Final Report October 2013

Assessment of Institutional Learning Outcome (ILO) VI: Information and Technology Literacy

Assessment conducted and Report prepared by team Graff, Striepe, Kushigemachi, Daugherty, Young, Hobbs

Co-Chairs Claudia Striepe and Irene Graff were given the task of assessing ILO VI: Information and Technology Literacy in Dec 2012. A team of facilitators will assist the co-chairs. This heralded a new approach to the task of ILO assessment. ILO “facilitators are appointed for core competencies. [They will] be in charge of goals and figures and how to assess technology. We [ALC] will help them if they need help... The task groups would be the experts in core competency” Assessment of Learning Committee (ALC) Minutes Dec 10, 2012. The ALC wanted to see whether a team of faculty intimately concerned with the ILO could come up with alternative approaches to ILO assessment to improve the usefulness of assessment outcomes.

Team: Seth Daugherty (Library/LRU), Charles Hobbs (Compton), Scott Kushigemachi (Humanities), Rica Young (Distance Education)
Irene Graff (institutional Research) Claudia Striepe (Library/Learning Resources Unit) Team Co-Chairs

Process:

Co-Chairs Graff and Striepe met during the Winter session to finalize a team that would have the necessary expertise and interest in the ILO, and would be representative of the campus. The co-chairs also discussed possible assessment instruments. A list of background reading resources for the team members was compiled.

The team members were contacted and meetings for the next semester scheduled.

At the first team meeting, we looked at the definition of ILO (ex-core competency) VI Information and Technology literacy “Students locate, critically evaluate, synthesize, and communicate information in various traditional and new media formats. Students understand the social, legal, and ethical issues related to information and its use.”

The team felt the definition is a bit vague, and a later survey of faculty (culled from a list of faculty who had rated Information & Technology Literacy highly) bore this out. We decided to move ahead with assessing information and technology literacies used for accessing, storing, retrieving, and presenting information, rather than technology literacy involving special equipment/programs for vocational/career programs (Fire-fighting, Radiology, telescopes).
The Team brief was to conduct a campus-wide assessment of the ILO and to report out to the campus at large and the Assessment of Learning Committee (ALC) on the assessment results at the 2 campuses.

We used the aforementioned list of faculty who had rated Information Literacy highly as our testing/evaluation pool.

On contacting faculty to either participate in the survey, or volunteer their classes for assessment, we encountered a high level of interest, cooperation and active participation which was very encouraging and gratifying.

Various assessment methods and tools were investigated and the team finally settled on the SAILS assessment, a nationally benchmarked tool which also offered the opportunity to include some campus specific questions. Funding was sought and granted for the test at an approximate cost of $4 per student. SAILS assessment was conducted either in-class, or, more often as an extra project conducted out of class hours, labs on campus were also made available to students to take the assessment out of class hours, but it seems most students did it at home. In most cases some form of extra credit was offered for taking the test which took an average of 50 minutes to complete.

It was also felt to be beneficial to have faculty from various areas on the ILO team as the various faculty could seek support from peer faculty within varied divisions.

Early objectives were

- To assess where ECC and CEC students place when assessed against peer students/colleges
- To get useful data from a valid assessment instrument that will provide meaningful data that can be used to improve teaching and services to students.
- To survey faculty to gauge their understanding of Information and Technology Literacy, and to see how/if they currently teach the concept in their classrooms
- To offer recommendations re: advice, training, best practices to faculty for their continued teaching of the concepts

Assessment results would be presented at fall Flex Day, and presented and discussed at the Assessment of Learning Committee to determine next steps after results were reported and recommendations reviewed.
FACULTY SURVEY:

Although we were assessing and measuring student performance of the ILO directly, we realized that, because this is an institutional outcome, faculty understanding and performance and administrative support should also be assessed and measured.

Do faculty understand the ILO as defined and how do they demonstrate this understanding in conveying the concepts to students?

Using similar surveys from other colleges as a guide, the team manufactured a survey that was given to faculty who had mapped high interest in the Information Literacy ILO and we received 60 responses from the ECC and CEC campus, with most coming from ECC.

On examining the survey we found that there was a divergent interpretation of the Information and Technology Literacy ILO definition and that some faculty interpreted it more broadly than was intended to include specific technology literacy. Some faculty took the ILO to mean literacy in specialized machinery/programs for specific jobs and careers – like XRay machines, statistics and music composition software and so on. This was felt by the team to be a bit beyond the scope of the catch-all definition and a recommendation would be to make the Information Literacy ILO definition clearer, and/or to add another ILO that would encompass specialized career competencies.

Does administration provide the support to teach and measure the ILO?

Administration provides avenues for faculty and staff development and training, and the Office of the Vice President Academic Affairs provided monies for the student assessment instrument SAILS, so the administration could be said to support faculty in teaching and measuring the ILO.

Some Findings from the Faculty Survey:

- Most faculty require the use of information literacy skills for assignments
- Teaching of Information literacy concepts was either entrusted to Library staff, self-taught by faculty (the vast majority), online videos used to illustrate the concepts, other campus resources like the LRC, the Writing Center, tutors, etc. are used.
- Many faculty indicate they have the time to teach the broad basics of information literacy themselves in the classroom
- Faculty showed an interest in attending brown bags/lectures/workshops for their own improvement in this area
- ESL teachers noted the additional language barriers to foreign students understanding the concepts
• The list of technologies students need to be literate in vary widely from the general to the particular. The Etudes software for Distance Education class use is of particular interest for student success in this area.
• Faculty showed an interest in referring students to out of class brown bags on the topic - perhaps for extra credit.
• Faculty seem aware of student shortcomings in the area of information literacy.
• Faculty are especially concerned about plagiarism.

SAILS (Standardized Assessment of Information Literacy Skills) STUDENT ASSESSMENT:

The SAILS test is described as follows:
The Standardized Assessment of Information Literacy Skills (SAILS) is a knowledge test with multiple-choice questions targeting a variety of information literacy skills. Questions on the SAILS test are based directly on two documents authored by the Association of College and Research Libraries: (1) *Information Literacy Competency Standards for Higher Education: Standards, Performance Indicators, and Outcomes*; and (2) *Objectives for Information Literacy Instruction: A Model Statement for Academic Librarians* (see Appendix F). In those documents, each of five information literacy competency standards is expanded to include performance indicators, outcomes, and objectives. The SAILS test questions are derived from the outcomes and objectives. ACRL Standard 4 is not included in the SAILS test.

Project SAILS has taken an additional step and rearranged the outcomes and objectives from the ACRL documents into eight skill sets. This report gives detailed results for the eight skill sets and more general results for the four ACRL standards. The SAILS item bank has 161 items in United States - English. The 161 questions are broken down within the eight skill sets as shown:
1. Developing a Research Strategy 32 questions
2. Selecting Finding Tools 18
3. Searching 27
4. Using Finding Tool Features 14
5. Retrieving Sources 15
6. Evaluating Sources 21
7. Documenting Sources 14
8. Understanding Economic, Legal, and Social Issues 20

ECC and CEC classes numbering 367 students, took this nationally benchmarked test and scored as follows (note: detailed analysis can be found in the SAILS report available on MyECC under Areas>Institutional Effectiveness>Learning Outcomes>Institutional Learning Outcomes).

Summary of Results
Students at El Camino College performed better than the institution-type (2-year college) benchmark on the following SAILS Skill Sets:

- Developing a Research Strategy
- Selecting Finding Tools
- Searching
- Using Finding Tool Features
- Retrieving Sources
- Evaluating Sources
- Documenting Sources
- Understanding Economic, Legal, and Social Issues

In other words: ECC/CEC scored above average on all eight skill sets.

To identify which skill sets were easier and which were more difficult for El Camino College students, below are the skill sets ordered by performance, from best to worst.

1. Understanding Economic, Legal, and Social Issues (Best)
2. Developing a Research Strategy
3. Searching
4. Documenting Sources
5. Evaluating Sources
6. Selecting Finding Tools
7. Using Finding Tool Features
8. Retrieving Sources (Worst)

Our recommendation would be to reinforce concepts in all areas for faculty and students and to concentrate efforts on the areas where students scored worst, assuming that this may be where faculty weakness in understanding also occur.

FINAL RECOMMENDATIONS:

1. Redefine the Information and Technology Literacy ILO definition to make the scope of assessment clearer.
2. Provide more training for faculty on the principles and concepts of Information literacy so that all faculty have a core common understanding of the basics of what students need to know in this area. Especially for faculty who choose to teach the concepts alone without the expertise/aid of other campus resources like the Library. Training could be in the form of brown bags, flex day presentations, faculty-produced videos online, outside webinars, and could be driven by individual faculty or departments or Faculty and staff Development Committees.
3. Market these sessions and initiatives more, using platforms like Faculty/Staff Development Committees, Flex Day offerings, Division meetings, Academic Senate.
4. Provide a library of peer faculty assignments and lesson plans that illustrate peer ideas used to teach and assess information literacy in the classroom. Peer faculty could freely use/adapt these ideas and plans for their own classroom use, again helping to standardize what is being taught in the area across campus.

5. Continue to assess student performance in the area of Information and Technology Literacy to see whether the college and students maintain current skills levels or whether skills improve/decline and adjust strategies/training accordingly.

6. Concentrate training and teaching in the Information Literacy skills areas where students performed the lowest.

7. Have the entire college adopt (where applicable) a Consistency Project approach, like that adopted by the Humanities Division, that encourages a knowledge and use of varied information resources and tools for research.

   http://www.elcamino.edu/academics/humanities/CollegeConsistency.asp

8. Encourage library orientation visits for more college classes. The librarians give a broad overview of information resources available through the ECC library, demonstration of their basic use, and provide supplementary student help via online videos, Ask-A-Librarian email reference services and in-person reference help.

9. Encourage the formation of a pre-Distance Education enrollment skills class in the use of computer technologies, especially Etudes, necessary for improved success in a Distance Education class.

10. Continue the use of inter-department/Division pairing and cooperative ventures, like the embedded librarian pilot with Humanities faculty, and Learning communities.

11. Link as many as possible of the useful aids for students to the Distance Education Etudes sites, and include a module on Information Literacy into Etudes for faculty training.

Information Literacy ILO Team/Oct 2013