

An Ecocentric Paradigm: An Important Tool for Teachers of Environmental Education

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A B S T R A C T

The paper discusses the nature of an ecocentric view of humans and the Earth, and how this connects with the development of human spirituality. The relationship of these ideas to environmental education is explored, and an outline provided of how humanistic educational methods might contribute to students developing ecocentric views, their unique spirituality and environmentally supportive behaviours.

Teachers' work needs inclusive conceptual frameworks to assist them in the designing of learning and teaching activities. In environmental education an ecocentric world view may be used as such a framework. I started to use an ecocentric paradigm for these purposes in the early 1990s. Studies of this paradigm stimulated me to carry out investigations into the philosophical, pedagogical and psychological foundations of environmental education (Salite 1993 & 1994). My theoretical studies indicated that the aims of environmental education include those related to the development of attitudes. Results of my empirical research led me to conclude that teachers of environmental education need to realise three educational functions: the demonstration of an 'ecological culture' in their daily behaviour; the professional capacity to deal with tasks at the meta-curricular level of environmental education; and the capacity to create learning environments in which the building from non-ecological values to the ecological can occur. The research suggested (Salite 1993) that in the early 1990s:

- most teachers had not been professionally prepared to carry out the educational functions mentioned above
- teacher training institutions were not capable of orientating future teachers towards creative solutions for problems in environmental education
- teachers and students of teacher training institutions did not have a strong conviction that educational activities in environmental education should involve the development of pupils' attitudes toward the Earth, as well as the development of knowledge and skills.

'the development of pupils' ecological culture was a highly variable process'

Results of research about pupils' attitudes towards nature (Salite 1993) showed that the development of pupils' ecological culture was a highly variable process. Reasons for this variability included: differences in children's

sensitivity towards the environment at different ages; their lack of experience in communicating with nature; and their underdeveloped ecological values. The results of this research formed the background on which selected courses in teacher professional education programs, and a Masters degree program in pedagogy for environmental education in elementary schools, were created.

'implementation of an ecocentric paradigm requires special emphasis on spirituality'

Work on a teacher education curriculum in environmental education (Salite 1997) led me to the conclusion that an ecocentric paradigm could be used as an important tool by environmental education teachers. This tool helps to overcome the reaction created by commonly held anthropocentric attitudes in which ecocentrism is viewed as an unnatural and inconvenient system within the day-to-day experience of human beings.

Some years ago I started my work on the problem that the implementation of an ecocentric paradigm requires special emphasis on spirituality. I was interested in the question of how one could apply ecocentrism for the promotion of pupils' spiritual development within a model of humanistic pedagogy. In this paper the following aspects of a suggested theoretical framework are described:

- the nature of an ecocentric paradigm, and its role in environmental education
- current interpretations of spirituality and its close connections with ecocentrism, and the application of these ideas to education
- how the conceptual structure suggested by ecocentric approaches gives the teachers of integrated, humanistic programs the opportunity to integrate diverse ideas and practical activities to help all students develop their spirituality and to find their own way of spiritual interaction with the world.

'people describe themselves as part of the world'

Ecocentrism is well known in philosophy; it was alive in prehistorical society and is still observed in the traditions and ways of thinking of many nationalities. In pursuing ecocentric relationships people describe themselves as part of the world; they do not place themselves at 'the top' of the world, nor do they feel that they are something different from the world.

The essence of an ecocentric paradigm is that:

- the Earth is one of the results of the continuing self-developmental processes of the cosmos, all the elements of which create each other
- humankind is one of the results of these cosmic self-developmental processes—and this self development continues in each person
- spirituality is a characteristic trait of human beings, one in which the results of the self-development of a person's individual and unique being is revealed
- a person's spiritual being is one of the vital ways in which they come to be involved in interacting with the structures of the biosphere, joining with its functions and interacting with the universe.

This view does is congruent with other approaches, where spirituality has been described as:

- an attribute of every human being (Kule & Kulis 1996)
- the most essential need of humankind, one showing individual differences in its strength (Wolf 1996)
- a property fundamental to human relationships and which integrates us into bigger cultural, ecological and cosmological matrices whether we know about it or not (Kulis & Kulis 1996).

I argue that ecocentrism is necessarily spiritual. This is the most characteristic trait of an ecocentric paradigm. Education which reaches to people's spirituality can therefore be grounded in ecocentrism.

The necessity for an education which develops human spirituality can also be inferred from tendencies displayed by humankind in its evolution. In the context of this kind of history spirituality emerged late in humankind's developing its capabilities, and its thinking and learning about life on Earth. A brief summary of that development might be:-

- stage 1—*Homo erectus*: 1–1.5 million years ago—the development of physical powers and the abilities to make choices and to influence our own destiny.
- stage 2—*Homo sapiens neanderthalensis*: approximately 100 000 years ago—an active interaction with environments leading to ethical notions and further refinement of the ability to propose and realise aims.

- stage 3—*Homo sapiens sapiens*: approximately 40 000 years ago—building conscious, purposeful relationships with environments; discovering and constructing contexts, space and time. Initially these arrangements helped people to engage with natural systems in pantheistic, mythological and religious thinking. Eventually many humans separated themselves from nature; more recently, new ideas have emerged which help to develop human spiritual interaction with nature.
- stage 4—a future vision—*Homo sapiens spiritualis*: an unknown length of time after the year 2000. Ecocentric relationships form between humans and natural systems. A conscious and purposeful regulation of the exchanges of matter, energy and information. Possible for humans to develop arrangements of context, space and time so that they are the source of energy that is, the foundation for activities which promote the conservation of environmental and ecological structures. Qualitative improvement in spiritual interchange between humans and the universe.

'new levels of human-nature arrangements'

This history points out the development, from initial ecocentric connections between humans and nature, through to egoistic and anthropocentric attitudes creating a human-nature separation. The intensification of this separation led to the search for new kinds of arrangements of humans vis a vis the Earth. A return to ecocentric thinking will not mean a regression to ancient thinking, but will lead towards new levels of human-nature arrangements—steps towards humans being responsible for the effects their lives have and contributing to processes of development for humans and the Earth. Ecocentrism thus becomes a vision for the future; the 'ecological mission' of humans becomes the most essential trait of this vision.

An interpretation of spirituality

Spirituality can be interpreted according to the views of Vernadski (1978), Gumilev (1994) and Dwivedi (1988) who considered human beings to be a cosmoplanetary phenomenon, or the spiritual dimension of the biosphere. By this they meant that a person's spirituality is itself a cosmoplanetary phenomenon in which the result of their own individual and unique self-development appears. The process of spiritual development involves the releasing of a person's potential energy, or potential ability. With this releasing process the creation of information-and-energy relationships begins, and this provides the interaction between the inner and outer lived worlds of a human being. As a result of the development of these interactions, humans experience their own individual arrangements of context, space and time. Within these arrangements each

unique human being integrates with the structures and functions of the biosphere and the universe. Within them, humans spiritualise the universe, consciously managing exchanges of matter, energy and information. If this process is to be part of a co-evolutionary sequence it will correspond with the proposition put forward by Kaznachejev and Spirin (1988). This proposition says that living substance—such as a human being—can develop progressively only if it improves the order in its environment, that is if it promotes improvement of surrounding structures.

Thus, the directions of a person's energy utilisation become a predisposition for their own further qualitative development. The Latvian poet, J. Rainis (1981), wrote about this phenomenon of spiritual relationships in the following words:

Both taking and giving give us something. But only what is gained through giving can no-one take away.

'a person's spirituality will be realised and revealed if.....their actions in the world [contribute] to the development of environments'

This idea can be seen as a universal proposition which connects with the notion that a human beings are cosmoplanetary beings with spirituality as their essential trait—and it corresponds with Kaznachejev's and Spirin's idea presented above. A person's spirituality, therefore will unfold as a result of self-development processes in which their unique arrangements of contexts, space and time become the source of energy for conservation and for further positive changes in the qualities of external structures. In other words, a person's spirituality will be realised and revealed if the arrangements of meaning, space and time developed through their lifetime reach beyond the habits of everyday life and survival interests to establish, by their actions in the world, contributions to the development of environments.

This approach is similar to those which describe spirituality as that which:

- comes from a person's core, from their inner world (Groome 1998)
- neither separates people from their environments nor judges their experiences (Kule & Kulis 1996)
- discovers our values and the enlargement of our relationships as being beyond our individual selves and our self-discovered contexts of life. Such values and relationships are considered to extend to ecosystems and the universe, although they are influenced by feelings which are often unknown and impractical but

which still live in us, such as being oversensible, overhabitual, overpragmatic and overreligious (Wolf 1996)

- is revealed in the ways in which we use what we have in our feelings, knowledge and experience, and in what the application of these things means to us (Groome 1998).

This approach reveals some views which can be implemented in education:

- intelligence is viewed as the phenomenon which enables and results from the exchange of information and energy with environments
- thought can be seen as a result of cosmoplanetary processes and a tool for creative activities of human beings
- the developmental processes of intelligence/thinking/learning are constructive processes contributing to a person's context, space and time arrangements, with which as a unique being they engage themselves with the structures and functions of the biosphere and universe.

In such an approach, intelligence/thinking/learning are viewed as a united dynamic, multifaceted, functional capacity inherent within human consciousness, a capacity which may be expressed in a variety of modes (Clark 1997). Learning can be seen as a process that involves making connections, identifying patterns, and organising previously unrelated bits of knowledge, behaviour and action into new patterned wholes, and a basis for spiritual development is found in the capacity of intelligence/thinking/learning.

We can describe the developmental process of intelligence/thinking/learning as the most essential core of human being which is the framework for the creation of contextual, space and time arrangements—or spirituality.

From my point of view three closely connected and complementary aspects of intelligence/thinking/learning—the core of spirituality—may be discerned:

- emotional aspect of the development of intelligence/thinking/learning—or the emotional aspect of spirituality. Development occurs as a person moves from first forms of an individual/environment interaction—the ability to enjoy and express generalised emotional experiences in the environment, to the appreciation of separate spiritual feelings, such as caring and empathy, and their integration within higher stages of spiritual feelings. The latter involves loving relationships, or connection with other humans and other entities, alive and not alive, and the world, unselfishly giving them one's own energy.
- information-and-energy aspects of the development of intelligence/thinking/learning—or informational and energetical aspect of spirituality.

This starts with undifferentiated interactions, the simplest ability to perceive external influences and to evaluate environmental influences from the viewpoint of one's own needs, as well as to strive to fulfill the need for getting knowledge about the world. A person tries to interpret and understand the world as a whole, and themselves within this wholeness. They develop their self reflective thinking which enables them to reach deeper levels of existential awareness, in the process growing into responsibility for themselves, others and the world—and growing into the spiritual ground for purposeful exchange of matter, energy, information in the course of their actions.

- identity aspects of the development of intelligence/thinking/learning—or the identity aspects of spirituality.
These aspects start with a person's learning about the values of others, discovering and developing their own values, exploring the congruence between individual and group values, and becoming aware of self and self-value all of which become the basis for the choice of aims which will bring meaning to that person's life.

'there follows a spiritual approach to learning and teaching'

From these considerations there follows a spiritual approach to learning and teaching which will take care of the development of each student's internal potential. The central aim of such an approach will be the facilitating of the self-development of each person as a unique being by assisting their pursuit of aesthetics, ethics and ideas, helping them to enhance all three within themselves and the world.

Spirituality in environmental education

The realisation of ecocentric and spiritual ideas in education makes at least the following three demands on teachers:

- skills to identify the most important aspects of spiritual development
- awareness of the attributes and psychological phenomena of ecocentric development, as well as the skills to set up learning experiences for the development of the aspects, attributes and phenomena mentioned above, which are based on ecocentric and spiritual bonds with the world.

The realisation of these two demands will depend on the ability of teachers to keep in their fields of professional thinking and acting the components of spiritual development shown in Figure 1 below.

- ability to create their own methods of work by the development of skills in constructing the kinds of

educational approaches which help to pupils to apprehend their spirituality.

Figure 1: Significant factors in spiritual development

- Investigation of the world, mastering the diverse contexts and incorporating knowledge and experience of many different activities
- Core of spirituality—development of intelligence/thinking/learning, creating an individual's arrangements of context, space and time.
- Information and energy aspect of spirituality
- Emotional aspect of spirituality
- Identity aspect of spirituality
- Development of emotional experiences and empathy
- Development of ecological values, ecological self and ecological identity
- Promoting the development of ecophilia—a love of the Earth

'The fundamental need.....is for teachers to perceive each pupil as a spiritual being'

The fundamental need in these approaches is for teachers to perceive each pupil as a spiritual being and to have an awareness of the diversity of ways of approaching the development of spirituality through ecocentrism. Teachers, with their pupils, search for the ways to develop their spiritualities. The selection of these ways requires the implementation of many important pedagogical skills.

In my work with the teachers I ask them to develop their approaches to planning educational activities. Construction of these approaches asks from teachers the ability to use the diverse opportunities found in contemporary environmental education for the development of spirituality on the basis of ecocentrism. Construction of such approaches requires the uniting of pupils' needs—or the most 'real' problems of their life—with the development of the values which provide the basis for their relationships with the world. These manifest themselves in pupils' activities as the expressions of ecological self and ecological identity. A second important process is the opportunity for pupils to discover the subjective and ecosystem contexts peculiar to them, that is, their attitudes towards observed phenomena and what they understand about their connectedness with the Earth—what the Earth 'means' to them.

In the last few years of my work with teachers I have tried to help them learn how to find ways of applying an ecocentric paradigm and spirituality in their work. A model of learning and teaching which provides the opportunity to work with meta-curricular problems where content can be used as the tool has been very useful in this work. In this model, educational experiences are considered to have two areas of student learning and teachers' work. One of these consists of curricular components which attend to the

content of 'subjects'. In the second, students and teachers deal with meta-curricular matters—or what is often implicit rather than explicit content and issues. These include the discovered meanings which students develop in the process of being active in the world, of contributing to the development of their environments—out of which their ecocentric attitudes, and their spirituality—develop.

As discussed above, development of the individual self and the ecological higher self is a central concern of ecocentrism and fundamental to a person's spirituality. An holistic approach to education focuses on the development of these selves in its seeking to establish the interconnectedness of all things. This pursuit necessitates the use of integrated methods and makes it possible for teachers to create their own humanistic models of education. Because the development of the learner is the focus of humanistic pedagogy, that is the content of learning is subordinated to this development, the structure of educational activities can usefully be viewed in this twofold curriculum/meta-curriculum framework.

In humanistic approaches the primary objectives are meta-curricular or attitudinal—or, in the present discussion, ecocentric and spiritual—which subordinate the content objectives. The successful application of humanistic method is only possible when there is a correspondence between curricular and meta-curricular objectives. This process, then, demands that teachers manage their professional work such that curriculum content, dealing as it does with the needs and skills 'typical' of an 'imagined' group of students, is subordinated and complementary to what I have called meta-curriculum 'content'—the needs and skills 'specific' to the 'real' group of students present in the classroom or other setting for learning, and to issues and 'life matters' which correspond with their experiences and interests.

Summary

The intention of this paper has been to discuss how integrated/humanistic programs, if properly designed and presented, can contribute to the promotion of students' ecocentric/spiritual development. In doing so, such programs will realise the intent of environmental education—that students, in pursuing the development of their individual and ecological selves, take action to contribute to the ongoing development of the Earth's environments. ☺

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