Graduate Student Research Abstract – Construction Education (Pedagogical Content)

Developing a Soft Skills Learning Curriculum Framework

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Recently, in the United States and worldwide, the excellence of soft skills' competences among entry-level employees has become a priority task of education. Construction employers are encountering an increasing gap between the soft skills possessed by the entry level construction graduates and those needed by construction employers, thereby becoming a major challenge for both industry and academia. This research proposes an innovation that aims to increase cultivation of soft skills among construction students by exploring the issue of soft skills in the construction context and improving the soft skills educational pedagogies in construction schools by answering broad questions like: Which soft skills matter the most? What are the dimensions of the soft skills gap? And, how do students get help cultivating soft skills? The stakeholders-driven soft skills' curriculum framework is achieved through three main objectives: defining the soft skills gap and dimensions in the construction context, exploring the ideal delivery method scenarios to acquire soft skills in construction education, and determining an effective process to implement soft skills in construction education. The research approach will be adopted utilizing qualitative and quantitative research methods. Qualitative approaches will be used in the early stages of the study by utilizing literature databases establishing a long soft skills list and studying knowledge domains and soft skills curriculum framework components. The long soft skills list will then be reduced to a shorter soft skills list. The quantitative approach will take the forefront in data collection and analysis stages. A survey tool will be developed for construction industry recruiters to rank the importance and satisfaction of each skill in the short soft skills list. The outcome of this survey will measure the gap for each skill in the short soft skills list and classify them into four quadrants: critical skills set, on-track skills set, unimportant skill set, and over-invested skills set. The research will implement two stages of Quality Function Deployment Tool using the survey data and a structured interview with education experts. This will result in matching each of the soft skills with the ideal delivery method and each delivery method with the ideal learning framework. The expected results from this research will construct a soft skills curriculum framework that is based on measured gaps, ideal delivery methods for each skill, and learning components for each delivery method. Through utilizing this soft skills curriculum framework, the teaching activities of construction will improve and broaden the soft skills taught in the classrooms to correlate with those needed in the marketplace. Consequently, this will help bridge the gaps between construction graduates and their employers and ultimately facilitate the recruitment of entry-level construction graduates.

Key Words: Construction Education, Soft Skills, Delivery Methods, Learning Components, Quality Function Deployment.