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EFFECTIVENESS OF SAFETY TRAINING SYSTEM USING BIM IN CONSTRUCTION WORKPLACE

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ABSTRACT

Construction safety training is comprised of the safety regulations and safety accident cases in South Korea. However, this education could not attract voluntary participation from trainees because it neglects individual characteristics and work type, the training contents are not related to work, and the teaching method is instructor-led. Therefore, the objective of this study is to develop an innovative safety training tool that effectively visualizes risks on construction sites utilizing BIM simulation. In order to prove effectiveness, understanding of safety training was compared, after one group had received an education by applying a traditional method and the other group had received the BIM simulation. As a result, it was found that developing an innovative instructional delivery method, the Building Information Modeling (BIM) simulation, could improve trainees' understanding. In the future, this study can be used as a reference for analyzing the correlation between safety training via BIM simulation and a measure to decrease accident rates at construction sites.