

PRE-SERVICE TEACHERS' PERCEPTIONS ABOUT USING EXPERIENTIAL LEARNING FOR TEACHING ENVIRONMENTAL EDUCATION : HOW CLOSE IS THE PARTNERSHIP ?

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Abstract : Experiential learning is considered to be a recent teaching approach in a general educational framework, which is related to learning through authentic direct experiences. However, the learning process within the educational system in India is mainly based on traditional models of teaching. Despite that fact, the NCF 2005 requires a teacher to be a facilitator of children's learning in a manner that the child is helped to construct his/her knowledge. Thus, the current research is focused on an add on program related study on experiential learning and teaching of environmental education in teacher education institute in Mumbai. Specifically, the focal point is on pre-service teachers' perceptions regarding the experiential learning as an approach within environmental education curriculum and the possibilities of implementing activities, in order to enhance students' learning. Through a qualitative approach, this research included analysis of the data extracted from open ended questionnaire with 30 pre-service teachers. The data were analysed thematically and summarized in various themes related to the connections between experiential learning and environmental education. The analysis indicated that pre-service teachers had largely positive perceptions towards the experiential model. The findings showed that the pre-service teachers recognized multiple benefits of experiential learning including increased subject matter retention among students, active engagement, use of higher order thinking skills, and academic success.

Key words: Experiential Learning, Environmental Education, Pre-Service Teachers

1. INTRODUCTION

Everybody experiences far more than he understands. Yet it is experience, rather than understanding that influences behaviour. –McLuhan

Presently, in the field of teacher education there is an increasing interest in the experiential learning environment as a constructive complement to the old-fashioned classroom teaching. Experiential learning has indeed caught the attention of many educators around the world who are

actively researching on their impact on different subject areas of learning and to evaluate the different perspectives about them. The schools are claiming for such teachers that who can teach students the competencies they need for real-world success. So it is utmost need for teacher educators to train pre-service teachers for authentic experiential learning. Thus, Sullivan and Rosin (2008) argue that the mission for higher education should be to bridge the gap between theory and practice and Bass (2012) suggests that to do this, the educational environment needs to intentionally create rich connections between the formal and experiential curriculums. The researcher feels that the nature of Environmental education demands teacher education to provide pre-service teachers with activities that cover complex societal issues, enhance critical thinking and to promote interdisciplinary and holistic learning. Therefore to expose pre-service teachers to experiential learning approach in teaching environmental concepts five days workshop was carried out. After the workshop the researcher wanted to know pre-service teachers' perception about incorporating experiential learning in teaching of environmental education.

This research aims to answer the following research question:

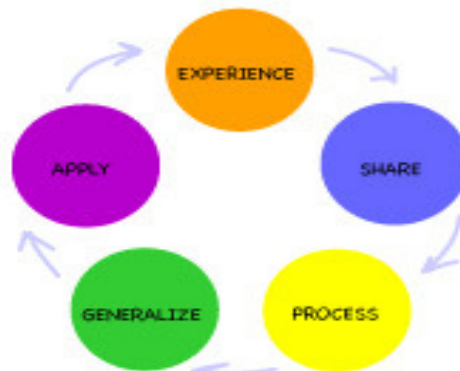
What are pre-service teachers' perceptions about incorporating experiential learning in teaching of environmental education.

2. Background

The definition of experiential education is dependent upon each person and each situation. Dewey (1938) believed that all true learning is based on experiences, and in order to continue learning, one must continually question and evaluate their own experiences. Kolb (1984) furthers this, stating that the purpose of education is to stimulate inquiry and skill in the process of acquiring knowledge, not to memorize a body of information. Research into the use of experiential learning in the university classroom has shown that student motivation and satisfaction are elevated through active participation in learning (Acosta, 1991; Baslow and Byrne, 1993; Cranton, 1989) Recent efforts to improve higher education have focused on the learning process (Kolb & Kolb, 2005). Such investigations into the learning process have led to a significant change in education from the traditional, knowledge-transfer approach to a more interactive, experiential approach across a wide range of disciplines such as business and management, education, medicine and nursing, and psychology (Kolb & Kolb, 2006). So there is need to have different pedagogies for adults to teach as characteristics of learners should match up with as students begin to understand concepts and apply them, they are motivated to learn, thus spurring on new experiential activities. So in order to combine experiential learning and environmental education the researcher had used a framework of

experiential learning cycle given by Pfeiffer and Jones (1975)

Experiential Learning



<http://www.experientiallearning.ucdavis.edu/images/icon-el-cycle-text.jpg>

3. Methodology

3.1 Research design

In this research case study was undertaken from a phenomenographic perspective (Cohen, Manion, & Morrison, 2007) to study the pre-service teachers' perceptions of using experiential learning in environmental education.

3.2. Study participants

The research involved 30 pre-service teachers, who opted for environmental education as a special field in the year 2014-15.

3.3. Instrument

In this research open ended questionnaire was used to gain data from participants in order to identify perceptions of using experiential learning in environmental education. There were 3 open ended questions put in the questionnaire: first question as related to meaning of experiential learning second was about connection between experiential learning approach with environmental education and third was on Experiential learning approach as an effective pedagogy to teach environmental education. The questions were framed keeping in mind the research question in mind which the researcher wanted to explore through this study.

4. Data analysis

Data analysis was conducted using a constant comparative approach to thematic analysis, including open coding (Strauss and Corbin 1998; Thorne 2000). First, sections of the transcripts were manually coded and organized into categories with common themes.

Table4.1–Open ended questions and inquiry logic

Sr No.	Interview questions	Inquiry logic	Themes emerged from responses of pre-service teachers
1.	Have you heard about experiential learning? What according to you is experiential learning	Meaning of experiential learning	<p>Experiential learning encompassing Inquiry based learning: <i>“Earlier I was unaware about his but now I know Experiential learning is a form of inquiry based learning. It’s a 5 E cycle which follows a systematic order to engage students. An approach to develop thinking skills in students and help them find their own solutions.”</i></p> <p>Active Engagement of students:<i>“According to me experiential learning is when you learn along with enjoying the whole experience of learning. Experiential learning is learning through field visits, classroom presentations, expert lectures, reviewing of text book related to EVS.”</i></p>
2.	Can you connect experiential learning approach with environmental education	Connection between experiential learning approach with environmental education	<p>Compatible to each other: <i>“Yes. It is an ideal way to impart information. Through field visits, classroom presentations, expert lectures and so on, we have learnt in a better manner rather than passive learning.”</i></p> <p>Nature serving as a laboratory for Experiential Learning Approach: <i>“Yes, experiential learning is connected with environmental education. As to learn about bio composting or vermicomposting only theory cannot be put in the minds of students, practical knowledge should be given which was given to us by actually being with the nature.”</i></p>

<p>3.</p>	<p>Do you think that experiential learning approach can help students to understand the environmental concepts in a better way? Justify your answer.</p>	<p>Experiential learning approach as an effective pedagogy to teach environmental education</p>	<p>Creating Euphoria in learning: <i>“Yes, it helps the students to engage themselves and creates good impact on their minds as we imbibed loads of curiosity in us. As I have learnt various topics using experiential learning the results were superb.”</i></p> <p>Bringing Conceptual clarity: <i>“Yes experiential learning approach can help students to understand the environment in a better way instead of studying from the book. We had visited Godrej mangrove site and what I learnt about mangroves will remain unforgettable for me.”</i></p> <p>Fostering Environmentally Responsible Behaviour: <i>“After experiencing it personally the students will feel the real need to protect our environment. Students will realize how harmful can be human activity for environment and indirectly to human beings.”</i></p>
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5. Discussions

The findings suggested that the pre-service teachers lacked formal prior knowledge about experiential learning but after add on program could foresee the interplay between environmental education and experiential learning approach in the form of engaging children with various environmental issues. It was observed from the responses of the pre-service teachers that they either directly equate the two fields or they refer to experiential learning approach for dealing with environmental issues. The pre-service teachers perceived that such an approach to environmental education would better prepare students to address the environmental problems of the future. The pre-service teachers were able to identify the potential and possibilities for implementing experiential learning approach based strategies in environmental education.

6. Conclusions

An attempt was made in this paper to orient pre-service teachers’ about experiential learning

approach for teaching environmental concepts. Environmental studies courses in institutions of teacher education can be enhanced through experiential learning. Teacher education programs should continue or begin to, include instruction on the entire process of experiential learning not just the importance of hands on concrete experience. Teacher educators should also be made aware that experiential learning is a process and not just simply providing learners with the opportunity to take part in an activity.

References:

1. Baslow R, & Byrne, M. (1993). Internship expectations and learning goals. *Journalism Educator*, 47(4), 48-54.
2. Bass,R. (2012,March/April). Disrupting ourselves: The problem of learning in higher education. *EDUCAUSE Review*, 47(2).
3. Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6thed.).London and New York: Routledge.
4. Cranton, P. (1989). *Planning instruction for adult learners*. Toronto: Wall & Thompson
5. Dewey, J. (1938). *Experience and education*. New York, NY: Collier Macmillan Publishers
6. Kolb, D. (1984). *Experiential learning: Experience as a source of learning and development*. Englewood Cliffs, NJ: Prentice-Hall.
7. Kolb, A. Y., & Kolb, D. A. (2006). Learning styles and learning spaces: A review of interdisciplinary application of experiential learning in higher education. In R. Sims and dS.Sims (Eds.), *Learning styles and learning: A key to meeting the accountability demands in education*. Hauppauge, NY: Nova.
8. <https://facultyinnovate.utexas.edu/teaching/strategies/overview/experiential-learning>
9. http://link.springer.com/chapter/10.1007%2F978-94-6091-927-5_7