

ABSTRACT

TOWARDS IMPROVING THE STATUS OF FORMAL AND NONFORMAL ENVIRONMENTAL EDUCATION IN JORDAN

As raising environmental literacy among all citizens has become one of the current international educational priorities, environmental education (EE) splits its essence in all educational systems. Therefore, the purpose of this study was to improve the current situation of EE in Jordan through surveying the status of formal and nonformal EE programs, as perceived by formal educators and environmental awareness program leaders.

The study addressed the main current question regarding teaching and learning in EE: “why some teachers are infusing EE more than other teachers to their educational settings.” A theoretical perspective is offered that links teachers' commitments to teaching EE to the beliefs and attitudes about teaching EE, as well as to significant life experiences. Therefore, the study explains the reasons such a theory may be useful in EE research and training; summarizes the synthesis and reasoning that led to the theory; and outlines the theory and its implications for further research. The study discussed three areas of existing research and theory that provide a basis for the theoretical development: the theory of planned behavior, life-span developmental theory, and field theory. Each theory is examined for its value in describing teachers' self-confidence in teaching EE and its explanatory power for use in the proposed EE Model. This model is explained in detail, and implications for future research are offered.

On the other hand, the study identified a considerable number of programs that were conducted in formal and nonformal sectors to achieve the goals and objectives of EE. Most of these efforts were isolated, limited to a single institution, and loosely connected. In addition, the results gave some insights into the constraints and opportunities relating to the implementation of EE in Jordanian schools.

Accordingly, the population of the study consisted of two categories. The first category was that of the formal educators at the Ministry of Education in Jordan. The selected sample was comprised of 347 formal educators. The second category was that of the environmental awareness program leaders. The sample was selected from 11 environmental conservation organizations. Consequently, two special instruments were developed; the basic format of the instruments was based on the guidelines for EE programs, which were developed by the Wisconsin Center for EE in the United States. After the data were collected, they were statistically analyzed, while the qualitative data and the comments of the respondents were summarized.

The results show that almost 30% of formal educators indicated that their institutions hold EE programs, and about 20% have shared EE programs with other agencies, while about 37% of formal educators in Jordan currently infuse education about the environment into their educational settings.

Males of formal educators in Jordan tend to infuse EE into their educational settings more than females do. Formal educators with higher qualifications and educational experiences tend to infuse EE into their educational settings more than those with lower qualifications and educational experiences. In relation to teaching subjects, formal educators tend to infuse EE into their educational settings in the following order: Fine Arts, Science, Religion, Arabic, English, Math, Social Studies, and finally, Sports.

The slow pace at which EE has progressed in Jordanian schools, as perceived by formal educators, is a reflection of a number of influences: inadequate support from administration; insufficient emphasis on teacher training programs in environmental issues; a lack of appropriate preparation time; inadequate funding; inadequate access to educational resources to facilitate the implementation of EE into school curriculum; and the lack of knowledge to effectively monitor EE activities.

Most formal educators, who indicated that they infuse EE into their educational settings, see that the best teaching methods are those which put emphasis on environmental values and consider that a child-centered approach is more appropriate for teaching and learning in EE. In addition, the most serious aspects of EE are the personal responsibility for the conservation of the environment; the awareness of local environmental issues; and environmental ethics.

On the other hand, nonformal EE has the potential to enhance the work of the formal education system. The results showed considerable bodies of EE programs within the nonformal education sector that have been initiated to increase environmental awareness. In general, nonformal EE programs and activities are awareness programs directed to the public and school students, publications, and a little of training programs.

Unexpectedly, less than 20% of awareness program leaders have received training on EE or on how to deliver environmentally oriented programs. In addition, the NGOs' involvement in the national public awareness campaigns should be noted, since most EE programs are undertaken by the following NGOs: Jordan Environment Society, Royal Society for the Conservation of Nature, and Friends of the Environment Society.

The findings show that formal educators and awareness program leaders need more educational resources and EE training programs. Moreover, they should work more closely together. In this regard, the researcher recommends that the presence of a national coordinating office would team up EE programs and not waste limited resources by duplicating efforts. Such an EE office should be based on the General Corporation for Environment Protection, the Ministry of Education, environmental conservation organizations and the Higher Education Council.

In addition, the researcher proposes an instructional model, which is relevant to the situation of Jordanian schools. It sets up cooperation between formal education sector on one side and community organizations on the other side. The proposed model relies on the effectiveness of first-hand experience, learning by doing, and involvement in local environmental issues. In the model, students choose an issue of personal interest, investigate that issue in depth, and develop issue-resolution action plans that are subsequently evaluated and implemented. In this occasion, school laboratories become candidates to be the homes of EE programs, and the starting points of outdoor activities.

Finally, other recommendations and proposals for improving formal and nonformal EE in Jordan, and areas for further research, are presented.