# A Process to Collect Case Studies from the Construction Industry for Improving Construction Management Education

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Exposing students to real world experience prior to their graduation has been an important part of a college degree in construction management (CM) programs. Introduction of encouraged or mandated internships, site visits, and guest speakers into the CM curricula have traditionally helped address this. All of these efforts have a similar goal of exposing the students to current and relevant professional situations that the students may or will eventually face. Using case studies as a part of instruction in the classroom is another way that students can be introduced to real world circumstances. However, it may become a challenge for instructors to maintain and update their case studies due to their limited access to project based encounters within the construction industry. This study presents the preliminary results of a research project funded by Roger Williams University (RWU) to collect short case studies from construction professionals in the Northeast U.S., using an online survey. Each case collected includes a description of a problem with a potential cost and/or schedule impact, and the solution that the company has adapted to mitigate any consequences. Collecting case studies requires an in-depth execution of conventional surveying techniques. This includes decisions regarding types of companies and individuals surveyed, the terms and conditions of the survey, and the communicated intent of questions in order to withdraw as many problems and solutions. It is important to note that authors utilized open-ended questions to collect a wide range of information from the industry professionals. Using open-ended questions in an online survey is not an easy practice, for the fear of low response rates, not generating responses in the areas researchers intend to, and the difficulty in analyzing mostly qualitative responses once the data is collected. However, open-ended questions are proven in this study to be a viable method and should not be overlooked by CM researchers as an effective approach for collecting real world experiences. Preliminary results given in this presentation include the demographics of the construction professionals who responded to the survey, as well as samples from 47 cases that have been collected to date. Future objectives of this research project include applying qualitative data mining techniques to explore frequency of specific issues and identify trends in their solutions within the construction industry. The authors also intend to convert the database of case studies into a web based simulation program that can be used by CM students to increase their exposure to real-world cases. This study is significant for generating instructional materials for construction topics including, but not limited to, project management, estimating and scheduling, job site administration, and safety. In addition, the methodology presented in this study can be used as an example for CM and other professional programs around the world with similar needs of up-to-date real world data in the classroom.

Keywords: Case Studies, Construction Education, Classroom Instruction, Real World Experience