

*Educational ecology or Ecology of Education* is a significant trend of interdisciplinary research, which is one of the basic trends of research performed at the Institute of Education and Home Economics at the Latvia University of Agriculture already since 1990s. During the last years there had been work continued on the conceptual substantiation of educational ecology and defining of this concept. Many trends of today’s human ecology can serve as the philosophical-methodological basis for the development of *education ecology* as a separate interdisciplinary trend of human ecology that opens a new perspective of the research in the science of pedagogy nowadays, including school pedagogy. In our explanatory glossary of terms we have given the following definition of the human ecology trend (Katane, 2007): *educational ecology is one of the trends of human ecology that is a discipline integrating natural, social sciences and the humanities researching in the interrelation of a person as an individual and/or a social system with the multidimensional environment in a holistic perspective in the aspect of education as means promoting the development of the sphere, process and result of human activities, the content of interrelation, human and environment qualities/characteristics.*

Educational ecology offers *ecological paradigm* in education; therefore nowadays it is important to develop the research methodology on educational ecology. There are different research levels in the modern science, which are shown in the research taxonomy model. The Taxonomy of Research (Katane, 2007). If a phenomenon — a thing, a fact or a process — is viewed and studied within the framework of one scientific discipline, we can call this *intradisciplinary* research. If a phenomenon is simultaneously studied by several researchers, representing different scientific disciplines, we can call this *multidisciplinary* research. If within the process of research *the integrative approach* is ensured on the basis of common conceptual approaches, methodology in different scientific disciplines and by using transfers; we can call this *interdisciplinary* research.

![Research Taxonomy Model](image-url)

If the work is carried out at the level of *scientific philosophy*, theoretically substantiating the both paradigms and conceptions and/or theories, and the uniqueness and universality of the conceptual approach, namely, possibility to use it for many or even for all scientific spheres through experimental approbation and proving also in practice, including research, we can call this *transdisciplinary* research. Due to the variety of the trends of human ecology, the varied explanations and interpretation of the concept *environment* are also transferred to educational ecology (Katane, 2007).

Environment — its *us* (social environment); Environment is *everything that surrounds us and is outside us*; Environment — *the totality of the reflections of real things, phenomena, processes in the human psyche*; Environment is *a multilevel ecological system (ecosystem), within which a human*
being as an endosystem - substructure of ecosystem; Environment is a multi-component and multi-
functional system of interaction, where the human being is an integral part of environment;
Environment as an interaction process; Environment as the sphere of human activities; Environment
as the field of semantics; Environment as a resource; Environment as a means for social
stratification.

In modern education it is important to respect the basic principles of environmental education
(Palmer, 1998): Education on environment; Education in environment and Education for
environment. Nowadays it is important to develop ecology of education pointing various
development perspectives.

**RESEARCH PERSPECTIVES IN THE SPHERE OF ECOLOGY OF EDUCATION**

At the end of the 20th century ecological approach was identified as an imperative in all the
spheres of human activities, including education, in order to:

- Forecast the changes that would take place in all the environmental contexts (natural,
social, cultural, mental etc.),
- promote the development of the ecological thinking of each individual separately and all
society on the whole;
- facilitate the environmental friendly attitude and the support of environment friendly
actions; prevent the consequences of an individual's inconsiderate activities/actions;
- ensure appropriate and friendly habitat environment (social, including educational, etc.
context) for the development of an individual as a personality and society as well;
- promote the sustainable development of environment, including facilitate the preservation
and further development of educational and cultural environment;
- Concepts sustainable development, sustainable education, education for sustainability
emerged in the scientific vocabulary at the end of the 20th century.

The researcher of future education, an educator D. Hicks (Hicks, 2004) has emphasized the idea: "If
the main mission of education is to serve to the future, then the needs of future mankind should be
clearly represented at all the educational levels". According to S. Sterling (Sterling, 2001), the crisis
in modern education can be managed, if there are found possibilities to protect humanistic and
democratic values as a contrast to the apparent forces of market economy and educational
management and their influence. According to S. Sterling, the developers of educational policy
often try to manage the educational crisis:

1) on the basis of economical regularities and principles,
2) By blaming only pupils/students/teachers/teaching staff, schools/higher educational
establishments, their own colleagues and/or particular authorities for their actions, this
does not ensure the solution of problems. Sustainable development of environment,
including natural environment, depends on educational sustainability. Individual's
ecological thinking and continuing learning ensures and promotes sustainable
development.

In our opinion, in order the changes would become the driving force for the individual's self-
development, instead of becoming an obstacle, there should be respected the following principles
in the pedagogical activities.

- There should be provided knowledge about the changes, in order to prevent the feelings of
disappointment, confusion and depression.
- The necessity for changes should be shown, understood, felt, and experienced. There
should be ensured the feeling of safety that everything happens for good.
- There should be provided enough time to understand and accept the changes. It is
important to have compassion, to think like others, to feel like others do. There should be
created conditions, where the idea about changes is accepted as one’s own.
- Openness to a dialogue enables an individual to involve in the facilitation of changes in all
possible ways. The dialogue may include debate, discussions, the expression of one's own
point of view, the expression and proving of an opposite view etc. Ecology of Education
offers several research perspectives, the substantiation of which we can find and develop in
the two main trends:
1) The Ecology of Human Development;
2) The Ecology of Systems Development.

The second of the research perspectives is related to the studies of sustainable development. The research performed in the field of environmental education also has a significant place within the Ecology of Education.

CONCLUSION

- Ecology of Education is one of the trends of human ecology with its own history. Educational ecology as an interdisciplinary trend of research offers a wide range of research opportunities in the field of education. There exist the following conceptual approaches of research in the field of educational ecology: the interdisciplinary approach, the ecological approach, the humanistic approach, which complementary supplement each other, ensuring the holistic approach, first of all, systems approach, in the educational research. Ecology of Education as a research trend has a scientifically substantiated philosophical-methodological basis.
- It is important in the educational research to move from the ecological paradigm to the modern educational process and/or research practice, the substantiation of which would be based on scientific conceptions, theories, as well as the environmental models developed by scientists. It is essential to base the development of environmental models on the systems approach, showing respect to the environmental taxonomy principle, as well as the classifications of environmental components/contexts.
- Ecology of Education offers several research perspectives, the substantiation of which we can find in the two main trends:
  1) Ecology of human development;
  2) Ecology of systems development.

One of the research perspectives is related to the studies of sustainable development. The research performed in the field of environmental education also has a significant place within the educational ecology.

REFERENCES