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

• Paper / Proposal Title:
Marginal Gains for Curricular Optimization

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• Abstract (300 words):
An important distinction an Architecture school can make from other disciplines in the University system is a unique and deliberate application of critical thinking, on one hand used as a place to experiment and explore while on the other hand as a vehicle for teaching the application of technical skills and a history of cultural significance. Design has long been taught as an iterative process which by nature requires time to mature. Architects have long been celebrated for our breadth of knowledge required to undertake the complexity of designing and realizing the design of the built environment. The pace of cultural and technological advancement, however, is increasingly placing pressure on students to learn more and do so in a shorter time frame. This has placed incredible pressure on the academy to deliver a product that meets these demands and they have struggled to meet this challenge in a substantive way. Some argue for the status quo to remain intact, while others offer more degree programs, shorter path to degree, or cater more directly to technical skills. What all of these variations have in common is the risk of diluting the ability for critical thinking skills and experience to temper their design abilities.
The concept of marginal gains, first popularized in the world of competitive cycling, has a simple premise. If just 1% performance improvement can be made through an aggregation of minor gains, there would be a clear separation in results. Rather than an overhaul of an existing curriculum, is it possible to apply a method of seeking marginal gains in architecture school? This paper identifies areas where inefficiencies, overlaps, deficits, and other potential marginal gains may be optimized in an architecture school curriculum and explores opportunities for incorporating pedagogical alterations.

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

Dave Lee is an Associate Professor and current Creativity Professor at Clemson University’s School of Architecture where he has taught since 2005. He holds degrees in Architecture from The University of North Carolina – Charlotte and Columbia University. His research focuses on computational design, both as a pedagogical instrument as well as for various means of fabrication and visualization.