# "ARCHITECTURAL CONSERVATION THROUGH EXPERIENTIAL LEARNING" –AN APPROACH FOR UNDERGRADUATE ARCHITECTURE EDUCATION

## Aparna Tarar

Assistant Professor, Priyadarshini Institute of Architecture and Design Studies, Priyadarshini Campus, Digdoh Hills, Hingna, Nagpur, Maharashtra, India

## Shrutee Dhanorkar

Assistant Professor, Priyadarshini Institute of Architecture and Design Studies, Priyadarshini Campus, Digdoh Hills, Hingna, Nagpur, Maharashtra, India

Abstract: In the modern world, the value of the rich cultural heritage is continuously decreasing. The objective of architecture conservation is to maintain the significance of the architectural heritage or site. Though we have many governing bodies for heritage conservation, it is important to train the young minds to protect and preserve our culture. But how can we achieve this objective more effectively? Can we put this thought in architectural education? In India we have post graduate programs in conservation at many institutions. But we can also promote the importance of learning of conservation principles, processes, history, its culture and values through the undergraduate architectural education. Experiential learning and hands on education have a key role to play in the architecture education. Objective of this paper is to present an understanding of experiential learning as a discipline in which the learner prefers to learn actively through hands on experience. This paper intent to exhibit the methodology adopted for teaching conservation to undergraduate students and study visit experienced by the students of "Priyadarshini Institute of Architecture and Design Studies, Nagpur" for learning the conservation methods and documenting it, at ASI conservation site of "Markanda Devasthan, Gadchiroli, Maharashtra".

Keywords: Architectural Conservation, Architecture Education, Case Study, Experiential Learning.

**Introduction:** Protecting the built heritage and conserving the local traditional and cultural values of communities is a challenge for future generation. So it is necessary to develop and implement the concept of architectural education in order to contain architectural conservation, which should be a philosophy. As an educator, we should promote new goals, approaches to develop new methodologies for teaching built heritage conservation in the architectural education. There are many colleges running post graduate architecture conservation programs. But, the need is to develop or to introduce the concept of conservation in early undergraduate years. Also some institutions have conservation as an optional elective subject for fourth year students. But again the challenge is to frame out the learning objectives at undergraduate level for better understanding and positive outcome.

Architectural Conservation: Conservation of heritage buildings is very important because it provides a sense of identity and continuity in a fast changing world for future generations. People today are least interested in preserving and conserving our heritage. It not only helps us to understand our own culture but also helps the people of the other parts of the world to learn and adopt our culture. We conserve our heritage to appreciate the achievements of human kind. India has a diverse cultural and architectural heritage. Among them very less heritage monuments are declared as World Heritage Structures by UNESCO. Others are taken care by Archaeological Survey of India (ASI), under state governments, some non-governmental organizations such as INTACH (Indian National Trust for Art and Cultural Heritage) etc. But still some of the structures do not come under any formal system due to lack of infrastructure and funds. There should be strong relationship between heritage conservation and architecture program, which meant of learning how to deal with heritage conservation processes, understanding

history, culture and its values, graduating the budding architects, who are responsible for the preservation of conservation projects.

#### **Architecture Education:**

Architectural education should be more responsive to conservation issues. The academic community should be involved in providing opportunities for future architects and urban designers to develop more socially and culturally responsible architecture. Architectural educators should strive to balance the way in which students view relationships with the physical and social worlds. Architecture students should be made aware of alternative viewpoints including the view of the material world as something to be respected rather than to be conquered and controlled. Architecture education is one of the most distinctive branches of education, which requires various capabilities. The subjects included in architecture curriculum can be broadly divided into three types of subjects,

- 1. Skill related subjects, e.g. Visual arts, Graphics etc.
- 2. Knowledge related subjects, e.g. History, Climatology, Building services etc.
- 3. Application related subjects, e.g. Design, Working drawing etc.

All these three types of subjects need to adopt different methods of teaching.

In education we need to proceed from the simple to complex. Each branch of instruction must proceed from the empirical to the rational. The students needs to be told as little as possible and induced to discover as much as possible through self-instruction, self-experience.

**Experiential Learning:** Experiential learning and hands on education have a key role to play in the education of planners, architects, engineers and builders of the future. It is assumed that education can bring about change , by changing conventional teaching into a teaching that ends primarily at enhancing attitudes and skills for the better understanding and perceiving of the built environment, enhancing attitudes and skills of communication and team work, and preparing students for a lifelong learning process. All that can be achieved through applying experiential learning. Learning occurs at the same time as the doing. It is almost as if, out of awareness, the learner reviews what he/she has done, and stores the knowledge or skills somewhere in her experience.

The theory of experiential learning has been proposed by Carl Ransom Rogers, an American psychologist. It was primarily employed to explain the learning mechanism, of adult learners and then was applied to adolescent and school going learners also. In his search for the basic nature of learning, Roger's tried to distinguish two types of learning- cognitive and experiential. He termed cognitive learning as meaningless in itself unless it is subjected to some use. Such learning is knowledge based and does may include the learning of vocabulary, multiplication table, mathematical formulae, historical events and geographical facts. The experiential learning on the other hand is quite vital to ones progress and welfare. The experiential learning is learner centered. That is to say it cares for the needs, and wants of the learner. Carl Roger's has tried to enumerate these qualities of experiential learning in the following ways:

- 1. Experiential learning is characterized by personal involvement of the learner.
- 2. It is self-initiated.
- 3. It is characterized by self-evaluation.
- 4. It leaves a pervasive effect on the learner.

Learning can be considered as a process that involves the whole experiences of an individual influenced by different factors such as his distinctiveness, educational environment, social environment, skills, abilities etc. Although learning is mainly a student-centered, the attitudes of instructors, the curriculum goals and the conditions of the learning environment are also very effective in the process. Thus learning can be defined as the outcome of an individual who is constantly active and interactive with her/his environment. Learning is contextual; it takes place in a social context.

**Experience-Based Projects in Architecture Education:** Experiential learning is a process through which students develop knowledge, skills, and values from direct experiences outside a traditional academic setting.

Learning that is considered "experiential" contain all the following elements:

- Reflection, critical analysis and synthesis
- have a lasting impact
- experiential learning involves the whole student: their cognitive, affective and physical domains
- Experience-based projects offer a change of pace from traditional classroom assignments
- Opportunities for students to take initiative, make decisions, and be accountable for the results
- Opportunities for students to engage intellectually, creatively, emotionally, socially, or physically
- Experience-based projects can help bring the students and the teacher closer together
- A designed learning experience that includes the possibility to learn from natural consequences, mistakes, and successes.

**Case Study:** The case example is the study and visit done by the undergraduate students of "Priyadarshini Institute of Architecture and Design Studies, Nagpur" for learning the conservation methods and documenting it, at ASI conservation site of "Markanda Devasthan, Gadchiroli, Maharashtra" under the subject of seventh semester Elective –Conservation.



**Fig. 1:** ASI Conservation site, Markanda Devsthan, Gadchiroli, Maharashtra (Source: ASI)

The objectives behind this exercise were:

- To develop the expertise in the field of architectural conservation.
- To make students aware of the holistic nature of the conservation practice.
- To equip students with technical know-how required for Architectural Conservation
- To focus on challenging real world conservation issues through site based exercises and 'hands on' practical experience in conservation through site visit, documentation.
- To develop the ability to connect philosophy, theory and practice; and devise realistic, implementable and innovative conservation interventions.

## I. Adopted Pedagogical Methodology:

- •Introduction to example, its history, sociocultural values and need of conservation.
- Site visit, interaction with conservation expert (ASI)
- Introduction to core concepts, techniques and methods of heritage conservation
- Understanding different documentation techniques involved.
- •Actual on site documentaton Hands on activity.
- •understanding different matrials and construction techniques used.
  - •Analysis of documented work.

**Conclusion:** Interaction with conservation architect helped students to know about the history, construction style, socio-cultural values and the need and methods adopted for conservation. Hands on activities such as taking site measurements and documentation helped students to learn more about the construction details and materials. Hence, for basic educational knowledge about conservation in the early undergraduate years of learning one can adopt the methodology of experiential learning.



Fig.2 Conservation Architect interacting





with the students. (Source: Author)

Fig. 4: Students Taking Measurements for Documentation (Source: Author)

#### **References:**

- 1. Ashraf Salama, "New Trends in Architectural Education-Designing the Design Studio"
- 2. David.A.Kolb, Experiential Learning, experience as the source of learning and development, 1984, Second Edition.
- 3. Mohga E. Embaby, Heritage conservation and architectural education: "An educational methodology for design studios" HBRC Journal (2014) 10, 339–350
- 4. Sara Khorshidifard, A Paradigm in Architectural Education: Kolb's Model in learning Styles in studio Pedagogy. ARCC 2011. Considering Research: Reflecting upon Current Themes in Architecture Research.: 621-634
- 5. Aparna Tarar, Neha Kolhe, "Learning Architecture through Experimentation" International Journal of Engineering Research and Technology. ISSN 0974-3154 Volume 10, Number 1 (2017), 62-68

\*\*\*