Cross-course Collaboration

The Impact of Integrating First-Year Students into the Broader Curriculum

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Background

CIT 12000 (Intro Problem Solving & Quantitave Analysis) is a foundational course. The skills taught in this gateway course are vital to all CIT students.

12000 had not been kept up-to-date and did not have a strong online presence. The topics lacked relevance & **students weren't able to understand the "big picture."**

Previous Course Feedback

Students could not understand how they would use the logic and problem solving in future courses. **The 12000 course was merely a "have to have," but students could not explain why.**

Feedback indicated that students could not correlate the information from 12000 to anything else they expected to experience in their future coursework.

Spring 2010
Curriculum Enhancement Grant

Two faculty in the CIT department applied for a Curriculum Enhancement Grant from the IUPUI Center for Teaching and Learning. In the grant proposal, the faculty proposed the following changes: **ensure the course had a place in the broader curriculum, update course materials so they were relevant to today's audiences,** and **greatly improve the online version of the course.**

The fundamental task the course development team had to undertake was simple: how could 12000 more accurately portray how the important skills learned would be used in future courses?

How do we make this "real?"

Summer 2010
Course Restructure

- Interviewed faculty and reviewed material for subsequent courses
- Evaluated texts and eventually created a custom text for the course
- Researched other peer collaboration projects for gateway courses
- Attended an Alice conference and researched the use of Alice in the classroom
- Rewrote all course materials and supplemental information provided to students
- Trained adjunct faculty on new procedures and course goals

Fall 2010
Final Project

Students had the option to participate in one of two final projects, each of which was directly involved with or related to an upcoming course within the curriculum.

Alice Programming

Students who selected Alice were introduced to programming using the 3D environment of the Alice software. Projects asked students to detail input, output, and processes to be performed within their application.

This project directly correlated with the department's 14000 course, which is the foundational introduction to computer programming required of all students.

> *I often found myself going back over past homework assignments to help me with this project which surprised me because at the time of doing the assignments I had a hard time figuring out how they would be very beneficial.*

Systems Analysis & Design

A select number of students were able to participate in a collaborative final project with students from the 21300 (Systems Analysis & Design) course. 12000 students played an active role in the development of the 21300 students' team projects, and were exposed to the situations within the curriculum where their 12000 expertise would be necessary.

> *It didn't take long to have an "oooooohhhh, that's why they teach us to make flowcharts" moment.*

Students participating in this project received an immediate introduction to Systems Design concepts from 21300, and also worked with database structures that are taught in 21400 (Intro to Databases & SQL.)