Chapter 1 Engaging Students' Learning in the Built Environment Through Active Learning

Lloyd Martin Scott

b https://orcid.org/0000-0001-6305-3749 *Technological University Dublin, Ireland*

ABSTRACT

This chapter addresses the position of learning, teaching, and assessment in education with the particular emphasis on higher education (HE) in the built environment (BE) but also embeds the context of the contemporary approaches that have emerged in the BE which are built on a solid educational underpinning. The conceptions of "active learning" are addressed from the perspective of what the literature refers to but also some significant reference to action research adopted, rolled out, and evaluated in undergraduate built environment education by the author. The "learning by doing" mantra of among the BE educational community has begun to make inroads. There is a more engaging approach from academics to support learners. An identification of the areas where improvement may be achieved into the future and the possible areas where research might be explored to address and solve some of these pertinent issues.

INTRODUCTION

I know I cannot teach anyone anything. I can only provide an environment in which we can learn -Carl Rogers

DOI: 10.4018/978-1-5225-8452-0.ch001

Copyright © 2020, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

This chapter builds on the personal, educational and cultural contexts of the author. It addresses the position of learning, teaching and assessment in education with the particular emphasis on Higher Education (HE) in the Built Environment (BE) but also embeds the context of the contemporary approaches that have emerged in the BE which are built on a solid educational underpinning. The conceptions of 'active learning' are addressed from the perspective of what the literature refers to but also some significant reference to action research adopted, rolled out and evaluated in undergraduate built environment education by the author.

Since the early 1980's numerous educational leaders in the field of HE made recommendations and urged academics to adopt more student centred learning approaches, including the adoption of more active learning methodologies. Bringing to the classroom ways to more actively involve and engage students in the process of learning. The 'learning by doing' mantra of among the BE educational community has begun to make inroads. There is a more engaging approach from academics to support learners. Although we consider the concept of student centered learning (SCL) to be a relatively new one, particularly in HE, interest in it has been longstanding among educators in all realms of education. In looking to characterise the various ways that SCL is defined, and how the learner experience might be enhanced through the use of methodologies that improve learning it is necessary to consider how academics approach learning and teaching. To contextualise student centered approaches, reflecting on some of the developments that have taken place in HE education is necessary. In particular, a focus on the BE, and how the experience of learners has been enhanced, through a variety of differing approaches to learning, teaching and assessment. An identification of the areas where improvement may be achieved into the future and the possible areas where research might be explored to address and solve some of these pertinent issues.

It looks at the pedagogic approach necessary for teacher/lecturers to consider, in the modern era of change in HE, in order that they can engage in practices that will foster and encourage deep and meaningful learning by students. The role of technology is briefly reflected upon and the contribution it can make to the learner experience identified. In particular, assessment for learning is investigated and defined, along with exploring teaching excellence as a concept to encourage and engaged academics in best practice through assessment as a theme while acknowledging the need to explore reflective practice in approaches by teachers/lecturers. To begin a speculative look back at the 12th Century HE educational experience of students and what they might have encountered back then is a good starting point. This is followed by a brief comparison with what one might expect to find in our modern 21st century educational establishments.

Assessment, which is considered an active learning methodology, has always been considered an important part of the educational process but it has rarely been discussed

23 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igiglobal.com/chapter/engaging-students-learning-in-the-builtenvironment-through-active-learning/234857

Related Content

Application of DEM to Historic Masonries, Two Case-Studies in Portugal and Italy: Aguas Livres Aqueduct and Arch-Tympana of a Church

Alberto Drei, Gabriele Milaniand Gabriela Sincraian (2016). *Computational Modeling* of Masonry Structures Using the Discrete Element Method (pp. 326-366). www.irma-international.org/chapter/application-of-dem-to-historic-masonries-two-case-studiesin-portugal-and-italy/155439

Eccentricity Instability: A Mechanism for Tainter (Radial) Gate Vibration

(2018). Dynamic Stability of Hydraulic Gates and Engineering for Flood Prevention (pp. 387-406).

www.irma-international.org/chapter/eccentricity-instability/188001

Ancient Materials and Singular Constructions: Numerical, Experimental, and Heritage Strategies to Preserve Masonry Structures in Seismic Areas

Paloma Pineda (2015). *Handbook of Research on Seismic Assessment and Rehabilitation of Historic Structures (pp. 629-648).* www.irma-international.org/chapter/ancient-materials-and-singular-constructions/133363

Improving the Design of Energy-Efficient Building Retrofitting: Design Guidelines, Energy Simulations, and Selecting of Technologies

Mari Aino Hukkalainen, Krzysztof Klobut, Tarja Mäkeläinen, Vanda Dimitriouand Dariusz Leszczyski (2018). *Design Solutions for nZEB Retrofit Buildings (pp. 165-185).*

www.irma-international.org/chapter/improving-the-design-of-energy-efficient-buildingretrofitting/199590

Finite Element Analysis of Pipe Bends under External Loads

Sumesh S., A. R. Veerappanand S. Shanmugam (2017). *Modeling and Simulation Techniques in Structural Engineering (pp. 209-238).*

www.irma-international.org/chapter/finite-element-analysis-of-pipe-bends-under-externalloads/162920