Poster paper

Identifying the indicators to success for students in computer-based business courses

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In 2003, one hundred and forty eight students enrolled on either INFO 150 (Business and Information Systems) or DIP 150 (Computer Concepts) at Nelson Marlborough Institute of Technology (NMIT). The prescription for these two courses can be found in the New Zealand Diploma in Business programme regulations. The courses are classified at level 4 on the National Qualifications Framework. The students were enrolled in one of four different programmes: Introduction to Business Studies (8%), New Zealand Diploma in Business (27%), Bachelor of Commerce (48%) and Bachelor of Viticulture and Oenology (17%). They attended a variety of day and evening classes at one of two different NMIT campuses (Nelson and Marlborough).

It was felt the profile of the students on these courses was changing because more New Zealanders have access to computers, many students graduating from college and high schools now have several years of computer training and experience, more mature students are seeking retraining, and the number of international students (especially mainland Chinese) enrolled on business courses in 2003 had increased significantly over the previous year.

With a view to providing suitable and innovative computer education, three key questions emerged:

- What is the general computer-skill level and profile of students enrolling on these courses?
- What factors appear to enhance successful completion of the course?
- What appropriate teaching resources need to be developed in the future?

To help answer these questions, we began an ongoing investigation to measure, document, and monitor changes in students' skill levels and profiles. One hundred and seven students (ie. 72% of the total enrolled) completed a survey and consented to the information being used for analysis. The survey included student self-assessment of skill levels in word processing, spreadsheets, database, Internet and email applications.

The results of this survey were combined with general student data based on computer ownership (68% computer ownership of the 107 surveyed), gender (51 % female, 49 % male), age (16% in their teens, 51% in their 20's, 33% 30+), ethnicity (European/pakeha 55%, Asian 34%, Maori 4%, Polynesian 2%) and final grade results (some interesting features here, with a number of variables).

Not surprisingly, almost all students surveyed considered themselves proficient at email and in the use of the Internet (93.5% for each). Of the general application software surveyed, students rated themselves most proficient at word processing, with spreadsheets and databases scored at lower levels of proficiency.

Surprisingly, computer ownership did not appear to make a difference to final grades achieved. Instead, we found that the factors that did appear to have the most influence on grades were age, English fluency/conversancy (61% of all students were English conversant) and gender.