Action Competence and Environmental Education

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ABSTRACT  A sharper profile of environmental education is needed to improve the quality of future environmental education. This involves an understanding of the conceptions related to 'environmental issues'. It is argued that environmental issues have to be understood as issues in the community with conflicting interests at several levels. At the same time the authors argue for the development of the 'action competence' of the pupils as the main goal of the new generation of environmental education and refer to promising findings from Danish environmental education, mainly from the MUVIN Programme.

TOWARDS A SHARPER PROFILE OF ENVIRONMENTAL EDUCATION

The success of environmental education is not only dependent on efforts to increase its distribution. The future success for environmental education will increasingly depend on how well we are able to improve its quality and critical potential, not least through a sharper profile of environmental education.

Too many educational activities have been included in the category environmental education and many more educators have to reflect further on what should be the central content of environmental education before the quality of environmental education can develop substantially.

Underlying the idea of sharpening the profile of environmental education is the premise that not every educational activity related to the environment should be considered a part of environmental education. Environmental education is not mainly teaching about the environment. What should be in focus are the environmental issues man faces through his use of natural resources and the possibilities of overcoming and preventing them in the future.

Accordingly, environmental education is not the same as nature studies. Nature has no problems, but human communities have problems with the way they use nature because that use generates problems for our living conditions now and in the future. Nature becomes 'environment' because we have an interest in extracting resources from nature and because we depend on a health-promoting environment in a broad sense, both now and in the future.

A closer look at every imaginable environmental issue will reveal involved
conflicting interests in the use of natural resources in all of them. This is a
general quality of all community issues. That is why environmental issues are
not just 'evaporating' by themselves when people gain knowledge of them.

Issues in the community appear at three levels, at least:

- on the individual level conflict exists between incompatible needs and
  wishes, often expressed as personal dilemmas;
- on the social level conflicting interests exist between various groups
  and/or individuals; and
- conflicting interests can be regarded as conflicts at the structural level of
  society, e.g. conflicts between political decisions and market forces or
  economical mechanisms.

If environmental education is to deal with the real environmental issues we
have to face all three levels of conflicting interests. Pupils' work on an environ-
mental issue should thus include identifying, exposing and analysing the
conflicting interests and how they affect our future.

FROM BEHAVIOUR MODIFICATION TO ACTION COMPETENCE

The concept 'action competence' has in recent years played a central role in the
pedagogical discussion of environmental education in Denmark. To develop the
pupils' action competence means developing their ability and will to take part in
democratic processes concerning man's exploitation of and dependence on
natural resources in a critical way (Jensen & Schnack, 1997; Breiting et al.,
1999).

Thus, in Denmark the overall objective of environmental education is seen
as development of the pupils' action competence. This approach to environmen-
tal education is basically different from mainstream environmental education,
seen as the goal to improve and save the environment here and now though
behaviour modification of the pupils. In the action competence approach we see
environmental education as an educational effort benefitting the pupils here and
now. Of course, it is the intention that the pupils in the long run will be better
qualified to handle environmental problems, but teaching in the schools is first
and foremost aimed at the far-sighted goal of action competence and we can say
with the immediate goal of how to live with environmental issues as a part of
children's daily life.

These are two different approaches to environmental education. The action
competence approach is related to developing a critical, reflective and participa-
tory approach by which the developing adult can cope with future environmen-
tal problems. The behaviour modification approach aims at prescribing certain
of the pupils' behavioural patterns which we here and now believe will contrib-
ute to solving current environmental problems.

Assessment of the objective of the first approach must be seen in connec-
tion with whether it has developed the pupils' will and ability to be involved in
environmental issues in a democratic way, by forming their own criteria for
decision making and choice of action. Action must in this sense be seen in a future perspective, where direction is not given beforehand. The objective of the second approach can, on the other hand, be related to actual environmentally friendly behaviour where direction is given. In this way, the ‘success’ of environmental education can be assessed by focussing on a reduction in the pupils’ use of water, electricity or the like.

Hence, the democratic perspective on action competence means that the concept is not a deterministic prescribing concept per se in that it points to specific behaviours or to specific understandings of the future society. It is rather prescribing an obligation to question critically but fairly, and act according to the answers found.

THE NEW GENERATION OF ENVIRONMENTAL EDUCATION

The action competence approach to environmental education outlined in brief above is considered to be much more coherent and consistent in its logic and more acceptable from a democratic point of view than the mainstream approach to environmental education. At the same time it also seems to be much more efficacious in seriously addressing the environmental challenges to the generation growing up without being fuel for their apathy or narcissism. It has been called ‘the new generation of environmental education’ because basically it is a new paradigm of environmental education (Breiting, 1993, 1995).

EXPERIENCES FROM THE MUVIN-DK PROGRAMME

The concept of action competence has been investigated empirically in the Danish research and development project MUVIN (an acronym for Environmental Education in Nordic Countries). In the MUVIN Project 85 primary and lower secondary schools were involved from August 1994 to July 1996. This makes a total of ~2000 pupils and 300 teachers developing their teaching in environmental issues. Until now, the MUVIN Project has formed the basis for the most extensive Danish research in the field of environmental education building on the same theoretical idea.

Important aspects related to the development of the pupils action competence have been investigated. Thus, from a number of empirical approaches research has focused on the following questions connected to the school projects:

- In what ways will a pupil’s belief in his/her own influence be affected by the teaching?
- How do pupil’s learn the concept of conflicting interests and how do they use it in understanding environmental problems and the possibilities for action taking?
- The value of different types of experiences in taking action in environmental education?
These three questions of focus were, among others, researched through a questionnaire to all pupils from grades 5–10. The questionnaire was constructed as a 7-page Likert-like type questionnaire with 37 items, giving good possibilities for correlation tests.

Analysis of the quantitative data from the questionnaire showed that teaching which builds on the ideas from MUVIN has contributed to developing pupils' action competence: this teaching has made the pupils' more keen on dealing with solving environmental problems and the pupils believe that they have learnt something in the teaching which has made them more able to have an influence on the solving of some environmental problems.

Another valuable experience has been that almost 3/4 of the pupils considered that concrete action directed towards the solving of an environmental problem must be an essential part of the teaching. This is a substantial finding of the research which must be coupled with the strong co-variation between three central components of action competence (Figure 1; Breiting et al., 1999).

The strong relationship between these three components of action competence indicates how essential it is that they be seen in relation to both further research and new practice for the development of environmental education.

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