

Construction Management Students Comfort Level With and Knowledge of Mobile Technologies

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Mobile technologies are becoming increasingly more common on the construction site as companies become aware of how they can simplify and automate the capturing of information in the field, and communicate that information back to company management systems. Field personnel are now being equipped with smart phones or tablets to check email, look at blueprints, take progress photos, or create punch-lists, all with one device. These technologies are being used to make work efforts more efficient, raise productivity, reduce costs, and positively impact project profitability. As the construction industry moves to these mobile technologies, so too should university construction management programs move to mobile education and learning applications to ensure that students are prepared for a mobile construction industry. This study uses university provided iPads in construction management classes to expose students to mobile technologies before they enter the workforce. This work uses a pre- and post-test survey to collect data about students comfort with mobile technologies, their knowledge about mobile technologies in construction, and their views on whether they think they will use mobile technologies in the workplace and for what tasks. Both first-year and upper-level construction management students were surveyed. While some students entered with a very low comfort level with mobile devices, there were gains in comfort level by nearly all students. Most, even first-year students, were able to envision how a mobile device could be used within the construction industry to perform various tasks, and their visions increased from the beginning of the semester to the end, even though no formal instruction was done in this area. The gains were primarily due to exposure to the device and general usage. The study is significant because by gaining a greater understanding of student comfort with and adoption of emerging technologies, more effective educational and training methodologies can be developed to facilitate instruction and improve the effectiveness of construction management students.

Key Words: Construction Management, Mobile Technologies, Learning