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

• Paper / Proposal Title:

Learning Design by making: An Alternate Practical Pedagogical Approach to Design Education in the United Arab Emirates

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• Abstract (300 words):

Few nations have witnessed such rapid and far-reaching socio-economic change as the United Arab Emirate (UAE). The commercial exploitation of the nation’s oil and gas reserves has radically transformed the nation both economically and demographically. At our university, design teaching is commonly implemented as a linear-sequential pedagogical approach with limitations, specially, on very junior design and non-design orientated students.

‘Making’ has always been a central part in our design teaching. It is the way we teach to think, synthesize a problem and visualize a 3D space. Yet historically, design has slowly been separated from production, with architects making ‘building representations’ rather than having a closer role on the construction of buildings. The rise of digital design and prototyping technologies has altered the traditional designer role, shuffled the design process order and opened new frontiers with a communal interdisciplinary approach.
As architects with interests in digital technology, fabrication and prototyping methodologies, we find ourselves in a very unique challenging setting; working with a very specific student demographic in the United Arab Emirates. They come with a background rich with culture and tradition situated amidst a global and international setting, yet still from an isolated sheltered environment regarding design and manufacturing processes.

The main aim of the approach is to instigate a design research oriented approach that derives its means from local community observations and utilizes global knowledge and latest technological advancement into proposing creative innovative solutions to local particularities, while simultaneously empowering individuals and spreading the ‘making’ culture. This is a start of a paradigm shift movement towards globally acquired knowledge and local production.

Situated within a consumerism-driven society, the conducted case study reflects upon a 3.5-month journey of two cohorts of female Emirati students and one of male students, who had no prior experience in making nor prototyping.

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

**Marco Sosa** is an Architect and Associate Professor teaching at the College of Arts and Creative Enterprises, Zayed University, Abu Dhabi. He holds a BA (Hons) and a postgraduate diploma in Architecture, and a MA in Architecture of Rapid Change and Scarce Resources from the London Metropolitan University. In 2012, Sosa published a photography book about the oldest functional mosque in the UAE. Sosa has also designed, participated and curated exhibitions, nationally and internationally. In 2014, Marco was appointed part of the curatorial team as Head of Design, for the First National Pavilion for the UAE at the 14th Venice Architecture Biennale.

**Lina Ahmad** is currently employed as an Assistant Professor at Zayed University, Abu Dhabi holding a Master Degree (MArch) from the Architectural Association, in London. She has over 10 years of professional experience working as an architect; Ahmad’s work has been extensively exhibited, including at UAE’s National Pavilion at the 14th International Architecture Exhibition, Venice Biennale. She is also the recipient of the Architecture + Cityscape Awards 2003, “Designing for a new world”, under the category of ‘Aspiring Architect’. In 2015, Ahmad published a book titled; Cellular ‘Network’ City, presenting an investigation into the realm of algorithmic architectural design.