

8-5-2011

Research in Progress – Development of an Assessment Tool for the IS2010 Model Curriculum

Andy Borchers

Lawrence Technological University, borchers@ltu.edu

Kewal Dhariwal

Follow this and additional works at: http://aisel.aisnet.org/amcis2011_submissions

Recommended Citation

Borchers, Andy and Dhariwal, Kewal, "Research in Progress – Development of an Assessment Tool for the IS2010 Model Curriculum" (2011). *AMCIS 2011 Proceedings - All Submissions*. 246.

http://aisel.aisnet.org/amcis2011_submissions/246

This material is brought to you by AIS Electronic Library (AISeL). It has been accepted for inclusion in AMCIS 2011 Proceedings - All Submissions by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

Research in Progress – Development of an Assessment Tool for the IS2010 Model Curriculum

ABSTRACT

Since 2003, the Center for Computing Education Research (CCER) has provided a direct assessment tool for information system educators to determine if students have achieved specific outcomes identified in ACM model curriculum. To date over 8,000 students at 20 universities have participated. In this presentation, representatives of the CCER's parent, the Education Foundation of the Institute for the Certification of Computer Professionals (ICCP), will update participants on important recent events including development and validation of scenario-based questions, mapping efforts between the assessment tool and model curriculum (especially IS2010) and improved reporting capabilities for participating schools. The presentation includes a call for participation in a Beta version of a revised examination.

Keywords

Assessment, outcomes, CCER, ICCP.

INTRODUCTION AND OVERVIEW

Since 2003, the Center for Computing Education Research (CCER) has provided a method for direct assessment for programs in Information Systems based on ACM model curricula. The current AIS IS2010 Model Curriculum is an update of the ACM, AIS and AITP IS2002 and earlier versions of the model curricula. The CCER examination is considered to be a direct measure of the effectiveness of college courses because of the structuring of the IS2010 curriculum, and the subsequent use of this structure by the CCER.

The CCER has assessed 8000+ students and over 20 universities generating a national average score of performance for graduating students from 4-year undergraduate programs. Originally covering the IS2002 model curriculum, the CCER updated the examination to cover seven CORE courses in the Information Systems 2010 model curriculum. The CCER released a Beta examination in December 2010. This paper and related presentation provides an initial report on the Beta exam and calls for more Universities to take advantage of the Beta exam opportunity and join the national institutional assessment program of the CCER.

The Institution for the Certification of Computer Professionals (ICCP) has established that direct measures of skills may be obtained using highly constructed Scenario-Based questions that are well written as judged by experts. The CCER has adopted this philosophy in developing its exams. Experts must agree that the question actually measures the objectives, and that the measurement is accurate and reasonable. Psychometrically, questions should be neither too easy, nor too hard to answer. The questions must be fair yet discriminating. Faculty who have taken the Information Systems Associate (ISA) exam describe it as very difficult and totally comprehensive of the Information Systems discipline. Faculty have used these scores to isolate areas of weakness, and have shown significant improvement in multi-year serial scores.

The 258 item - two-part examination matches the ACM-AIS IS2010 Model Curriculum requirements and provides 5 different reports for participating universities:

1. Skill words analysis by Model Curriculum by course and learning unit;
2. Local University Score compared to National score by model curriculum outline,
3. Students performances by score within university,
4. Individual student performance by subject outline - strengths and weaknesses analysis
5. ABET program outcomes.

At the AMCIS conference, representatives of the Educational Foundation of the ICCP will present updates on the CCER's progress in developing its assessment tool and related reporting features.