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Didactic Options for the Environmental Education

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Abstract

Didactical implications of the environmental education reveal a clear image about the peculiarities of the social reality. Therefore, features of such an approach require the understanding, in pragmatic terms, of the social reality combined with the dimension of environmental education. Moreover, the acceptance of social pragmatism related to an educational reality legitimizes the fact that the size of the environmental education guides the assumed finalities towards social innovation. Moreover, we believe that the importance granted to this paradigm expresses the structural organization of a social system. However, the quality of a social system depends considerably on the educational dimension promoted.

Keywords: environmental education, social pragmatism, environment, educational initiative

1. Introduction

An important issue within the educational system is supporting a preparation of competent persons on their own specialization and also on similar scientific fields (or, why not, various but related, specializations). What is relevant in this case is given precisely by the interdisciplinary connections and by the conceptual-theoretical transfer resulted from new scientific results. Thus, the socio-educational actors involved in this activity should assume every action throughout this valuing initiative, where the idea of responsibility is a priority issue in terms of increasing the...
scientific knowledge. In this manner, at the level of human consciousness is visible a scientific-axiological weight, according to which there are established connections between different levels of reality.

This approach is supported by a concrete educational model designed, in fact, on true value skills as they are perceived at the social level. Moreover, methodological influences visible in a purely pragmatic social environment legitimate the fact that education is reported in its approach about (self) training at some knowable-axiological structures, where also occur a number of didactical contradictions (Stevenson, 2007). Furthermore, the expression of pragmatism at the social level involves on the one hand, a number of conceptual and theoretical correlations on socio-educational forms of organization, corroborated with scientific aspects of environmental education, and on the other hand, critical approach (Huckle, 1993) and/ or critical analysis (Hart & Nolan, 1999). For this purpose, we recognize that to become pragmatic, a social system must be built first and foremost on spontaneous education. Secondly, we believe that a perspective of social effective policy involves a specific approach on the environmental education. Therefore, the social and methodological correspondences transpose into an operational plan the entered finalities within the educational demarche.

2. Scientific substantiation for environmental education

Scientific substantiation for environmental education involves explanatory-normative valences of the axiological structures within which are analyzed, in epistemological terms, forms of the social reality. For this purpose, on axiological level, instructional activities initiated and undertaken by socio-educational actors points to the idea of epistemology for environmental education, which highlights a number of specific research methods (Franson; Gärling, 1990). Therefore, taking into account this valuing approach involves the reassessment of the educational dimensions and of the conceptual-theoretical correlations regarding the scientific substantiation of environmental education.

Depending on the specific strategies approached at the level of environmental education, social actors relate to an initiative where a distinctive scientific methodology can be found. Such methodology reveals a concept that in the specialty literature is known as didactics. We have to deal in this case with a number of choices, by means of which to emphasize, at the social level, the pragmatism of the environmental education. We consider that this pragmatism can be justified by appealing to the idea of sustainable future (Diduck, 1999). Therefore, a study of the relation between social reality and environmental education reveals a specific approach of the beliefs and attitudes specific of contemporary society, related to the quality of future Environmental Education (Breiting & Mogensen, 1999).

Such a variety of social understanding forms represents a gain for knowledge, meaning that the facts of social life can be interpreted scientifically in relation with the central issues of society. Human nature experiences, resulting from such a process, do nothing but reflect the result of a gradual transformation in society. This kind of transformation, in a positive or less positive sense, (Giglioti, 1990) is obvious when we analyze the environmental education dimension.

The conceptual confusion between environmental education, environmental management education, conservation education, outdoor education reveals a number of aspects which express the need to reassess the dimensions of analysis and explanation to which it relates can acquire practical validity (Roth, 1970). For this purpose, the term “environmental education” should be, in our opinion, analyzed from a didactical perspective at the level of the educational process. We bring into question, in this context, the necessity of educational models in which the didactical nature of environmental education didactics would represent a relevant vector regarding the legitimacy of this endeavour.

2.1. A pragmatic perspective on environmental education

The pragmatic perspective of such a model of environmental education illustrates a methodological correspondence between goals for curriculum development and the strategies of implementation that validate the didactical approach. Such a paradigm also requires, from a pedagogical point of view, the correlation between a substantial volume of information about environment with the need for specific training programs/ viable financial programs (Athman & Monroe, 2001). For example, at the level of learning process or within the (interdisciplinary)
teaching activities we can achieve a series of programs that, through a simulation process specific to environmental education, gain a practical finality.

Furthermore, perceived as "a new educational movement" (Swan, 1969), but also as "a global problem" (Gayford, 1987), environmental education has, in the specialized literature and practice, different interpretations of the assumed purpose (Ham & Sewing, 1987), relating to three distinct approaches (Lucas, 1972). Therefore, the idea of environmental education implies taking into account its theoretical and applicative dimension concerning the environment sustainability through the quality - degradation ratio. In these circumstances, we notice, theoretically, an evolution of the idea of environmental education towards the education for sustainable development (Fien & Tilbury, 2002), and in practice a reassessment process with regard to the acknowledgement of specific strategies.

The substantiation of educational strategies at different social levels involves an epistemic analysis of the environmental education. In this manner the educational analysis focuses on the correlation: objectives - content methodology – assessment. Therefore, we believe that this strategy of approach can provide the necessary preconditions for an effective assessment of the dimension of environmental education.

2.2. Active methodology reported to environmental education

Educational process involves a number of cognitive and affective approaches. Therefore, viewed as an integral system, the didactic methodology requires taking into account the research strategies and the application of informational content. For this purpose, a methodology is regarded as an "aggregate" of methods, procedures and techniques based on pedagogical and/or didactical principles. Therefore, a didactic methodology requires a theory about method, embodied at the level of practical action, within which are obvious goals and objectives for instruction in Environmental Education (Hungerford & Volk, 1990).

The educational strategies that are assumed at social level reflect a certain trend towards the scientific globalization, fact that should not be condemned, as long as everything is made in the name of a pragmatic humanism. The context of educational reforms emphasizes the need of something new in learning process. By example, student involvement in the environmental problems confers a sense of accountability and active participation (Tilbury, 1997) for the social awareness. Also, environmental education can be validated only by focusing on results (Greenall, 1981), as the focus point of an active methodology.

In this way a new scientific perspective assumes the socio-professional training of educational actors. As a result, the contemporary society simply has to sustain a performance education, through which the new obtained results should acquire a pragmatic character, all these, reported to the relationship social system-educational system.

Therefore as a result of significant changes occurred over recent years in the social reality, as well as to the environmental status, the analysis made on the modalities of strategies embodiment concerning the development of activities characteristic for Environmental Education should aim, in our opinion, at the development and implementation of active methodologies (into learning process) that would constitute a solid support for teaching and learning activities.

3. Revaluation of social reality in terms of environmental education

When we talk about didactic methodology as regards a social system, we admit that we must also take into account the terms of competences of the social actors. In other words, the organization of skills within the education environment, designed, moreover as part of the educational process (Stapp, 1969), implies the consideration of development strategies in the process of socialization. In addition, we believe that socio-educational actors should take into account what is known in the specialized literature under the designation of didactic option.

Perhaps, therefore, as a result of significant changes occurred over recent years in the social reality as well as into the environment the analysis made on the modalities of embodiment of the strategies concerning development of the activities characteristic Environmental Education should aim at in our opinion development and implementation of methodologies active (into learning process) that would constitute a solid support as regards taking the teaching-learning activities.
However, in the terms of a didactical methodology (Rickinson, 2001), we can identify in the specialized literature a number of barriers for what environmental education represents. Among these, there can be mentioned the "conceptual barriers" (those that show a lack of consistent identity) and "logistical barriers" (those arising from misunderstanding, enforcement resources or curriculum imbalance). In addition, another barrier retrieved within teaching processes is given precisely by the lack of specific competences as regards the teaching methods (Ham & Sewing, 1988). Therefore, the analysis of the approaches on environmental education from a didactical point of view require a methodological approach that acquires meaning and significance depending on the didactical options assumed by the educational actors (teachers, pupils / students).

Environmental education, distinct from environmental teaching (Buiatti, 1995) becomes significant in citizens' learning process. To this end, the diversity of practical actions that are found in schools emphasize a number of approach strategies based on didactic options. Such options are found at the level of initiated activities in the educational process, as part of the curriculum. Environmental protection is materialized into researches through methodological strategies (didactic options) designed to provide a scientific explanation to causes and effects of (direct or indirect) certain measures.

This issue brings into focus a number of aspects that come to show the need to support the educational system of an environmental behaviour. In addition, promoting and actively supporting such behaviour among children or young people in general should constitute strategic coordinates of educational policy. We recall some of the most important kinds of active promotion of an environment behaviour: research on sources of pro-environmental behavior, socialization for democratic skills and values, the development of a personal sense of competence, and the development of collective competence” (Chawla & Cushing, 2007).

In line with the previous mentioned authors, we support their theoretical inquiry, with the specification that these four dimensions may be linked to the idea mentioned at the beginning of this paper, namely, that of a concrete educational model, designed on true value skills as they are perceived at the social level. Moreover, through this assumption, we would like to emphasise that the scientific – theoretical and practical – groundwork of the dimension environmental education involves the acceptance of those specific teaching and learning strategies. One example that we can offer in this context is that based on a series of conducted partnerships (Means, 1998), but also on the materialized research programs aimed at promoting and supporting various initiatives related to the environmental education issues such as the contact with environmental teaching (Connell, Fien, Lee, Sykes, & Yencken, 1999), or carrying out activities involving the manipulation of organic substances (Bixler & Floyd, 1999).

3.1. Legitimizing the environmental educational paradigm

The diversification of the teaching strategies shows an entire process of metamorphosis of the educational paradigm. This fact becomes obvious in the specialized literature when we analyze the relation between pedagogy and the sciences that use the applied research in the education field. The epistemological foundation of educational structures must exploit a step in which the specific responsibility of a certain educational field should be complementary to the explicit process of the rules that legitimize this paradigm.

Environmental education seen as permanent practice requires a recovery on the psychosocial behavior of the social actors. In other words, understanding the social reality points to the idea that the evaluation of physical phenomena and processes depends on how social actors operate on the environment. We consider in this context the fundamental mutations in the environment and their social, psychological and physical impact on society. In this regard, we consider it necessary in the reorganization of the social system and, hence, if the reconstruction of the environment, assuming some new rescue strategies.

Under these conditions, natural resources and the methodology involved support a certain form of educational dimension related to the social reality. Therefore, the attitude of community can be justified since the values relate to the social norms and to the idea of responsibility (Jeder, 2011). Moreover, environmental education is perceived at the educational level as an interdisciplinary process where “an analysis of human values tends to a specific form of social pragmatism” (Posteucă, 2013). The role of environmental education refers to a set of ontological conditions through which understanding of common features enables a classification (division) of the uniquely human features. Therefore, we believe that the socio-cultural significance must relate to the idea of environmental education, within which concepts like training and purpose hold an important role.
Instrumental value of quality in the educational act depends on certain scientific criteria assumed at the social level. It is about an education materialized so far as the idea of reassessment of the educational contents relates to social issues of utmost importance. Educational strategies assumed at the level of the educational process illustrate figures designed to support ideas about the surrounding environment. Education in the family is an important step in the defense of environmental education (Sabo, 2011). In this context, we support the idea of a new reform in school, regarding the potential of the environmental education in the sense of a “reshape” (Sauvé, 1999). Therefore, the trend towards flexibility and continuity of the environmental education involves a series of methodological connections, from a discursive scheme towards a theoretical and an applicative level.

3.2. Didactical values and attitudes for environment education

Scientific legitimacy of the environmental education highlights the need for explanatory models in the social reality. The dynamics of such an approach constitutes a pragmatic operationalization of the main activities carried out at the level of the social reality. In this manner, the evaluation of environmental education is possible as far as the methodological context taken depends on the behaviour the social actors. Pedagogical values must gain, within the educational design, the value of universally applicable directives, addressing to multicultural and inter-environmental issues.

The idea we wish to emphasize refers to the fact that the didactic options for the environmental education are closely related sequences of value encountered in the educational system. In other words, the specific values of environmental education acquire pragmatic relevance in the extent that they find their correspondent in the learning universe of discourse. We can speak in this case about a certain cohesion brought together within an organizational and social culture in which sequences of characteristic values are structured in relation to the internal / external changes.

The current context of economic and social development highlights a change in attitude as regards the Environmental Behaviour. Therefore, concerning the re-conceptualisations of environmental education, Stevenson and Evans talk about "expanding the place of nature study", "nature experience", and "developing environmental responsible behaviour" (2011). In this approach we note the dynamic and complex nature of how it is perceived, explained and assumed such a change of attitude concerning the (re)configuration of environmental concepts translated as educational principles. Directly associated with the values that it promotes, environmental education the generally emphasizes the real conditionings between didactics and environmental behaviour.

Conclusions

A specific typology for environmental education refers to an epistemological analysis of the new assumed model. It's about accepting in this demarche a new form of education in the context of a scientific dimension. Certainly, such a perspective can be explained by the fact that the social reality is illustrated according to certain socio-educational policies regarding the environment.

Of course, the meanings of the explanatory approach initiated for this scientific endeavour show the role of environment education in the learning process. Actively involved in this process, the current society assumes the attribute of responsibility in the transmission of different interpretations of the environmental education reality. For this purpose, we believe that an analysis of the conditionings implied in the assuming and defining of every educational dimension represents and should remain a pragmatic approach through which activities can be evaluated to the extent that their purpose acquires social / economic validity.

We also consider that the theoretical and practical share of the environmental education depends on the social meanings retrieved at the society level. For this purpose, a form of such educational dimensions is given by the environmental education itself. In consequence, the basis of a decision taken at a social level, depending on a specific educational form, namely, environmental education, reflects the fact that the scientific unity within the sustained methodology requires explanatory and normative valences of the strategies approached. Therefore, we are
entitled to say that environmental education is an individual form of a social paradigm, form that acquires meaning and significance depending on the didactic options retrieved at the level of the learning process.

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