

# UNIVERSITY OF SCRANTON

## INFORMATION LITERACY ASSESSMENT REPORT

Weinberg Memorial Library

March 2008



**Prepared by the Information Literacy Assessment Team**

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## Background

Development of the Library's instructional program requires systematic assessment of the growth in students' information literacy. Since many instructional sessions are "one shot" sessions, the Library determined that assessment was best measured over time and against peer institutions. The 2004 Information Literacy Assessment results were compared against two other local institutions. The comparisons indicated that the students at the three institutions were not similar enough to make it a useful comparison. The comparison would serve us a benchmark for future assessment of University of Scranton students.

Using the 2002 edition of the *Middle States Commission on Higher Education's (MSCHE) Characteristics of Excellence in Higher Education: Eligibility Requirements and Standards for Accreditation* as a guide, the Weinberg Memorial Library Information Literacy program supports the goal that our institution "should be to produce information literate graduates" and that "at the time of graduation, students should be proficient in information literacy, which includes critical thinking and analysis" (p38). In the Computer Information Literacy 102 and 104 sessions, each question corresponds to an ACRL Standard, Performance Indicator and Outcome. The rating of these questions has been assessed for the past five semesters and increases/decreases in correct answers have been used to reevaluate the program and emphases in lectures.

Using the 2004 Information Literacy Assessment Tool as a benchmark, the 2007 Information Literacy Assessment Tool will provide data on any significant changes, negative or positive. This data will be used to develop the Information Literacy Program at the University of Scranton. The targeted increase in scores was 20%: seven (7) out of the twenty-five (25) questions had a twenty percent (20%) or more increase, nine (9) of the eighteen (18) left had a 10 percent (10%) increase. All but one question had some percentage increase. (See Table 2).

## 1. Introduction

During the 2004 Fall semester, 275 Freshman and 217 Seniors participated in an Information Literacy Assessment. The analysis of that assessment is available at:

<http://academic.scranton.edu/department/wml/InformationLiteracyAssessmentReport.pdf>

To determine if there was development in information literacy skills, assessment was scheduled at predetermined intervals. The following Information Literacy Schedule was adopted by a consensus of the WML Librarians on April 18, 2006.

Using the same assessment tool, students are tested as freshmen and as first semester seniors to measure development in their skills.

## INFORMATION LITERACY ASSESSMENT SCHEDULE

<b>2004</b>	<b>Freshmen</b>	<b>Seniors</b>
<b>2005</b>		
<b>2006</b>	<b>Freshmen</b>	<b>ETS pretest of 75 students</b>
<b>2007</b>		<b>Seniors (2004 Freshmen)</b>
<b>2008</b>	<b>Freshmen</b>	
<b>2009</b>		<b>Seniors</b>
<b>2010</b>	<b>Freshmen</b>	<b>ETS post test of 75 students</b>
<b>2011</b>		<b>Seniors (2008 Freshmen)</b>
<b>2012</b>	<b>Freshmen</b>	
<b>2013</b>		<b>Seniors (2010 Freshmen)</b>

The assessment tool, adapted from the “Information Literacy Competency Inventory” administered by Maryville College’s Lamar Memorial Library, was introduced by Dr. Terry Mech, of King’s College, Wilkes-Barre, PA. Since the first assessment, there have been numerous changes to the tool, but in the interest of consistency the Librarians decided to use the original assessment tool for the Fall 2007 Seniors. The 2004 paper format was converted to an online format (designed by Mark McGovern, Senior Research Analyst, PAIRO) in 2007 facilitating analysis of assessment data when the targeted numbers of students are tested. For a copy of the tool used see Appendix A.

For the 2004 participants, the only demographic data collected was the class, professor, and the person who administered the assessment tool. In 2007 additional data was collected. For seniors, a script was given to each participant explaining the purpose of the assessment, confidentiality of their responses, and that completion of the demographic data form was voluntary. Three (3) of the 302 students chose not to turn in the form. See Appendix B.

The Senior classes selected for participation in the 2007 assessment corresponded as closely as possible to the 2004 Freshman Seminar Classes. Of the 302 seniors, 139 or (42%) remembered taking it in 2004. For others, it is probable that this particular assessment was not sufficiently memorable to stand out among other tests taken during their four years at the University.

## 1.1 2007 Senior Characteristics

Demographic questions were asked to create profile of the Senior participants. (See Appendix B) The students were given the opportunity to remain anonymous or not to respond at all. Out of 302 participants, 299 volunteered information about themselves and their futures. Table 1 summarizes those characteristics.

**Table 1 Characteristics of 2007 Senior participants**

<b>Gender</b>			
Male	149		
Female	150		
<b>Colleges</b>			
CAS	121		
CPCS	115		
KSOM	63		
<b>Status</b>			
Part-time	3		
Full-time	296		
<b>Future Plans</b>			
Work Force	90		
Graduate School	91		
Both	111		
Other			
Armed Service	3		
Volunteering	2		
Internship	1		
Undecided	1		
	YES	NO	*DR
Took Test in 2004	139	45	115
*Don't Remember taking this test			

For this assessment, questions about ethnicity and GPA were not asked. These questions could be added in future administrations of the tool.

## 1.2 Assessment Results

Where applicable, the tables will make comparisons between the 2004 Freshmen and the 2007 Seniors. The Information Literacy Assessment Tool is comprised of twenty-five

(25) multiple choice questions. The 2004 assessment was a pencil and paper test that was collected and analyzed by PAIRO. The current online test was given to seniors using a password to obtain entry to the tool; once completed the student submitted it for correction and analysis.

Table 2 gives comparison data between 2004 Freshmen and 2007 Seniors, and percentage changes for each question answered by these students. In 2004, based on the content of the question, librarians determined which academic departments' courses incorporated the teaching content of each question. This is also listed as part of Table 2.

**Table 2 Comparison data between 2004 Freshmen/Seniors and 2007 Seniors**

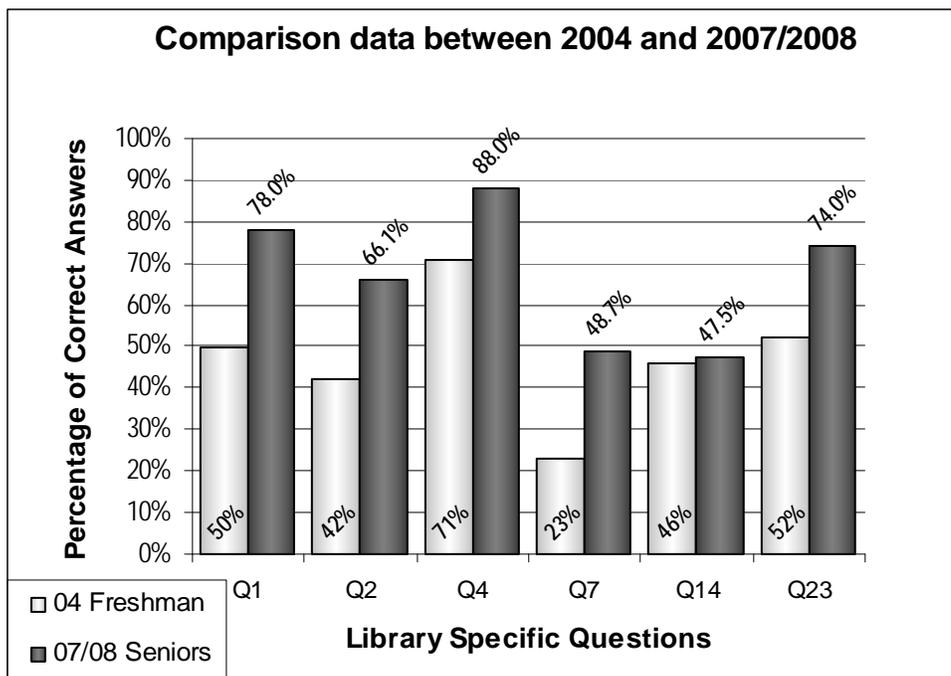
	275 2004 Freshmen	302 2007 Seniors	Changes between 2004 Freshmen and 2007 Seniors	Department Responsibility
	Correct	Correct		Question
Q1	136 (50%)	234 (78%)	+28%	Library
Q2	115 (42%)	199 (66.1)	+24.1%	Library
Q3	190 (69%)	206 (68.4%)	-0.6%	Library/All
Q4	196 (71%)	265 (88%)	+7%	Library
Q5	87 (31%)	192 (63.8%)	+32.8%	Library/All
Q6	32 (12%)	51 (17%)	+5%	All
Q7	62 (23%)	146 (48.7%)	+25.7%	Library
Q8	93 (34%)	180 (60.2%)	+26.2%	Library
Q9	185 (67%)	207 (69%)	+2	Library
Q10	117 (43%)	161 (53.5%)	+10.5%	All
Q11	139 (51%)	176 (58.5%)	+7.5%	KSOM
Q12	93 (34%)	173 (57.5%)	+17.5%	Library/CTLE/ENG
Q13	153 (56%)	180 (59.8%)	+3.8%	CTLE/ENG
Q14	127 (46%)	143 (47.5%)	+1.5%	Library
Q15	69 (25%)	195 (64.8%)	+39.8%	Computer Science
Q16	94 (34%)	145 (48.2%)	+14.2%	CS/Communication
Q17	122 (44%)	168 (55.8%)	+11.8%	Communication
Q18	204 (74%)	249 (83%)	+9%	All
Q19	183 (66%)	235 (78.1%)	+12.1%	All
Q20	82 (30%)	103 (34.3%)	+4.3%	All
Q21	98 (36%)	143 (47.7%)	+11.7%	All
Q22	123 (45%)	171 (56.8%)	+11.8%	Library/CTLE/ENG
Q23	144 (52%)	222 (74%)	+22%	Library
Q24	107 (39%)	261 (86.4%)	+17.4%	Library/All
Q25	135 (49%)	184 (61.1%)	+12.1%	Library/All

Frequency Tables for Information Literacy 2007 (Final Results) can be found in Appendix C.

### 1.3 Library Specific Questions

In 2004, questions 2, 3, 5, 8, 15 and 24 were identified as information that was the primary responsibility of information literacy instruction. In the 2007 online assessment, the first question, "Are you a Freshman or a Senior?" was removed so the questions that compare with the 2004 list are now, 1, 2, 4, 7, 14, and 23. Table 3 shows the comparison data of those questions targeted by the Librarians.

**Table 3 Information Literacy Assessment Primary Library Responsibility Questions Percentage Correct**



From the 2004 data, the WML Librarians developed an assessment plan for 2005/2006 academic year. The Librarians chose to focus on Question 2 and the ACRL Standard One, Performance Indicator 2, Outcome 5 during the Information Literacy sessions scheduled during the 2005/2006 academic year as well as at the Reference Desk.

Question 2 is:

Which of the following is a characteristic of a scholarly journal?

The ACRL standard, performance indicator and Outcome are as follows:

Standard One:

The information literate student determines the nature and extent of the information needed.

Performance Indicator 2:

The information literate student identifies a variety of types and formats of potential sources for information.

Outcome 5:

Differentiates between primary and secondary sources, recognizing how their use and importance vary with each discipline.

In working with students, Librarians chose the following methods to assess this question:

- Tracked questions that were asked at the Reference Desk about scholarly journals.
- Designed a Peer Assessment of Information Literacy Instruction form that included a question related to Outcome 5.
- Matched the ACRL Standards, Performance Indicators and Outcomes to the C/IL 102 and 104 Blackboard Exercise questions and assessed each semester to see if there was a significant increase/decrease in the correct answer.
- Added a new slide to the C/IL power point presentation on **How do I Identify Sources?**

Results for these methods are reported in the 2005/2006 Information Literacy/Information Fluency Assessment Plans for 2005/2006.

[http://academic.scranton.edu/department/wml/Information\\_Literacy\\_Annual-Report-2005-06.pdf](http://academic.scranton.edu/department/wml/Information_Literacy_Annual-Report-2005-06.pdf)

During the summer of 2006 librarians revisited the results of the 2004 Assessment and chose Question 8 (Question 8 became question 7 in the 2007 assessment) to focus on in Information Literacy sessions, especially during the C/IL 102 and 104 classes.

Question 7 is:

Choose the example of Boolean Logic that would likely yield the greatest number of results in a database search.

In 2004 sixty-two (62) Freshmen (23%) answered this question correctly. Librarians were concerned about the low percentage of correct answers from the Freshmen because Boolean Logic is the backbone for developing a search strategy. It was therefore encouraging to see that in 2007, Seniors who took the assessment raised their score to 48.7% an increase of 25.7% over the 2004 Freshmen score.

This increased knowledge of Boolean Logic is supported by data from the C/IL 102 Question Analysis. Four (4) questions on the C/IL 102 exercise deal with Boolean Logic. The percentage of students who have answered the questions correctly has been logged for the last five (5) semesters. In the fall 2007 C/IL exercises, all four questions were answered correctly 70% or more. Boolean Logic will continue to be emphasized in all C/IL and Information Literacy classes with the goal of raising this score in future Senior assessment.

The scores for all questions, with one exception, were raised from that of the 2004 Freshmen Assessment. Many of these scores had significant increases; however, one question did not increase in percentage.

Question 3 is:

Which of the following is Not a secondary source?

In 2004, one hundred ninety (190) Freshmen (69%) answered this question correctly. In 2007, two hundred six (206) Seniors (68.4%) answered this question correctly. While -0.6% is not a significant decrease, an increase was anticipated since primary, secondary and tertiary sources were an emphasis in Information Literacy sessions in 2005/2006. There could be a couple of reasons for this. It might be due to the emphasis being on identification of primary sources rather than on secondary sources or because wording questions in the negative might decrease identification of the correct responses. Primary/Secondary sources need to be addressed again in Information Literacy classes as well as in students' regular classes. Revision of the Information Assessment Tool should look at rewording this question.

#### **1.4 Assessment Calendar**

Information Literacy Assessment activity follows a twelve month cycle. First an ACRL Standard and one or two Outcomes is selected with the intent to cover all library only related questions (See **Table 2** for Department Responsibility). Date results and plans for improvement are reflected in the Library's Annual Report.

Following is the twelve month assessment calendar.

- August-November: Identify Standard, selected Outcomes, means of assessment, and the criteria for success in the selected year.
- September-May: Implement improvement strategies based on previous year's assessment results.
- September-May: Conduct current year assessment activities.
- May-July: Discuss results of current year assessment and work on improvement strategies.
- June-July: Report on Information Literacy Assessments from the previous year in the Annual Report of the Weinberg Memorial Library

## 1.5 Recommendations for Future Steps

- Present the results of the 2007 Assessment to the Library Advisory Committee
- Revise the Information Literacy Assessment Tool to reflect changes developed by Dr. Terry Mech from King's College.
- Select questions to focus on during Information Literacy sessions and at the Reference Desk.
- Continue to inform Faculty how they can incorporate Information Literacy into their lectures.
- Continue to make comparisons between the C/IL 102 and 104 Exercise results, the Information Literacy results and the ACRL Standards.
- Prepare an article for the Library's Fall 2008 Newsletter regarding the assessment results.
- Give the Information Literacy Assessment Tool Fall semester of 2008 to the 2008 Freshmen, preferably in Freshman Seminar Classes.
- Explore the possibility of giving a presentation at the Pennsylvania Library Association Conference.
- Develop an article for publication in a peer reviewed journal.

## 1.6 Library Faculty, Administration and CTLE Administration

For future assessment, use of the test results and demographic data, the following Library Faculty, CTLE and Library and Administrators completed the IRB-CITI (Institutional Research Board-Collaborative Institutional Training Initiative) required of all persons conducting research with Human Subjects at, or in conjunction with, the University of Scranton.

Katie S. Duke	Reference Librarian – Coordinator of Information Literacy
Bonnie Strohl	Associate Director of the Weinberg Memorial Library
Betsey Moylan	Reference Librarian – Chair of Department
Kevin Norris	Reference Librarian – Database Coordinator
Bonnie Oldham	Reference Librarian – Distance Learning Library Coordinator
Donna Mazziotti	Reference Librarian
Kay Lopez	Part-time Reference Librarian
Narda Tafuri	Acquisitions Librarian
Eugeniu Grigorescu	Associate Director of CTLE

## Appendix A

**Contact Katie Duke, Information Literacy Coordinator for information about the questions.**

## Appendix B

### Characteristics of the Participants

Date: \_\_\_\_\_ Class \_\_\_\_\_

Name \_\_\_\_\_ Age \_\_\_\_\_ Gender (Circle one) M F

Did you take this Information Literacy Exercise during the Fall Semester 2004 (Circle one)

Yes                      No                      Don't Remember

Student Information (Circle one)

Full time              Part time

Major \_\_\_\_\_ College (Circle one) CAS      CPCS      KSOM

Future Plans: (Check all that apply)

Upon graduate I plan to go to:

- Work force
- Graduate school
- Both
- Other \_\_\_\_\_

## Appendix C

<b>Information Literacy 2007 (Final Results) – Frequency Tables</b>
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**Contact Katie Duke, Information Literacy Coordinator, for information the questions results.**