

NextPlans For Educators

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Collaboration Generates Real World Experience in the Classroom

Recently, Robert Ford, a construction management professor used his influence in the construction industry to persuade NextPlans, an on-line data management service provider to collaborate with him and allow him access to their services to use in the project based curriculum associated with two of his courses; a fall CM 424- Facility Management and a spring CM 231- Code and Plan Reading course. Robert is a non-traditional educator that worked the construction and manufacturing industries for twenty years before getting a college education. His past experience at the supervisory level in many different applications has instilled in him the ability to evaluate learning performance and outcomes better than most educators. Robert understands that to build knowledge it takes applying fundamental layers of instruction and mentoring to generate positive learning outcomes.

The first step in the collaboration was to locate accessible as-built drawings that did not have the usual confidentiality clauses attached. The Information Technology Director with NextPlans realized that public funded projects could be obtained through a right to know clause and he was able to upload several as-built data sets which included the drawings and specifications related to completed projects conducted on campus. Having the as-built data sets relate to local projects led to a better understanding of the lesson plans for the students. Once the site was developed and the data uploaded the next process was to register all the students on the site as new members of the project team. They were able to register as sub-contractors and were assigned secured login credentials that allowed Robert to track their activities on the site, eliminating any excuses concerning the milestones that had been initiated for grading purposes.

The first application of this study was introduced to a Facility Management course where the lesson plans followed the course textbook materials. Acting as the general contractor Robert would issue request for qualifications (RFQ) that required the students to brainstorm on what the necessary requirements would be to qualify for the administrative roles of a facility manager and the necessary support staff they would need. Chapter 1 of the text covered such requirements.

Once the administrative qualifications were set, Robert issued Request for Proposals (RFP) in segments related to the layout of the text chapter outline. If students had questions they had to upload a request for information (RFI) just as if they were in the real world. After all the necessary RFPs had been completed and all the milestones had been met the students were assigned a group and through a collaborative effort they developed a proposal to present to the class trying to convince them that their particular strategic plan would be the best to implement. The learning outcomes were very obvious to Robert and all his expectations concerning the students and the application of the curriculum plan had been met.

The spring Codes and Plan Reading curriculum plan includes two sets of as-built renovation projects that were implemented on the campus. The students were introduced to the history of building codes and introduced to the function of the 2012 International Building Code reference book which will be used as the course textbook

for the study. They will be challenged to learn who to determine the occupancy code associated with the data sets, relate the different drawings to relevant applications covered in the various sections of the reference book, and be able to simulate the actions of a code inspector on the two sets of data for the final project. So far the lesson plans and related milestones are on schedule and the final learning outcomes will be evaluated and released in the final presentation of the study results.

According to Robert this on-line service could be the turning point between the 20th and 21st century approach to construction education. If a program wanted to make a positive change for the future they could introduce this service and application at the introductory level and continue to upload related data to it until the course work had been completed. During the senior capstone experience, that most programs require, the educator could upload a larger project and assign the same requirements the students had experienced during the program to complete allowing the students access to completed work for reference. The same approach would be developed issuing milestones and monitoring their activity until completion.

If you have any questions or concerning please feel free to contact the following collaboration partners:

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