

University Libraries Assessment Committee

2008-2009 Report

University Libraries and Online Courses:

Document Analysis and Student Survey

Respectfully submitted by

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UNIVERSITY LIBRARIES

UNIVERSITY of
NORTHERN COLORADO



University of Northern Colorado's Information Source

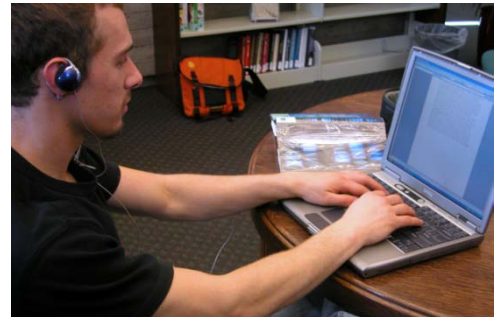
The Work of the Committee

The Committee met regularly over the course of the year, creating a presentation on completed work as well as exploring, refining and executing new projects. In September 2008 members of the committee presented a short Open Forum, describing the project that had made up the previous year's work.

The 2007-08 project was an implementation of Appreciative Inquiry to qualitatively assess how graduate students in online programs perceive the Libraries' services and collections. As the University of Northern Colorado offers more and more graduate level courses and entire graduate programs online, the Libraries' need to change the method of delivery of services and collections. The Appreciative Inquiry method focuses on what works well, inviting participants to identify any successes they have had allowing the Libraries to build on that foundation of strength. The September presentation included discussion of the design of the instrument, solicitation of participants, findings and vision, and finally recommendations, which were forwarded to Libraries Administration to inform the planning process.

Focus on online courses and learners

For 2008-09 various potential projects were given preliminary exploration and discussed by the committee, including the possibility of partnering with social science students to execute focus groups, a recommendation expressed in the 2007-08 report.



Ultimately, the committee chose to pursue two projects, both focusing on the increasingly important online learning environment: a document analysis project and a survey delivered online with the assistance of the Social Research Laboratory (SRL), a campus enterprise led by sociology faculty Mark Riddle and Jeff Houser.

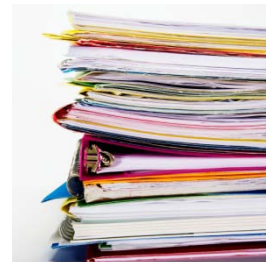
Initially, the survey was selected as the sole project with the goal of exploring the ways in which students in online courses responded to assignments involving research. SRL researchers were engaged to assist with instrument design, administration of the survey, and analysis. The committee chose to partner with SRL in order to ensure that a valid sample from the desired population was surveyed, and to secure the analytical expertise of two trained social scientists. Complete discussion and preliminary results of the survey are presented below.

While discussing the survey project, the need for the document analysis project was realized: members of the committee had assumed that research projects involving Libraries resources are assigned in online classes. The committee determined that this assumption needed to be checked. Syllabi for online courses taught in the spring semester of 2009 were collected and

analyzed for research project presence or absence. Additional details associated with research projects were also noted. Complete discussion and results of the document analysis are presented below.

Project One: Document analysis

As part of this year's project, the Assessment Committee performed a document analysis in which the syllabi for online courses were examined, seeking the presence or absence of research papers or projects and exploring how those projects are defined. By analyzing syllabi, the committee hoped to gain insight into the instructors' expectations for student research without the need to directly survey the instructors themselves.



Gary Pitkin, Dean of Libraries, contacted the Deans of the different colleges in order to gain authorization to inspect syllabi as well as information regarding how best to access the syllabi. From Insight, a list was generated of all the online courses offered during the Spring 2009 semester. Courses offered through Extended Studies were excluded to ensure a homogenous population of courses. An e-mail message requesting access to syllabi was sent to all the instructors on that list. Many instructors simply sent an electronic copy of their syllabus. Other instructors directed the committee to Blackboard which turned out to be a convenient way to view the majority of the syllabi analyzed. Of a possible 83 syllabi, 60 were analyzed.



A spreadsheet was created for recording syllabi data which included course prefix, number, level, title, instructor, enrollment, syllabus date, whether there was a research project or not, and additional information about the project if any, including specific sources or databases named, specific mention of a UNC library or librarian.

A "research project" was defined as one that requires the student to find information resources on his/her own that were not part of the assigned reading list for the class, to summarize, analyze and synthesize those resources and finally, to draw conclusions.

It was difficult to determine from the syllabi whether some papers or projects fit into this category; these are included in the analysis as "Unclear/NR" (See Table 1). A number of syllabi noted that further guidelines for a project were available in the additional course materials, but, not having access to more detailed information the committee could not determine the nature of these projects. In several cases, instructors indicated via email that while their spring course did not include a research component, a course offered in the fall semester did. Data from other semesters is not included in this study; however, analysis of fall semester syllabi might yield different results from those presented here.

Table 1. Course Level by Presence of a Research Project by Enrollment

	No. of Sections	Total Enrollment
100 level	9	395
200 level	12	344
300 level	18	483
400 level	3	139
500 level	15	188
600 level	22	229
700 level	4	24
	83	1802

	"Yes" Sections	"Yes" Sections Percentage	"Yes" Enrollment	"Yes" Enrollment Percentage
100 level	3	33.33%	175	44.30%
200 level	2	16.67%	68	19.77%
300 level	3	16.67%	72	14.91%
400 level	1	33.33%	21	15.11%
500 level	5	33.33%	52	27.66%
600 level	6	27.27%	73	31.88%
700 level	2	50.00%	13	54.17%
	22		474	

	"No" Sections	"No" Sections Percentage	"No" Enrollment	"No" Enrollment Percentage
100 level	6	66.67%	220	55.70%
200 level	9	75.00%	226	65.70%
300 level	7	38.89%	207	42.86%
400 level	1	33.33%	105	75.54%
500 level	6	40.00%	78	41.49%
600 level	13	59.09%	120	52.40%
700 level	1	25.00%	2	8.33%
	43		958	

	"Unclear/NR" Sections	"Unclear/NR" Percentage	"Unclear/NR" Enrollment	"Unclear/NR" Enrollment %
100 level	0	0.00%	0	0.00%
200 level	1	8.33%	50	14.53%
300 level	8	44.44%	204	42.24%
400 level	1	33.33%	13	9.35%
500 level	4	26.67%	58	30.85%
600 level	3	13.64%	36	15.72%
700 level	1	25.00%	9	37.50%
	18		370	

Findings

Syllabi examined represented 83 sections of 63 different courses taught by 52 different professors. Total online enrollment for spring 2009 was 1802 students. The largest single class was EDEL453 (Elementary Instruction, Social Sci and Math); 105 students were enrolled in its single section. The smallest active sections were two sections of NURS 604 (Management of Chronically Ill Populations II) with one student each, and one of SRM 600 (Introduction to Graduate Research) which also had only one student. The average section size was 21.7.

In UNC's online course offerings for Spring 2009, the School of Education had the highest number of course sections, with 43 sections of 33 different courses online, for a total enrollment of 762. Special Education had 23 sections of 23 different courses, for a total enrollment of 236. Education Technology had 19 sections of 9 different courses, for a total enrollment of 421.

More than 30% of graduate level courses required a research paper/project as compared to 21% of undergraduate courses. More than 30% of graduate students and 24.6% of undergraduates were required to do a research paper/project.

Of the 60 syllabi examined, only 6 specifically mentioned a UNC library (10%), and 3 specifically mentioned a subject librarian (5%). The three that specifically named the subject librarian were three sections of the same course, namely BA101 (Business Computing), which did not require a library research project.

Project Two: Survey of students in online courses

Working in concert with SRL, the committee created a survey. Initially the committee assembled questions, honing a refined question set into the instrument that ultimately became the online survey. The final instrument, as approved by IRB, is attached as Appendix I. Members of the committee also worked with OBIA personnel to create a list of students enrolled in Spring 2009 online courses; the list totaled nearly 1800 students, representing all four undergraduate years as well as graduate levels. This list, making up the survey population, was used by SRL to draw a sample of students who were then contacted via email with invitations to participate in the survey. The initial invitation, sent in late April, was followed by two reminders over the course of ten days. Text of the invitation makes up the first portion of Appendix I. Eight (8) Barnes & Noble gift cards were offered as incentives.



SRL received 441 responses, a 24% response rate, with the majority (nearly 60%) of respondents reporting as either senior undergraduates (n = 135) or graduate students (n=133). See Table 2.

Table 2. Class level of survey respondents

Response	Frequency	Count
Freshman	4.5%	20
Sophomore	11.3%	50
Junior	23.4%	103
Senior	30.6%	135
Graduate	30.2%	133
Valid and Total Responses		441

Respondents were grouped by age range, with more than 64% indicating a fairly traditional undergraduate student demographic. See Table 3.

Table 3. Age of Respondents

Response	Frequency	Count
18-25	63.7%	258
26-45	24.7%	100
46 and above	11.6%	47
Valid and Total Responses		405

Major areas of study were broadly represented. Interdisciplinary Studies represented the highest frequency (n=93). See Table 4.

Table 4. Top Categories of Major Area of Study

Response	Frequency	Count
Interdisciplinary Studies	21.10%	93
Special Education	8.40%	37
Nursing	6.60%	29
Business Administration	6.10%	27
Criminal Justice	4.30%	19
Pre-Program	4.30%	19
Nursing Education	3.90%	17
Psychology	3.20%	14
Mathematics	2.70%	12
English	2.30%	10
Non-Degree Seeking	2.30%	10
Speech-Language Pathology	2.00%	9
Dietetics	1.80%	8
Educational Technology	1.80%	8
History	1.80%	8
...		
Valid and Total Responses		441

More than 160 (41%) of those who responded to the question “Including this semester’s courses, how many online courses have you taken?” indicated that they had taken two (2) or fewer online courses. Only 16% of those responding indicated that they had taken 7 or more online courses. This question was designed to gauge the respondent’s overall facility in the

online learning environment, so there was no stipulation of UNC-offered courses. In response to the question “If there is a research project assigned in the course, do your instructors suggest particular sources for you to use?” the majority of respondents (58%) indicated that some instructors suggest particular resources, while others have not.

One of the questions asked respondents to indicate which resources they used frequently, seldom, or never. The resources that respondents frequently use when assigned an online research project include *EBSCO’s Academic Search Premier* (64%), *Article Finder* (63%), *Books* (47%), and *Google/Yahoo/other search engine* (75%). Resources seldom used include *Library Subject-specific databases* (42%), while those never used include *LexisNexis Academic* (43%) and *Wikipedia* (45%). The items listed for response are not necessarily equivalent resources, however the committee determined that it would be useful to discover precisely how students proceeded through the research process.



More than half (53%) of respondents indicated that if the materials needed for online research projects were unavailable through UNC, they did not use Prospector or Interlibrary Loan and when asked about preferred sources of help with research projects, nearly three-quarters went directly to the instructor, while in-person library assistance was indicated by 42%. See Table 5.

Table 5. Preferred Assistance with Online Research Projects

Response	Frequency	Count
Faculty member/instructor	72.8%	295
In-person library assistance	42.2%	171
Online chat/IM library assistance	9.4%	38
Telephone library assistance	6.9%	28
Email library assistance	17.0%	69
Ask Colorado	4.4%	18
Other [please specify]	8.9%	36
Valid and Total Responses		405

When posed the question “What does ‘using the library’ mean to you? Check all that apply,” nearly 350 (86%) selected *Doing research*; while more than 250 (60%) selected *Accessing library databases from off campus, Individual study space, and Group study space*. More than 200 (52%) indicated that using the library also meant *Personal use (checking email, Facebook, leisure reading, etc.)*.

Analysis of student types and help with research projects

The analysts at SRL performed a series of cross-tabs mining the data for information potentially relevant to the libraries’ planning process, the results of which are quoted extensively in this section. One question explored the level of achievement as expressed by grade point average (GPA) and responses to survey questions. Analysis showed a small (not statistically significant) direct relationship between GPA and use of Prospector and Interlibrary Loan.

. . . 46.4% of all students use borrowing resources like Prospector to obtain materials not available from UNC libraries. This result holds true across all GPA levels, although there is a slight decrease with GPA; 49.1% of “A” students indicate borrowing from other libraries, while only 45.3% of “B” students and 39.3% of “C” students indicate they borrow from other libraries when unable to obtain necessary materials.

Another analysis sought a relationship between student achievement levels and those places, people, or services used by students when help was needed. The question posed: *When you needed help with online research projects, where did you go? Check all that apply*. The result indicated that higher achieving students were more likely to ask for help from course faculty or instructor; however the relationship is again not statistically significant. When examining those that indicated seeking help from library personnel in-person, the results are significant:

Overall 42.2% of all respondents sought help in-person from a member of the library staff. 37.3% of “A” students asked library personnel for help with their online projects, while 44.7% of “B” students and 64.3% of “C” students sought help from library staff in person. Unlike the previous findings the trend in seeking help directly from library personnel is statistically significant ($\chi^2 = 9.648$; $\alpha = .047$).

Additional analyses indicated that students much prefer in-person assistance, whether from teaching faculty or library personnel, over assistance offered in other formats:

. . . the most likely source for help is via email contact with a librarian (17.0%), followed by telephone online chat/IM library assistance (9.4%), telephone library assistance (6.9%) and finally Ask Colorado assistance (4.4%). Student GPA did not generate any statistically significant differences in help seeking behavior.

Some very subtle (and statistically insignificant) trends do reveal themselves in this analysis, which indicate that higher achieving (“A”) students are more likely to seek assistance via telephone over chat/IM assistance or Ask Colorado.

Student strategies for seeking help with online research projects

When considering the analysis of graduate and undergraduate student strategies for seeking assistance with online research projects it is important to keep in mind the distribution of survey respondents: 68% of respondents indicated undergraduate status, 31% indicated graduate status, and 1% selected the option “non degree seeking.” Graduate programs generally involve more extensive research demands than undergraduate programs; the distribution of respondents skews the data to courses typically requiring little or no research.

In addition, whether or not respondents were “distance” learners (living 50 miles or more from Greeley, CO) did not influence the use of Prospector or Interlibrary Loan. Anecdotal data indicates that students living at extreme distances from Greeley make use of local academic, institutional, and public libraries to access print materials and for Interlibrary Loan services. Therefore, UNC students do borrow from libraries other than UNC’s Libraries, either directly by using the library down the street or in a university teaching hospital, or by using services provided through UNC’s Libraries.



For example, a statistically significant difference in use of Prospector or ILL services between graduate students and undergraduates was revealed. However, there is virtually no difference in the use of these services between online and on-campus students: “In general, 53% of all students borrow from other libraries no matter where they live.” On-campus students and undergraduates are more likely to ask for in-person help from library personnel than online students or graduate students. Chat/IM assistance is used consistently “. . . roughly 9 % of students have utilized this form of library assistance. There are no statistically significant differences between undergraduate and graduate students; nor between on-campus and distance learners.” Telephone library assistance and email library assistance is statistically more likely to be sought by graduate students and online students than undergraduates and on-campus students. Complete SRL reports



are available from Archival Services located in Michener Library.

Observations from the two projects combined

Without a comparison between online and face-to-face and hybrid courses the committee cannot draw any conclusions about either the number of research papers or the references to the Libraries as identified in the document analysis. However, in 2008/09 Libraries faculty conducted more than 330 instructional sessions to more than 8,500 students. One might speculate that students in on-campus courses receive more exposure to the libraries and library resources than their counterparts in online courses. Additionally, some disciplines may better lend themselves to online presentation and some less well, precisely because materials supporting research projects are more likely to be available online. It may be that some online courses are specifically designed without a research component because they are marketed to students who may not have access to an academic library.



In the world of online learning, there is a strong potential for a student to feel isolated and to be unaware of resources available to enable success. An alarming number of teaching faculty appear to remain unaware of the breadth of services and collections available remotely which could support student research and learning. It is important that students, faculty and administrators be made aware that the library is accessible to them as a vital resource. With that in mind, the Libraries should consider new avenues to reach out to both instructors and students in online courses.

Such avenues could include the Libraries providing instructors a library information statement that can be inserted into the syllabi for online courses. The statement could include library contact information, information about services and collections, even the name of the appropriate subject librarian.

What is seen in the survey results is that even students in online courses come to the Libraries to study, not necessarily solely to do research. Additionally, when students DO conduct research, it is mostly through a search engine. A simple movement to give a syllabus statement of services and collections provided by the Libraries, and the subject librarians, could result in an increase in research being done with the aid of the library, and not just the Internet. It seems reasonable that a project to include a statement regarding library services and collections, as well as subject librarian contact information might be piloted within the School

of Education, as 52 % of the online sections and 42% of the online students represent this School.

Recommendations

The Committee offers recommendations drawn from both the document analysis and the survey of students in online courses:

- Explore avenues for reaching those teaching in the online environment regarding the Libraries' collections, services, and library instruction options. This outreach might be most effectively delivered in collaboration with the CETL or the Office of Extended Studies, depending upon "where the teachers are," and, as described above, might be piloted with faculty in the School of Education.
- Explore options for enhancement of the Libraries' presence in Blackboard, offering more specific guidance to patrons unfamiliar with the Libraries generally. Possibly increase customization of this link by subject librarians, perhaps customizing LibGuides for specific online courses.
- Explore options for redefining the notion of "distance learners." Because many online learners are within the 50 mile radius presently used to define and prescribe certain library services, the current definition and limitations may be reaching obsolescence.
- Continue emphasis on electronic resources – both their acquisition and their promotion.
- Continue development and refinement of the library webpage services for online learners.
- Undertake further evaluation of student's preference of database use as indicated on the survey. On the basis of this further analysis, consider tailoring outreach efforts by focusing on specific databases and library services.

Summer 2009

Appendix I – the invitation/announcement and survey

TEXT OF THE EMAIL INVITATION TO PARTICIPATE:

The University of Northern Colorado's University Libraries routinely measure patron satisfaction with our services. Students in online courses have unique needs that we hope to learn more about through this survey. Would you take a few minutes to let us know how well we are doing in meeting your needs? To express our appreciation, we offer you the chance of winning one of eight \$25 Barnes & Noble gift cards.

We foresee no risks to participants beyond those that are normally encountered in computer use. The questions are brief and responses primarily involve selecting from a set of choices. It should take approximately 15 minutes or less to complete the survey.

Participation is voluntary, and you may end the survey at any time. We request no information that could be used to identify participants; your responses will be held in confidence. Data, for research purposes, will only be used in the aggregate, further ensuring privacy. Clicking on the link below connects you to the survey, and indicates consent to participate.

Please contact the chair of the University Libraries Assessment Committee, annie.epperson@unco.edu with any questions or concerns about this research project. If you have any concerns about your selection or treatment as a research participant, please contact the Sponsored Programs and Academic Research Center, Kepner Hall, University of Northern Colorado in Greeley CO 80639; 970-351-1907. Thank you for participating.

- - - - LINK TO SURVEY IN WEBSURVEYOR - - - -

Survey Questionnaire

Thank you for being willing to participate in this survey. Your answers will be confidential, and are in NO WAY connected to any course in which you are, or will be, enrolled.

There are two parts to the questionnaire. In the first part we ask about your experience with online learning, and in part two we ask some demographic questions that help us know a little more about you. At the end you will be presented a chance to enter a drawing for a \$25 Barnes & Noble gift card.

Part I: Online learning

1. Including this semester's courses, how many online courses have you taken?
2. Of all the courses that you've taken, how many have included a research project as one of the assignments or requirements? By this, we mean a project in which you are expected to use materials beyond your text book and assigned course readings to learn more about a topic and write a paper or create a presentation on that topic.
3. If there is a research project assigned in the course, do your instructors require a certain number of sources used for the project? Y N
4. If there is a research project assigned in the course, do instructors suggest particular resources for you to use? This could include directing you to a particular librarian, to a journal or magazine, to an online source, or some other resources that could be useful. Y N
5. Please indicate the sources that you use when assigned an online course research project.

	Frequently	Seldom	Never
Academic Search Premier	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Article finder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Books	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EBSCO	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Google/Yahoo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Journal/magazine/newspaper articles	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lexis Nexis Academic	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Library subject-specific databases	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Source (UNC's Library catalog)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wikipedia

Other [please specify]

6. When you can't get materials from UNC's Libraries for online research projects, do you borrow from other libraries, using Prospector or Interlibrary Loan (ILL)? Y N

7. When you needed help with online research projects, where did you go? Check all that apply.

Faculty member/instructor

In-person library assistance

Online chat/IM library assistance

Telephone library assistance

Email library assistance

Ask Colorado

Other [please specify]

8. Indicate how much you agree or disagree with the following statements.

	Strongly agree	Agree	Don't Use	Disagree	Strongly disagree	Don't know, or never heard of
UNC's Library Homepage (library.unco.edu) is easy to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Library Homepage is easy to navigate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
The Source, UNC's Library catalog, is easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Finding articles from the Library Homepage is easy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Help with the Library Homepage is easy to find	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

UNC's periodical databases linked to Article Finder are easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
UNC's electronic journals are easy to use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I can get the materials I need for online research projects through UNC's library	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Part II: Demographics

9. What does "using the library" mean to you? Check all that apply.

- Personal use (checking e-mail, Facebook, leisure reading, etc.)
- Getting a snack from the Coffee Corner
- Meeting with friends
- Individual study space
- Group study space
- Doing research
- Accessing library databases from off campus
- Other [please specify]

10. Sex: F M Choose not to answer

11. Age:

12. Zip code of current residence:

13. Is this the zip code at which you do most of your course work? Y N

14. Please indicate your status at UNC:

- Undergraduate Graduate Student Non degree seeking

END

Thank you again for being willing to participate in this survey. With your help we will work to improve our service to students in online courses.

If you would like to be entered into the drawing for one of eight \$25 Barnes & Noble gift cards, click [here](#).