Sonoma State University Information Competence First Class Pilot Project
Assessment After Year 1 2006/2007

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1) ABSTRACT & GOALS

Sonoma State University (SSU) completed the first year of a two-year pilot project, which aims to expand pedagogical approaches to freshman-level critical thinking and writing objectives and to strengthen SSU’s General Education (GE) program. With a combination of small seminars and large lectures, the pilot curriculum addresses critical thinking, analytical reading, information competency, oral communication, writing, and student development learning outcomes. The theme for the class was Identity and Global Change. Six learning competencies were articulated, including Information Competence outcomes based upon the ACRL Information Literacy Competency Standards for Higher Education. Ten faculty from various disciplines, 2 librarians, 4 student services professionals, and 10 peer mentors worked with 150 freshmen in 10 sections. Students met with their small seminar group (15 students) twice a week and attended a large plenary lecture once a week.

This grant project provides resources for intensive faculty training, ongoing faculty/librarian collaboration, dedicated class time for instruction by librarians, and a variety of assessment approaches, including the iSkills tool.

GOALS

Upon completion of the project, FIRST Class teaching faculty will:
- Improve their understanding of IC and its critical role in teaching and learning
- Be advocates for collaborative curriculum development between librarians and faculty members
- Develop project assignments allowing students to use IC skills in a concrete, assessable way
- Assess the impact of the IC aspects of the FIRST Class curriculum
- Gain transferable tools to integrate IC into other course curricula

Upon completion of the project, FIRST Class students will:
- Define needs for information, given a particular research focus
- Define a research strategy for locating necessary information, and locate resources of all types
- Comprehend and assess the appropriateness of resources
- Practice habits of academic integrity, using source material ethically
- Effectively articulate and communicate one’s own and others’ ideas, including ideas and arguments with which one disagrees
- Identify and articulate an author’s assumptions and biases
- Evaluate and critique one’s own and others’ research, writing, and presentation skills
- Use numbers as a way to make, understand and interpret arguments

Upon completion of the project, FIRST Class librarians will:
- Provide leadership for collaborative curriculum development between librarians and faculty members
- Assess the impact of the IC aspects of the FIRST Class curriculum
- Use and assess the effectiveness of the ICT test for pre- and post-testing of entering freshmen
- Examine the effectiveness of a year-long approach to IC integration for freshmen
- Advance the integration of IC into the curriculum

2) Project Activities
Project activities were designed to meet the goals outlined above. In general, we adhered to the timeline and most of the activities outlined in our proposal. What follows is a brief synopsis of our activities.

**Reaching Faculty Goals**

The librarians met regularly with the faculty during the summer 2006 for one-on-one discussions about IC, faculty experiences and ideas, and the pilot in general. Each librarian became ‘connected’ to one faculty member for a total of 5 sections for each librarian. We had anticipated that the librarians and faculty would finalize IC assignments for the first semester prior to the semester starting but in actuality, assignments were refined as an on-going process throughout each semester. During both semesters, the librarians continued working closely with their faculty partners at the weekly curriculum meeting, as well as one-on-one, to develop meaningful approaches for IC.

In collaboration with the IC Faculty Liaison, faculty trainings were given prior to the start of each semester. The first training session was an introduction to the grant, IC skills and general concepts. The winter session was designed to model the types of learning we were asking of our students. One of the writing instructors, the critical thinking instructor and the librarians collaborated in developing this faculty training. The session incorporated critical thinking, writing, and IC activities, and finally how to develop an annotated bibliography assignment that had meaning to students. This training was very successful in terms of faculty appreciation, presenting IC concepts, and modeling “real-world” ease of integration of the ideas presented into assignments and activities. Some of the faculty used activities for their class sessions.

**Reaching Student Goals**

The librarians developed and conducted in-class sessions based on the specific focus of each section while adhering to general foundational skills of IC. In the first semester, students were assigned two writing assignments that incorporated information competence skills. The students also engaged in a number of “low-stakes” IC activities. During the second semester, the faculty wanted to try a more individualized approach to assignments for their sections. However, although all students were required to turn in an annotated bibliography and use multimedia tools to create their final projects. In total, the librarians conducted 45 sessions (15 in the fall and 30 sessions during the spring). These numbers do not reflect attendance at the drop-in workshops or individual sessions with librarians.

**Reaching Librarian Goals**

The librarians attended weekly lectures and faculty meetings, which was perhaps one of the most beneficial aspect of the grant project, in regards to advancing IC outcomes. This provided the librarians a unique opportunity to participate in ongoing curriculum development, hear and address concerns of faculty that might not have been voiced in other venues, and share with faculty as a whole the issues and successes of the IC component of the pilot. The librarians were able to use their own regularly scheduled time to talk through curriculum approaches, develop matrices, ensure “like-minded” thinking on grading, and explore issues surrounding IC integration into first year programs in ways that could not be available without the time allowance from the grant.

**ICT Implementation**

Students were required to take the iSkills test – at the beginning of the fall semester and the end of the second semester. Librarians took both tests to determine which to administer (the CORE was selected). The Faculty Assessment Coordinator spent time during the summer becoming familiar with the product. The ICT Technical Coordinator spent time on the phone with ETS discussing specifics for setting up the test. He also spent time both semesters ensuring the lab was ready for implementing the test. Library student workers were on hand to help with proctoring and any technical problems that might arise. For both semesters, it took a great deal of communication with ETS to get score reports and determine how best to analyze the data.
3) ICT Literacy Analysis
As mentioned above, we administered the “Core” iSkills test to students in this program. It was our intention to administer the test twice, once in the fall and again in the spring, under the assumption that a change in score might provide an opportunity for reflection on our instructional approach. While students were required to take the test, individual instructors determined how participation would count towards their student’s grades. Students were scheduled to take the pre-test September 5 – 8, 2006 and September 15, 2006 and the post-test April 23 – 27, 2007 and May 4, 2007. If a student was unable to attend, s/he contacted the ICT Coordinator to schedule an alternative time. Once a student completed the test s/he was given an attendance verification slip.

For the pre-test we had 103 participants, 44 for the post-test, and 33 students taking it both times. There was no statistical significance for comparing the pre- and post-test because of the small sample. From the pre-test we were able to determine that our students, in comparison with the examinees from all other groups, were slightly lower in the category of “Define,” slightly higher in categories of “Access,” “Evaluate,” and “Create,” and equal in categories of “Manage,” “Integrate,” and “Communicate.”

Additional observations about the iSkills tool include:
• The idea of a pre/post test was unsuccessful. The lack of success can be attributed to lack of student participation for the post-test perhaps due to lack of incentive, minimal consequences for most students who didn’t take the post-test, and students being “over tested” at the end of the spring semester.
• The test should be administered in a fashion similar to other large-scale assessments on campus – not by the librarians.
• It is unclear if the definition and content of the iSkills categories correlate to what we are teaching our students in this course.
• The test would be more appropriate if tied to an entire program or degree, rather than an individual course.

It is our thought, at this point, that knowing the baseline scores of entering freshmen, in relation to comparison groups, might be useful for a variety of faculty on the campus. We would recommend it be administered during the first four weeks of the semester.

4) Assessment
We used a variety of approaches to determine if the activities we outlined were meeting the goals of our project. We also met throughout the year with the ICT Assessment Coordinator who advised on assessment approaches. Assessment approaches included:

• iSkills instrument
• Rubrics were created for 3 assignments (first semester writing assignment incorporating information, essay on defining a research project, annotated bibliography)
• Student focus groups were conducted twice
• Librarians regularly recorded observations
• Faculty meetings provided regular group and individual feedback

What we learned
• Based on the iSkills test taken during the fall semester, we were able to determine that our students, in comparison with the examinees from all other groups, were slightly lower in the category of “Define,” slightly higher in categories of “Access,” “Evaluate,” and “Create,” and equal in categories of “Manage,” “Integrate,” and “Communicate.”
• Based on rubric grading of assignments, students did improve their ability to define a topic and widened their range of the types of information they used.
Based on student focus groups, students appreciated the integrated approach to information as well as the ability to develop their abilities over two semesters.

Based on evaluations using the rubrics, we saw the students practicing habits of academic integrity and using source material ethically in their written papers but did not see this translated into their multimedia presentations.

Based on the iSkills test taken during the spring semester, we are not able to determine a pre/post test score because there was no statistical significance for comparing the tests due to the small sample.

Based on librarian observation, librarian and faculty participation throughout the year, and librarian examination of faculty implemented “low-stakes” activities and discussions into the classroom, it was clear faculty embraced the theoretical need for information competence and more than half moved beyond IC theory and integrated their teaching approaches.

In addition, we learned

- Relationships between students and librarians were more developed than in semester-long freshmen classes. The impact of this will remain to be seen in the coming years.
- Academic technology is not as well supported on this campus as we had assumed. Many issues with students, and faculty, creating multimedia projects came to light because of this project.
- Because this was a pilot program for all involved, the start-up aspects of this program were more time consuming than anticipated. Incorporating IC into student learning and faculty development, for most faculty, was “one more thing” included in the start-up of this project. We anticipate most of these issues have been addressed.
- There is still a wide range of discussion by the faculty as to the best approach for reaching student learning outcomes in general – should there be any uniformity to assignments or should it be up to individual faculty members in the program to determine h/h means for reaching student learning outcomes. Naturally, assignments incorporating IC fall into the same discussions. It does provide interesting discussions for assessment. It is clear from the analysis of the 3 papers that the directions for the assignments greatly impact the student output.

**Activity Adjustments for year 2**

During the second year of our grant we anticipate making adjustments in the following areas:

- Rethink iSkills post-test approach
- Examine possibility of iSkills “unproxied” test
- Continue working on trainings for faculty to address new and ongoing challenges
- Better address the Academic Technology approach – the issues of creation of work and how to “cite” for students; and broader campus concerns.
- Identify project “tech liaison” to help ensure productive use of MM.
- Advocate for revising outcomes to better reflect ACRL standards and ensure meaningful assignment analysis as the pilot moves forward
- Create a database or list of IC activities faculty engage students with in their classes
- Develop mechanisms for addressing our goal of having faculty develop “transferable skills” and addressing “the impact of IC aspects on curriculum”
- Consider follow-up with students from year 1 of the pilot