Chapter XVIII

Required Software Proficiency in General Education and Business Courses

Linda Lynam
Central Missouri State University, USA

ABSTRACT

Approximately 1,100 students in a general education computer course at a Midwestern state university with a technology focus were required to demonstrate competency in Microsoft Word®, Excel®, and PowerPoint® during the Fall 2001 and Spring 2002 semesters. The entrance requirement at the university requires a minimum of an ACT score of 20 or in the upper two-thirds of their high school graduating class. Many students are in the 20 to 23 range of ACT scores. A large portion of the students lack high school experience in independent study and individual responsibility. Results of the project indicate that students with little experience in self-responsibility can achieve at the university level when required.

LITERATURE SEARCH

While a literature search found many instances of computer testing used in intelligence testing, ability assessment in reading, writing, mathematics, and languages, no references were found concerning mandatory productivity software assessment.

BACKGROUND

Three full-time faculty members teach most of the general education computer literacy courses in the College of Business and Economics have had a long-term goal of requiring all students to demonstrate a basic proficiency in the major business software applications: word processing, spreadsheet, and presentation software. These instructors have long known that students think they know more about the computer than they really do. Professors in other courses assume students know basic computer use, and employers expect graduates to possess basic computer skills.

A pilot project was performed in 1999 with a small group of approximately 35 students in the College of Applied Science and Technology. Software assessment tests were created specifically for this purpose and were individually graded. Students self-evaluated their skill levels before taking the exams. The results indicated that students generally overestimated their knowledge of the various software programs.

The result of this small study encouraged the campus director of assessment, the director of educational development, and the computer information systems faculty to talk to the university administration about implementing an institutional requirement that all students graduating from the university must show a basic proficiency in the most common business software programs. The most logical time to test the students is as they enter the university. If they have the necessary skill level, the requirement would be satisfied. If they do not, they immediately are aware of deficiencies and can enroll in remedial courses to prepare for retaking proficiency exams. The most common reason given not to implement a software proficiency requirement was the logistical problem of adding more activities to the freshman/ new student orientation. The current program is a one-day on-campus visit the summer before the student first attends the university. Software testing would add approximately 90 minutes to the schedule. Another reason given is that not all students are majoring in computers. To counter this objection, it was pointed out that most employers expect college graduates to know basic computer skills, enough to write a report, keep a budget, and make a simple presentation. The third objection is that it would not be fair to allow one department to get all the credit hours that would be generated as a result of the necessary remedial classes that would be taken.

IMPLEMENTATION

Because the instructors of the general education computer course believed the students needed the software skills now and not when the political battles were settled, a software proficiency requirement was implemented in all sections of the general education course. The course is not only taken by all majors on campus but also is required of all business majors. In the Fall 2001 semester, approximately 600 students enrolled in the course were required to achieve at least 80% on each of the exams in Microsoft Excel, PowerPoint, and Word. When a minimum of 80% was achieved, a pass was recorded for that exam. No points were awarded for the proficiency exams. Students who did not master the three exams could not receive a grade higher than a D in the course, even if grades for other course work were higher than a D. The proficiency exams were only a portion of the course. Regular class periods included lecture and videos over computer hardware, online research, and Internet use. Course work included three multiple-choice exams over lectures, several homework exercises

3 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-global.com/chapter/required-software-proficiency-general-education/7345

Related Content

Developing Future Global Business Leaders Through International Experiences: An Assessment of Study-Abroad Outcomes
Daria Paninaand Katy Lane (2021). *Research Anthology on Business and Technical Education in the Information Era (pp. 234-258).*
www.irma-international.org/chapter/developing-future-global-business-leaders-through-international-experiences/274365

Ontologies and E-Learning: How to Teach a Classification
Matteo Cristani (2005). *Intelligent Learning Infrastructure for Knowledge Intensive Organizations: A Semantic Web Perspective (pp. 345-356).*
www.irma-international.org/chapter/ontologies-learning-teach-classification/24422

The Acquisition of Skills and Expertise: Work-Based Learning
Joanne M. Gosling (2021). *Applications of Work Integrated Learning Among Gen Z and Y Students (pp. 64-92).*
www.irma-international.org/chapter/the-acquisition-of-skills-and-expertise/275035

Evaluating Higher Education Institutions through Agency and Resource-Capabilities Theories: A Model for Measuring the Perceived Quality of Service
José G. Vargas-Hernándezand Salustia Teresa Cano Ibarra (2017). *Innovation and Shifting Perspectives in Management Education (pp. 246-268).*
www.irma-international.org/chapter/evaluating-higher-education-institutions-through-agency-and-resource-capabilities-theories/167937

Developing an Integrated Evaluation Framework for E-Learning
Yonjoo Cho, Sunyoung Park, Sung Jun Jo, Chang-Wook Jeungand Doo Hun Lim (2009). *Handbook of Research on E-Learning Applications for Career and Technical Education: Technologies for Vocational Training (pp. 707-722).*
www.irma-international.org/chapter/developing-integrated-evaluation-framework-learning/20011