Examining Design Strategies of Students in the Built Environment: 20-years Later

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Students and professionals within the disciplines of the built environment were asked and participated in an evaluation of their design decision making process 20 years ago and provided feedback as to their design inquiry modes. The earlier data will be compared to another evaluation, within the next year (2015) and used as a basis for improving pedagogy in professional schools of education, particularly for BIM visualization, engineering modeling, and design thinking. Research hypothesizes that self-awareness and or ability to identify the cognitive approaches among designers makes a significant difference in the effectiveness of design efforts among individuals within the built environment for; buildings, spaces, communities, projects, and other built objects. Many schools and universities of applied sciences struggle with the challenge of customizing curriculum content to address this unique skill development and this research will be used to develop exercises, coursework and software/courseware tools to identify and maximized an individual's potential. While having ascertained the design approach of the students and professionals from 20 years earlier a current assessment will allow us to determine if the design inquiry approach has changed, if some cognitive strategies are "inherent and inflexible", if external stimuli are significant or insignificant and the factors attributed to those changes? Data from the initial inquiry may not be the best model for effective learning, and it misses many (Gardner, H.) well suited individuals thinking styles that do not fit the prevailing "stereotype". The follow-up data will provide additional options for professional education of individuals both more varied and complex. Questions formulated since the initial inquiry include; Is mere awareness of one's personal working style in the (architectural) design & construction (management) domain enough to be a successful practitioner? Do schools start developing ways to have curricula adapt to personal preferences? Do issues like "sustainability", concepts of "cradle to cradle", Building Information Modeling, influence one's personal working style? Does the individual working style awareness help contribute to a more productive team effort? The follow up SSAT and ethnographic interviews with the original subject's will provide answers to these questions. Upon locating the original interview subjects who were given the SSAT and queried about their goals for their professional futures, they will be asked to complete a follow up SSAT-2, followed by an ethnographic interview that examines the effect of a 20-year life experience. The longitudinal study is modeled after the work of Getzels, and Csikszentmihalyi, "Creative Vision" with the focus on individuals within the Built Environment, Construction Managers, Architects, Engineers and other related professionals. Findings will question the prevailing values that prioritize the educational agenda, how recent tools and technologies have developed and transplanted earlier skill sets, since the original study. We intend to use the data to recommend an appropriately developed educational experience for the professional career path of Built Environment students and professionals (AEC).

Key Words: Built Environment, SSAT, Design Inquiry Modes