Education, Design and Practice – Understanding skills in a Complex World

• Paper / Proposal Title:
Connecting technology and sensory design: A collaborative approach to designing university learning environments in a digital age

• Author(s) Name:
Megan Parker and Michelle Reynolds

• University or Company Affiliation:
Durban University of Technology – Faculty of Arts and Design

• Abstract (300 words):
This paper discusses the value of collaboration as a tool for designing university learning environments in a digital age. The paper reflects on findings that were obtained from a research study, performed in 2017 within the KwaZulu-Natal region of South Africa.

A practical project was used as a tool in a series of focus groups and follow up interviews with a collaborative team. The collaborative team included an information technologist, a mechanical engineer, a product designer, an educational psychologist, a student and a lecturer from the Faculty of Arts and Design (FAD) at the Durban University of Technology (DUT). This was done to establish how technology enhanced learning (TEL) environments that consider the senses may provide students with embodied and improved learning experiences.

The research output was provided in the form of a conceptual academic hub to encourage interdisciplinary and multi-sensory learning experiences. Conclusions showed that to connect technology and the senses effectively, interior designers need to find a balance between integrating technology, stimulating the senses and encouraging collaborative learning. The paper makes a strong case for a collaborative
design approach when designing TEL environments, as the wide range of specialist knowledge and skill-sets contributed to the design process and solution.

KEYWORDS: technology-enhanced learning, sensory design, collaboration, interior design

Authors Information

Megan Parker
megan.parker95@yahoo.com
Durban University of Technology
South Africa

Michelle Reynolds
michelleh@dut.ac.za
Durban University of Technology
South Africa

• Author(s) Biography (200 words each):

Megan Parker

In 2014, Megan Parker completed her Bachelor of Technology degree in Interior Design at the Durban University of Technology (DUT). Under the supervision of her lecturer Michelle Reynolds she conducted her research topic on Sensory Design: Encouraging student-centered learning in university libraries. Her study explored how Sensory Design can be used to influence student behaviour, attitudes and emotions, in an attempt to encourage learners to study productively. Her passion for the subject lead to her selection to participate in the 2014 Falling Walls Lab held in Johannesburg. Falling Walls, is part of an international conference held in Berlin, Germany, that provides an interdisciplinary platform for young academics with outstanding ideas, research projects and initiatives. In the year 2015, Megan was selected as an Emerging Creative at Design Indaba and participated in the Homewood Emerging Designer competition. She was a finalist selected as one of six aspiring Interior Designers across South Africa and designed Homewood’s showroom in Kramerville, Johannesburg.

Michelle Reynolds
Michelle Reynolds has worked in design education at the Durban University of Technology for just over a decade. She is new to postgraduate supervision with her first Masters student, Megan Parker graduating in 2019. Michelle received her Magister Technologiae: Interior Design from the University of Johannesburg in 2012. Her study looked at ‘Barriers impacting on the implementation of sustainable interior design in KwaZulu-Natal, South Africa’. Michelle received a Cumulus Green award for the best paper in sustainability at the Cumulus conference Northern World Mandate held in May 2012 in Helsinki, Finland. Another of Michelle’s accomplishments included one of her students winning the acclaimed PG Bison student of the year award. Part of the award was an all-expenses paid trip for Michelle and her student, to the Salone Internationale Del Mobile Faire in Milan in 2010.