Cohort 3 – Third Year Report from CSU/San Jose

Introduction

Integrative learning is seeing connections in seemingly disparate information, drawing on a wide range of knowledge to make decisions and adapting the skills learned in one situation to problems encountered in another (AAC& U Greater Expectations Report). **Integrative learning** is vertical within a major; horizontal across disciplines; general education and the major; and co-curricular with curricular; which includes application of knowledge (theory and practice) and connecting the university with the community. **Curricular** refers to the academic learning where formal university credit is awarded and **Co-Curricular** refers to the learning that takes place outside of structured learning environments and is not awarded academic credit. At San José State University, Student and Academic Affairs were already engaged in conversations on integrative learning before starting the ePortfolio project. Integrative learning and First Year Experience (FYE) courses are emphasized in SJSU's Vision 2010 statement, and in response, Student Affairs and Academic Affairs created the SAIL (Students Actively Integrating Learning) program. The timing of the ePortfolio grant through Academic Technology was fortuitous in that it allowed the FYE objectives, SAIL and integrative learning to be promoted and assessed through FYE courses using the e-portfolio process.

The purpose of the research was to determine if the use of an ePortfolio during First Year Experience courses would increase integrated and/or intentional learning.

Methods

In the Fall 2007 semester, SJSU implemented the ePortfolio to promote and assess integrative learning as part of the SAIL pilot in selected sections of the FYE courses. Faculty and peer mentors in the piloted sections were directed to promote self-reflection, integrative learning, and intentional learning, and to utilize the Taskstream ePortfolio for these and other class activities. There was no control group that did not use the ePortfolio so we could not assess whether use of the ePortfolio improved integrated learning.

In addition to their regular course assignments, students were assessed in two ways related directly to the SAIL pilot: a reflective essay (letter to future self) and a

questionnaire, imbedded into the ePortfolio, both collected once at the beginning of the semester and again at its end. Quantitative data were collected in the ePortfolio's pre/post survey. Qualitative data on integrated learning were collected in the first/second "letter" which had been uploaded into the ePortfolio. In January 2007, letters were scored by a group of faculty/administrators from SJSU, SFSU and CSU Monterey Bay using a rubric.

Assessment data were to be collected from the students at two more points in their college career – in the mandatory junior-level writing course (to be piloted in Spring 2008) and in a capstone course during their final year. Student Affairs and Academic Affairs were to continue to be involved in the implementation of ePortfolio and assessment of integrative learning.

Results & Discussion

Assessment outcomes of the Fall 2007 FYE courses on integrative learning showed no significant change over the semester. Several significant statistical correlations between post integrative learning score and experiences during semester were found; integrative learning score was correlated with:

- frequency student was asked to reflect on self as student, or class work, in written or other formal assignments;
- frequency non-academic activities or campus events were mentioned or promoted in class;
- frequency with which students attended campus events outside of class; and
- amount of time during semester spent pursuing or researching topics encountered in class but clearly not "graded" material

Implementing ePortfolios into the curriculum required significant planning, training, and coordination. This focus on the ePortfolio may have, in retrospect, caused faculty and peer mentors in the FYE courses to attend to the ePortfolio while slighting the in-class instruction on self-reflection, integrative learning and intentional learning. The student resistance to e-portfolio use and the cumbersome of this particular e-portfolio solution may have impeded additional portfolio use. In addition, to have meaningful use of ePortfolios by students and faculty, there needs to be some greater

incentive/disincentive (grades) offered for its use. Incentives for faculty use, however, were not easy to develop.

Interestingly, a follow-up study on integrative/intentional learning assessed 70 "mid-career" students in two junior level courses by scoring pre- and post- integrative essays for students who were not using an ePortfolio found the following:

In Science 100W course only, students expressed an:
- increase in the importance of taking non-required courses based on their interests;
- increase in the number of students who indicated that they understood the importance of attending on-campus events and activities; and
- increase in the number of students who reported that non-academic activities on campus were mentioned in class.

Science 90T course only, students expressed an:
- increase in the number of students who reported attending on-campus events through the semester.

From short answer, quantitative, integrative learning question: "Give an example of something you learned this semester that combined experiences in this class and with others you had outside the course. What are two key elements that contributed to that learning?"
- 100W students tended to note that they learned how to write. A supportive instructor with interesting strategies combined with some personal trait (e.g., patience) facilitated the learning.
- Many psychology majors noted that some content (e.g., child development) helped them either with work or personal relationships. This was facilitated by a combination of new knowledge with personal interest.
- 90T students, on the other hand, tended to focus on learning time management skills, facilitated by personal experience (e.g. stress), skill development and interactions with peer advisors or faculty.

However, there was no statistical significant difference in the pre/post scores using the scoring rubric.

Next Steps and Future of ePortfolios at San Jose State University

Because of the bumpy start of our program, the struggle with training the faculty and students on the ePortfolio, it is difficult to say that the students benefited. Unfortunately, although we learned from our experience and believed that the students could benefit from the curriculum and the use of ePortfolios, the project was not continued as a result of the cuts in the California budget and lack of positive results.

Recommendations for success of future research

If ePortfolios are being used to assess integrative and intentional learning in the classroom:

1) faculty must "buy in" to using the technology and the need for the research/assessment;
2) faculty must receive training in promoting integrative/intentional learning and their courses need to be assessed to determine if assignments/lesson plans have been added to support the learning;
3) in order to increase quality, student use of ePortfolios in a course/program there needs to be a built-in incentive such as requiring course assignments to be uploaded into the portfolio or presentation portfolios/reflections that will be reviewed/scored/commented by their peers etc.; and
4) the ePortfolio must be user friendly with adequate help support for students and faculty.