Technology Use Proposal

Computer Based Testing

(Project 2)

EDTC 802

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Testing and quizzing at academic institutions using computers as an interface is available through a variety of platforms and range from the more game products such as Quizlet and Kahoot to the more formal such as Respondus and Questionmark (Hart, ) For assessments outside of the low stakes quizzes, many schools in higher education have invested in an enterprise product and utilize the product for the administration of practical exams, finals, lab quizzes, just to name a few.

Philadelphia College of Osteopathic Medicine has invested in the Examplify testing product developed by ExamSoft® for the administration of tests and quizzes in several of its programs, including the Doctorate of Osteopathic Medicine. Assessments are administered to the students during the didactic years, the first two years of the four year program. With the exception of a non-graded comprehensive exam given at the end of the penultimate term, tests and quizzes are given in each course and cover content from that particular block of lectures. Beyond looking at statistics for individual test questions as well as a particular exam, little more is used for the program outside of secure test administration.

The use of online testing may be used at the program level to support accreditation audits, increase the level of collaboration between faculty members, as well as allow for better sequencing of questions in an assessment (Ellaway & Masters, 2008). There are also direct benefits for students as well, including immediate feedback on assessment results, as well as long term tracking of tracking of progress against levels of learning, as well as objectives for the course, program, and accrediting body (Green, Godshall, Yost, & Devine)

Application of Technology

I propose that the program utilize the category feature within the ExamSoft® database to tag questions with information related to Bloom’s levels of learning, academic discipline, learning objective, and the osteopathic core competencies for medical students (*Osteopathic core competencies for medical students.*2012). Appropriately tagging questions will allow the longitudinal reporting feature to provide information on strengths and weaknesses in the following areas. First, students will be able to determine whether they are memorizing facts or understanding content at a deeper level through the report on Bloom’s levels. In preparing for the comprehensive examination or the board exam, they can use the reporting feature to determine content areas where they have performed well allowing them to focus resources on areas that need improvement. Finally, they can use the reports to assess their strengths in various competencies as they prepare for the boards.

Policy Concerns

Network security is maintained and managed by the department of Information Technology Services (ITS). ITS is responsible for the Wi-Fi on campus, creation of student email accounts, and billing issues related to enterprise network systems. The Office of the Registrar maintains student records related to grades, student course enrollment, and provides consultation services on issues related to FERPA. The office of Diversity and Community Relations is charged with training and maintaining records related to network security, FERPA, and identity theft. All employees are required to have documented completion of online training in these areas on a yearly basis.

Student and faculty accounts in ExamSoft® are managed by the database administrator (DBA) and/or his designee. In the case of the database for the DO program in Philadelphia, the DBA is Mr. Douglas J. Koch. His responsibilities include creating student accounts, creating courses, enrolling students into the appropriate accounts, managing faculty and staff accounts, supporting exam creation and administration, as well as maintaining communication between the program and the provider.

 Accessibility is addressed in two ways. First, access to computers is addressed through the requirement of all incoming students having access to a compatible laptop computer. Computer requirements are posted on the institution website (Computer recommendations.). Physical standards are addressed during the admissions process. Personal communication with members of the admissions committee indicate that, due to the nature of the program, students must have certain physical abilities, including adequate vision. Students with certain visual limitations such as rare color blindness are allowed to take exams on paper. Accommodations for students with documented learning disabilities needing additional time are managed through the Office of Student Affairs and granted multiples of testing time as determined by their accommodation.

Assessment

Assessing the success of the educational technology intervention will take place in X ways. First, students will be asked for their feedback in during their course evaluations. This question will be open ended and given at the end of every term. Data from each term will be collected from each of the three trimesters in both years. Student failures across the terms will also be tracked and compared to previous years where the feedback on learning levels was not given. Third, feedback from the Student Progress Evaluation Committee in the form of informal interviews with the chair of the committee will be collected. Finally, first time board passing rates for cohorts of students before and after the intervention will be compared. It is expected that the student evaluations will be positive and the positive aspect will increase in nature as the students’ progress through the program. It is also hypnotized that student pass rates will decrease and feedback from the SPEC committee will reflect student’s better understanding of their learning. Finally, it is anticipated that first time board pass rates will increase after the intervention.

References

Ellaway, R., & Masters, K. (2008). AMEE guide 32: E-learning in medical education part 1: Learning, teaching and assessment. *Medical Teacher, 30*(5), 455-473. doi:10.1080/01421590802108331

Green, M., Godshall, M., Yost, M., & Devine, D. (2016, September). Creating academic quality through planning and technology. *Annual Conference on Teaching and Learning Assessment: Academic Quality Driving Assessment and Accreditation,* Philladelphia, PA.

Hart, J. Quizzing & testing tools. Retrieved from <http://c4lpt.co.uk/>

American Association of Colleges of Osteopathic Medicine. (2012) *Osteopathic core competencies for medical students.* Chevy Chase, MD.