Summary Report for Innovations in Education Award entitled: “Creating Clinical Competence Through Interactive Technology”

Project Director:  Amy E. Aggelou, MA, ATC  
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The initial goal of our project was to prepare a fully integrated computerized teaching tool to help prepare students for the critical thinking processes required of competent clinicians. This tool was intended to help teach the students to take the discrete evaluation skills and course information that they are presented in the classroom and apply them appropriately in mock clinical situations.

We believe we were successful in developing such a tool. Along with the programming guidance of individuals from CIDDE, we were able to use the software purchased with this award (Articulate Quizmaker ’09) to develop the tool. The intention was to create 6 to 8 separate mock clinical scenarios. Each scenario required the student to navigate through a series of questions. The answers that the student supplied would dictate the path they would take through the scenario. Each scenario would culminate with the student making a clinical decision.

We conferred with CIDDE on multiple occasions prior to submitting the budget portion of our application; however we believe both parties grossly underestimated the time (funds) necessary to complete this project. With their support, we were nearly able to fully complete one scenario; and thanks to their willingness to consult and troubleshoot problems with us if we had issues, we are able to continue programming scenarios on our own. This turned out to be a blessing in that we are now able to use this software to create and tailor scenarios to fit into a variety of different areas (i.e., shorter scenarios for students just beginning to utilize their clinical decision making skills, and longer, more in-depth scenarios for students who are preparing to sit for their certification exam and enter the workforce).

In the fall of this year, we launched our first completed scenario via CourseWeb. This scenario, dealing with the recognition and diagnosis of concussions, was published for the course ATHLTR 1841: Athletic Training Practicum 3. At the conclusion of the lecture series discussing mild head injuries, the students were instructed to log onto CourseWeb and complete the assigned scenario. Unfortunately, for reasons that have yet to be determined, only 1/3 of the students were able to fully access the entire scenario when using their computers from home. Success was greater (but not full-proof) when students used the on-campus computer labs. CIDDE was contacted about this problem, but has not come up with a solution as of yet.

In order to validate the content and the delivery of the scenarios, we sought the advice of a content expert who has been certified in our profession for 17 years and has been on both the didactic and clinical side of athletic training education. This content expert has past and current experience in teaching workshops that address the content and delivery of our national certification exam, which is the format that we were attempting to replicate in our project. The content expert was impressed with the quality of the program as well as the variety of question types that our software provided. Unfortunately, because of the problems with disseminating the program via CourseWeb, we have only been able to seek the input of individuals who are able to travel to Pitt to review it. We hope that we
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will eventually be able to invite the input and expertise of a variety of our clinical faculty who currently work at off-campus locations.

We would like to incorporate many of these scenarios into our clinical practicum courses each term. Our hope is to expose students to as many scenarios as possible so that they start to become more comfortable in their decision making skills. In the near future, we will receive a report from the Board of Certification, Inc. on the performance of our students’ with respect to the first-time pass rate for our national certification exam. Since we are attempting to format the scenarios in a similar fashion as the exam, we expect to see an increase in our first-time pass rate. Although, our program has a very high first-time pass rate already (84.2% vs. 44.6% nationally over the past three years), our goal is to improve on this until we reach a rate of 100%.

We truly appreciate being awarded this grant and know that the money and time spent developing this project will pay dividends for years to come.

Thank you.