

## Digital Craft: A Contemporary Bauhaus Model from Design through Build.

*Michelle Pannone  
Rebecca Dolgas  
Marywood University*

Emerging technologies and digital fabrication have revolutionized architectural education and practice, transforming the methods and tools of making in the design process that progress an idea from creative artistic vision into the fabricated built environment. Contemporary architectural education, pedagogically rooted in Bauhaus principles, must therefore utilize the advantages of these modes of making, fundamentally aligning teaching methodologies to the technologies that forge this process. As stated by Gropius (1919), “The Bauhaus believes the machine to be our modern medium of design and seeks to come to terms with it.” Today, more than a century later, the intersection of art and design remains essential to making.

With technological advancements in the profession, it therefore has become imperative for academia to direct focus towards digital craft. Digital fabrication has enabled the pursuit of limitless making through more comprehensive and efficient tools, equipping the designer to fabricate any creative idea, rather than limiting design potential by the ability to fabricate an idea. Gropius (1919) elaborates on the need for a greater connection between the drawing board and the construction process, stating that “The ultimate goal of all visual artistic activity is construction!... Let us establish a new guild of craftsmen without the presumption of class distinctions building a wall of arrogance between craftsmen and artists.” To better position students to see design through the lens of construction and with the contemporary digital tools that define making in the modern field of design, this paper examines a case study community design build program, and the transformative role of linking the profession and academia through making at full-scale. In connecting the principles of the Bauhaus to the technological tools and processes of digital fabrication, while investigating the interplay between various materials and assembly, design build represents a teaching methodology pertinent to contemporary design education.