

INTER-INSTITUTIONAL INFORMATION LITERACY INSTRUCTION AND ASSESSMENT

MARCUS KIELTYKA

This session will examine the current status of Information and Technology Literacy (ITL) between Washington State Community/Technical Colleges and the state Baccalaureate institutions. Some issues explored include the evolution of state-mandated ITL assessment; other initiatives aimed at ITL classroom inclusion; changes in the baccalaureate education between these groups; and the transformation of education under more state-centered and accreditation mandates for ITL inclusion and assessment

LEGISLATIVE BACKGROUND AND INSTITUTIONALIZATION

In Washington state formal acknowledgement of Information and Technology Literacy (ITL) as a student competency was first expounded in the Higher Education Coordinating Board's (HEC) 1986 strategic master plan, a document required by the state legislature every four years outlying future needs and directions.¹ Beginning with the 1997-1998 biennial budget, the Washington state legislature mandated the HEC board to implement an accountability system in consultation with Washington's public four-year universities and colleges.² As part of its 1999-2001 biennial recommendations, the HEC Board included that incentive funds should be used to reinforce institutional and state initiatives in the area of student learning outcomes, and to encourage new assessment projects, particularly in the areas of quantitative skills and technological literacy.³ As a mandated initiative, the six public baccalaureate institutions addressed information literacy, among other measures, at the Fifth Annual Colloquy on Teaching, Learning and Assessment: Information Literacy Conference of Washington Post-Secondary Institutions held in October 1999. The outcomes of that conference included:

- Adopted, with some revisions, the ACRL Information Literacy Standards
- Established general assessment plan and timeline through summer 2000

In addition to a number of agreed premises to guide the development of an effective assessment program namely that:

1. Student ability to access and use information is a complex task best observed in samples of student work;
2. Work products should be supplemented by some type of student reflection to provide a more complete picture of the process used; and
3. Because information is stored and used somewhat differently within various subject areas, assessment of information and technology literacy should take place within the academic discipline.⁴

Another product of the Colloquy was the formation of the Inter-institutional Planning Group on Information/Technological Literacy, the charge of which was to work towards a measure of student learning in the areas briefly described above, and formally stated as follows:

An inter-institutional work group is convened to (1) define information and technology literacy, (2) develop the way in which to measure the achievement of information and technology literacy, and (3) assess the cost of implementing strategies and assessments of students' information and technology literacy.⁵

The next step will be to plan a summer workshop in which the group will develop a rating rubric based on the IL standards. To measure the effectiveness of the current programs this rubric will then be used to rate the set of papers and reflective essays provided by faculty teaching capstone senior courses in a variety of disciplines from each campus. This action reflects

Kieltyka (Instruction & Outreach Librarian)
Central Washington University [Ellensburg, WA]

a shift in accountability efforts from institutional efficiencies to a focus on student learning outcomes, e.g., as modeled by Innovation Centers created by the Washington State Community and Technical College System during 1995-1997.⁶

This project was further advanced in a written format known as the Information Literacy and Technology Progress Report in November 1999 and presented to the Council of Presidents, the primary liaison between post-secondary institutions and the state legislature's Committee on Higher Education. This work prepared the foundation for the passage of Bill 2373 by the 56th Washington State legislature in the 2000 Regular Session. Specifically, in H.B. 2375 the state legislature through the advice of the Committee on Higher Education added the following two sections to chapter 28B.10 RCW (Revised Code of Washington) relating to Information and Technology Literacy in Higher Education. (See Appendix 1.)

During Spring Quarter 2000, samples of senior capstone projects and essays were collected at each institution within five disciplines (Business, Education, Humanities, Sciences and Social Sciences) and a preliminary scoring rubric was developed during the first scoring trial at the Inter-institutional Planning Group on Information/Technological Literacy Summer 2000 Workshop. It was concluded, first, that some assignments are better suited than others to demonstrate student use of information resources and technology, and second, that the original specification of the student reflection needed to be redefined.⁷ The ITL workshop also led to the creation of a new progress report on these standards and presented to the Higher Education Coordinating Board in August 2000 and subsequently presented to the Committee on Higher Education and the general assembly in January 2001.

During the academic year 2000- 2001 three different working groups met to identify the most appropriate artifacts of student work for assessment purposes, to revise the way in which students would be asked to reflect on the process by which they created their work, and to continue the development of a scoring rubric initiated the previous summer. During Spring Quarter 2001 there was a second collection of student work and reflections. Student work was collected at each institution within the same five disciplines as those chosen previously, and subjected to a second scoring trial at the Inter-institutional Planning Group on Information/Technological Literacy Summer 2001 Workshop. It was concluded, first, that the scoring rubric should be simplified both in terms of categories rated and the rating scale used and second, that technology use at the upper-division level is discipline-specific and it might be desirable to implement a supplementary, cross-discipline assessment of more commonly used technologies. Additionally, discussions were carried out relative to the feasibility of the proposed approach.⁸ Other outcomes of the 2001 workshop were:

- The need for a simplified scoring rubric of student work
- Recommended supplementary assessment of technology literacy
- Refined strategy for assessing information and technology literacy
- Determined need for a scheduled 3rd trial in Spring Quarter 2002.⁹

In October 2001, an updated Progress Report on Information Literacy and Technology Literacy was presented to the Council of Presidents.

LATER DEVELOPMENTS AND ACCREDITATION REQUIREMENTS

According to the Inter-institutional Assessment of Information and Technology Literacy's project website there were no further updates since October 2001.¹⁰ Additionally, there were no subsequent requests by the state legislature, the Committee on Higher Education, or the Higher Education Coordinating Board. The ITL working group experienced some personnel changes and whatever funds had been allocated by the state were either eliminated or never made available. Both of these developments led to a shift in priorities by the six baccalaureate institutions. Because this was seen as a library-related activity, each baccalaureate institution had at least one representative on the Inter-institutional Planning Group on Information/Technological Literacy that had initially been charged with the evaluation of student ITL papers. This group has continued to work in spite of dwindling institutional support as it now recognized that none of the state governing bodies are likely to revisit this issue, especially with no visible signs of funding. Each institution has agreed to work collaboratively, but independently in support of ITL initiatives on its own campus. This is proving to be especially important as these institutions will be facing institutional accreditation through the Northwest Commission on Colleges and Universities (NWCCU), specifically Standard 2 which, regarding ITL, can be summarized as:

1. The information literate individual accesses needed information effectively and efficiently.
2. The information literate individual constructs and implements effectively designed search strategies.
3. The information literate individual retrieves information online or in person using a variety of methods.
4. The information literate individual refines the search strategy if necessary.
5. The information literate individual extracts and records the information and its sources.

In keeping with its earlier history of student learning outcomes in the P-16 program, the Washington Community and Technical Colleges announced in 2002 their receipt of a four-year LSTA grant of \$160,000 beginning in the 2003/2004 academic year during which interdisciplinary teams of librarians and faculty from Washington two-year colleges will collaboratively develop and implement programs that utilize Information Literacy as both a lifelong skill and an instructional strategy.¹¹ Part of this grant would include the ACRL immersion program for interested community college librarians. The six public baccalaureate institutions were also encouraged to send representatives to this week-long workshop due to the large number of students who take advantage of a state higher education initiative to continue working toward a four-year degree at a local community college

that has partnered with a public baccalaureate institution in the so-called 2+2 program. Due to its popularity among working adults and other groups that may be prevented from traveling to a public four-year institution, it is necessary for the latter group to understand the level of ITL that has already occurred. This situation is further complicated by the fact that students do not necessarily remain at the same institutions but instead transfer among them to locate specific programs of interest. A further issue is that some students due to economic opportunities may take time off during each program or between them. This further complicates the ability to track them over time and determine their level of ITL.

RECENT CHANGES AND THEIR IMPLICATIONS FOR THE FUTURE

Recently, the state legislature has made two moves which have further complicated the ability to track students over time regarding ITL and consequently necessitated the closer collaboration between two and four-year institutions. The first action was the change from a strict 2+2 program on which 90 credits were completed at the community/technical college level and the remaining 90 credits at the four-year institution to a 105/75 split, the issue being that many introductory 300 level courses in which ITL was addressed at the four-year level could be bypassed through additional coursework at the community/technical college level. Due to licensing agreements with database providers community college students as a whole are not permitted access to the resources at partner four-year institutions and, even if they are, rarely are courses designed to use resources at another institution. From the four-year side, courses that were designated as ITL intensive were not always mandatory for the transfers and provisions were not always available at the next course level to pick up the introduction of these resources as it was assumed that the knowledge base already existed. Secondly, there currently exist three community/technical colleges that, due to program need and distance from the four-year institutions, are allowed to offer a four year degree with questionable access to the resources available to students at competing four-year institutions.

Perhaps the larger question that is being overlooked at all the institutions is the level to which instructional faculty have been introduced into the process of not only ITL but its assessment. As both Community/technical colleges and baccalaureate institutions are being asked to more clearly identify and assess learning/life skills such as ITL in many states, how much discussion has there been regarding the actual faculty and the methods they employ in this process of instruction and assessment? Many faculty have not been educated in this electronic environment and those who are very versant in these resources have the advantage of transferring a solid print education into an electronic environment. Thus the difference between them and their students is not one of degree of knowledge but of kind.

The nature of research has changed from the more traditional hierarchical nature of tangible materials to a flatter world of electronic materials where students are often unaware of the type of resource that they are viewing and then incorporating into their work. Having already survived an overall decrease in

the quality of undergraduate research, faculty have responded in a number of ways – many of which obviate the need for traditional library use. One method is to rely further on course reading packets, whether they are available in print or through various course management systems such as WebCT or Blackboard, from which the students construct their papers and arguments the possibility of selecting inappropriate materials. Perhaps the library is used to print these items, but is not used in its traditional function as a place of information seeking.

Another method which deserves more investigation is the access that the purchase of a textbook provides. Often additional text-specific readings have been pre-selected by the publisher and included in either accompanying CD-ROMs, user-accessed publisher websites or through publisher purchased access to specific databases. This method, like its predecessor, creates not only a smaller pool of information from which to choose but guarantees that the number of users and time of access is limited and furthermore prepaid through increased textbook costs. This further removes the library from the ITL picture, does not require additional institutional expenditures and also allows this textbook to be used at any number of institutions regardless of their level of electronic access to resources. Thus, these courses could be offered at various levels and across states without any worry to the instructor regarding the availability of resources for these specific classes.

The final part of the assessment cycle is the feedback that is first transmitted from the students to the faculty to their respective departments and institutions then back to the accreditation agencies and state education oversight boards. These groups are seeking supporting material beyond the letter grade from groups long-accustomed to the finality of the grade in the learning process. As the nature of public higher education changes, accountability increases and the participants seek more interchangeability between schools and programs in the creation of their more personalized degrees from a variety of institutions over a longer period of time, all interested parties, including libraries which serve research needs, are facing issues that alter their obligations both to their institutions and to each other.

ENDNOTES

- 1 Washington State Higher Education Coordinating Board. (1986). *Master plan*. Retrieved February 16, 2007, from <http://www.hecb.wa.gov:80/policy/reports.html>.
- 2 Washington State Higher Education Coordinating Board. (1999). *Performance funding and accountability: Progress report and recommendations for the future*. Retrieved February 18, 2007, from <http://www.hecb.wa.gov:80/policy/reports.html>
- 3 Washington State Higher Education Coordinating Board. (1999).

- 4 Assessment of Information and Technology Literacy. (2001). *Project description*. Retrieved February 18, 2007, from <http://depts.washington.edu/infolitr/project.htm>.
- 5 Angeley, R., and Purdue, J. (May 2000). *Dialogue Information literacy: An overview*. Retrieved February 19, 2007, from <http://www.ac.wvu.edu/~dialogue/issue6.html>.
- 6 Angeley & Purdue, (2000).
- 7 Assessment of Information and Technology Literacy. (2001). *Project description*. Retrieved February 18, 2007, from <http://depts.washington.edu/infolitr/project.htm>.
- 8 Assessment of Information and Technology Literacy. (2001). *Project description*.
- 9 Assessment of Information and Technology Literacy. (2001). *Project description*.
- 10 Assessment of Information and Technology Literacy. (2001). *Index*. Retrieved February 18, 2007, from <http://depts.washington.edu/infolitr/index.html>.
- 11 Washington State Community and Technical Colleges. (2007). *LSTA grant information literacy in Washington Community and Technical Colleges*. Retrieved February 18, 2007, from http://www.pierce.ctc.edu/Library/lstagrnt/wp-content/ILGrantSummary_01.doc.
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APPENDIX 1

HOUSE BILL 2375

Passed Legislature - 2000 Regular Session

State of Washington

56th Legislature 2000 Regular Session

By Representatives Lantz, Esser, Carlson, Kenney, Dunn, O'Brien and Haigh

Read first time 01/12/2000. Referred to Committee on Higher Education.

AN ACT Relating to information and technology literacy in higher education; adding a new section to chapter 28B.10 RCW; and creating a new section.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON:

{+ NEW SECTION. +} Sec. 1. The legislature finds that competence in information literacy and fluency in information technology are increasingly important in the workplace as well as in day-to-day activities. The legislature finds that to prepare students to meet the challenges of the work force and society, students must be able to effectively manage and apply information from a variety of sources. In addition, the legislature finds that institutions of higher education have the opportunity to provide students with a framework and approach to use information and technology effectively.

{+ NEW SECTION. +} Sec. 2. A new section is added to chapter 28B.10 RCW to read as follows:

- (1) Beginning in April 2000, representatives of the public baccalaureate institutions designated by the council of presidents, in consultation with representatives of the community and technical colleges and representatives of the higher education coordinating board, shall convene an inter-institutional group to begin to: (a) Develop a definition of information and technology literacy; (b) develop strategies or standards by which to measure the achievement of information and technology literacy; and (c) develop a financial assessment of the cost of implementation.
- (2) The baccalaureate institutions shall provide the house of representatives and senate committees on higher education with a progress report in January 2001.
- (3) By the end of January 2002, the baccalaureate institutions shall deliver to the house of representatives and senate committees on higher education a report detailing: (a) The definition of information and technology literacy; (b) strategies or standards for measurement; (c) institutionally specific plans for implementation; and (d) an evaluation of the feasibility of implementation taking into consideration cost.
- (4) If the legislature determines that implementation is feasible, the public baccalaureate institutions shall pilot test strategies to assess and report on information and technology literacy during the 2002-03 academic year.
- (5) By the end of January 2004, the institutions shall report to the house of representatives and senate committees on higher education the results of the 2002-03 pilot study.
- (6) Implementation of assessment strategies shall begin in the academic year 2003-04.
- (7) The higher education coordinating board shall report results to the house of representatives and senate committees on higher education in the 2005 legislative session.

Passed the House February 8, 2000.

Passed the Senate March 2, 2000.

Approved by the Governor March 27, 2000.

Filed in Office of Secretary of State March 27, 2000.

RCW 28B.10.125 Technology literacy -- Reports

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(2) The baccalaureate institutions shall provide the house of representatives and senate committees on higher education with a progress report in January 2001.

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(7) The higher education coordinating board shall report results to the house of representatives and senate committees on higher education in the 2005 legislative session.

[2000 c 166 § 2.]

NOTES:

Findings -- 2000 c 166: "The legislature finds that competence in information literacy and fluency in information technology are increasingly important in the workplace as well as in day-to-day activities. The legislature finds that to prepare students to meet the challenges of the work force and society, students must be able to effectively manage and apply information from a variety of sources. In addition, the legislature finds that institutions of higher education have the opportunity to provide students with a framework and approach to use information and technology effectively." [2000 c 166 § 1.]

REFERENCES

- Angeley, R., and Purdue, J. (May 2000). *Dialogue* "Information literacy: An overview". Retrieved February 19, 2007, from <http://www.ac.wvu.edu/~dialogue/issue6.html>.
- Assessment of Information and Technology Literacy. (2001). *Index*. Retrieved February 18, 2007, from <http://depts.washington.edu/infolitr/index.html>.
- Assessment of Information and Technology Literacy. (2001). *Project description*. Retrieved February 18, 2007, from <http://depts.washington.edu/infolitr/project.htm>.
- Information and Technology Literacy in Higher Education, 28B.10 RCW State of Washington House Bill 2375 56th Legislature 2000 Regular Session. Retrieved February 19, 2007, from <http://search.leg.wa.gov/advanced/3.0/main.asp>.
- Technology Literacy- Reports, 28B.10.125 RCW Sec 28B.10.125. Retrieved February 19, 2007, from <http://apps.leg.wa.gov/RCW/default.aspx?cite=28B.10.125>.
- Washington State Community and Technical Colleges. (2007). *LSTA Grant Information Literacy in Washington Community and Technical Colleges*. Retrieved February 18, 2007, from http://www.pierce.ctc.edu/Library/lstagrant/wp-content/ILGrantSummary_01.doc.
- Washington State Higher Education Coordinating Board. (1986). *Master plan*. Retrieved February 16, 2007, from <http://www.hecb.wa.gov:80/policy/reports.html>.
- Washington State Higher Education Coordinating Board. (1999). *Performance funding and accountability: progress report and recommendations for the future*. Retrieved February 18, 2007, from <http://www.hecb.wa.gov:80/policy/reports.html>.