

How Modeling Methodologies Are Transforming Curricula

Modeling has taken on several manifestations from the earliest physical prototypes to virtual simulation by means of computer based technologies over the past four decades. While it is convenient to talk about functionalism in the context of digital tools, the goal of this presentation is to focus on the integration of modeling in pedagogy. Modeling can be utilized for a wide range of tasks including: Conceptual Design, Sustainable Design & Analysis, Integrated Project Delivery, and Digital Fabrication.

Each modeling method has it's pros and cons for form generation, problem-solving, accuracy, and multiplicity of re-using data for creating a computational model. The challenge therefore, is how to integrate these various forms of modeling in a comprehensive way into curriculum.

We will begin the presentation with an overview of various modeling methods and their applications followed by interactive round table discussions to explore the challenges that modeling presents to pedagogy and begin to provide answers on how to address them. Each table will have a unique problem to solve and will share their findings with the group. Discussion of the findings will promote peer learning and understanding.

At the completion of the round table discussion, participants should

- understand how various modeling methods apply to curriculum
- obtain better understanding of the limits of certain modeling methodologies
- feel enabled to engage with faculty to begin development of action plans

John Herridge, AIA
Building Solutions Specialist
Worldwide Learning and Education Programs

Autodesk, Inc.
5004 Galway Drive
Dublin, OH 43017
Direct 614 764-3851