Case Study VIII

The Indigenous Pre-IT Program

Stephen Grant, University of Technology, Sydney, Australia
Max Hendriks, University of Technology, Sydney, Australia
Laurel Evelyn Dyson, University of Technology, Sydney, Australia

From January 12-24, 2004 the Faculty of Information Technology, at the University of Technology, Sydney (UTS), conducted the first Pre-IT program for indigenous students in Australia. The program was run successfully for a second time in July 2005, with a another planned for 2006. The Pre-IT grew out of the Indigenous Participation in Information Technology (IPIT) Project which began at UTS in 2002. The purpose of the IPIT Project is to increase the participation of indigenous Australians in IT studies and careers (Robertson, Dyson, Norman, & Buckley, 2002).

The design of the Pre-IT is modeled on the Pre-Law course at the University of New South Wales, which over 100 indigenous students have completed since 1995, with most proceeding to undergraduate law studies. Before the Pre-IT, there was no equivalent tertiary preparation course for indigenous students to
enter Information Technology (IT) at any Australian university. The Pre-IT course extends indigenous access beyond the established study areas of law, education, business and health into a new field in which very few indigenous Australians have participated to date, namely information technology.

This article describes the Pre-IT, focusing on the first offering of the course, including the curriculum design, marketing strategy, background of students recruited and an evaluation of the course against the quality indicators contained in the original course proposal.

**Development of the Pre-IT**

In February 2003 curriculum development began. First, the objectives of the course were identified:

- to raise awareness of IT as a career and study option for indigenous Australians;
- to act as a feeder program for entry of indigenous students into tertiary IT courses; and
- to prepare indigenous students for tertiary studies.

The course was intended to provide indigenous students with the opportunity to sample some information technology that might whet their appetite for pursuing tertiary studies and a career in this field (an opportunity to “taste and see”). The course was designed to be two weeks long, with modules chosen to express the range of subjects offered in IT degree programs and as practiced in IT careers and professions: computer fundamentals, Web design, Internetworking, introduction to programming and information systems development.

It was decided to make the course project-based. This allowed for the integration of all modules to a central focal point — a single project on which participants would work throughout the course. The curriculum content, delivery and assessment were all built around this project model. Project-based learning has proven successful in indigenous technology education: It moves away from the non-integrated approach to knowledge presented in much of Western education in favour of a holistic view in which knowledge is integrated into social and practical contexts and outcomes (Seeman & Talbot, 1995).

The major item of assessment for the Pre-IT course is the development of a Web site involving the application of skills and knowledge from all five course modules.
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