

RESEARCH TITLE

A framework for enhancing the design skill sets of Foundation Programme Landscape Architecture students

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ABSTRACT

Every person has the potential to be creative, but this often only happens if the conditions for developing creativity are favourable. Hence, it can be argued that educators are responsible for creating a teaching and learning environment that fosters and encourages creative expression. Subscribing to the view that creative potential is a combination of various skills that can be learned and taught, and using the theoretical perspective of Multiple Intelligence (MI) Theory, this Design-Based Research (DBR) study endeavoured to develop a design skill set enhancement framework to improve access to and success in Landscape Architecture studies. The context for the study was the Cape Peninsula University of Technology (CPUT), South Africa. The research was conducted during 2017 with the student cohort registered for the Foundation Programme in the Diploma in Landscape Architecture at CPUT. The study comprised iterative cycles of design, implementation, analysis, and review. During each iteration, pre- and post-intervention data gained from design assignments, Participatory Action and Learning (PAL) projects, as well as informal and unstructured interviews were analysed and compared. The rigorous in-depth interpretation of the data, and more specifically the data of three randomly selected student participants, produced encouraging results. The interpretation delved deeply into the design skill set heuristics that emanated from the multiple intelligence conjecture-driven teaching experiment. Importantly, the design skill set framework merged the two components, i.e. the design knowledge semiotic process and the design skill set modal agencies, into the modal agency meaning making process. Exposing the participants to the different modalities, through the approach of teaching to, for and through their preferred skill sets, not only supported them to experience learning in ways they are most comfortable with, but also challenged them to learn in other ways, thus enhancing their underdeveloped design skills. Multiple modal entry points shifted the attention away from underdeveloped skills as barriers to teaching and learning to engage the interest of students and facilitate the development of design skills of students with disparate abilities. The implementation of the modal agency meaning making process in an authentic, domain specific environment facilitated the participants' skills and knowledge development, by bridging the gap between the understanding of

theoretical knowledge concepts and the real life application of those concepts. Extending learning beyond the physical architecture of space into a psychosocial, collaborative learning environment that encourages a diversity of approaches to identify and solve problems, demonstrated that both skills acquisition and information processing reinforce and expand a student's creative ability and perceptions. In addition to the primary contribution of the study in the form of the proposed framework, five design principles were identified, providing insight into the function and key characteristics of the design skill set development framework intervention, as well as the procedural conditions guiding implementation. It is clear that the design skill set framework is a feasible and effective teaching and learning strategy that can be adapted for application in various contexts.

Keywords: Landscape Architecture, Design Education, Design-Based Research, Design Knowledge Semiotic Process, Multi-Modality, Design Skill Sets, Multiple Intelligence Theory, Design Skill Set Modal Agencies, Access to Higher Education, Creative Ability, Semiotic Transference, Authentic Learning, Transmodal Moments and Collaborative Learning

The full thesis can be found at <http://hdl.handle.net/10019.1/104812>