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What's the VALUE of Information Literacy? Comparing Learning Community and Non-Learning Community Student Learning Outcomes

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What's the VALUE of Information Literacy? Comparing Learning Community and Non-Learning Community Student Learning Outcomes

Abstract

Using the Information Literacy VALUE Rubric provided by the AAC&U, this study compares thirty final capstone assignments in a research course in a learning community with thirty final assignments in from students not in learning communities. Results indicated higher performance of the non-learning community students; however, transfer skills were higher with the learning community students. Reasons for the findings are discussed, along with suggestions for future research. This article contributes to the growing literature about the role of librarians and information literacy in learning communities.

Keywords

assessment, information literacy

Introduction

Information literacy is defined as the ability to find and use information effectively and ethically. Information literacy instruction in higher education has evolved over the past several decades from a skills-based practice to a more integrative, transformative pedagogy that is recognized as a necessary means for today's undergraduate students to be successful in a digital world (ACRL, 2015). For colleges and universities that use learning communities as a high-impact practice to increase student retention and engagement, information literacy, with its interdisciplinary focus, can provide a place of intersection as students explore shared themes through research.

Supported by a small internal fund through Duquesne's Assessment of Learning Outcomes (ALOA) Committee, this study examines summative assessment of learning outcomes between learning community and non-learning community students enrolled in a freshman-level information literacy course. The comparison of the information literacy outcomes of these assignments can inform decisions about whether or not to integrate information literacy within a learning community as well as contribute to the somewhat limited base of literature on integrating information literacy in learning communities.

When embedded in learning communities, librarians can better collaborate with faculty discipline leaders to link to content area knowledge for higher impact learning that directly relates to the activities, courses, and assignments. Understanding the most productive method of information literacy instruction within learning communities—as informed by assessment results, student attitudes, and student success—can help us integrate library instruction and information literacy more effectively into learning communities.

Background

Information Literacy

Information literacy (IL) encompasses a number of concepts that students must not only learn but also master if they are to be successful in finding and using information in today's information-saturated environment. The Association of College and Research Libraries has created a set of five influential competency standards for information literacy in higher education (Association of College & Research Libraries [ACRL], 2000). Our work is informed by these standards, which also include performance indicators and outcomes. In 2015, subsequent to our work, ACRL proposed a new definition of IL in the *Framework for Information Literacy for Higher Education* (ACRL, 2015); however, the earlier standards continue to influence IL instruction and assessment and provided the basis for our project.

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Echoing the ACRL Standards, the Middle States Commission on Higher Education, the body that accredits our institution, Duquesne University, has offered its own definition of IL:

Several skills, collectively referred to as "information literacy," apply to all disciplines in an institution's curricula. These skills relate to a student's competency in acquiring and processing information in the search for understanding, whether that information is sought in or through the facilities of a library, through practica, as a result of field experiments, by communications with experts in professional communities, or by other means. Therefore, information literacy is an essential component of any educational program at the graduate or undergraduate level. (Middle States Commission on Higher Education, 2003)

The Middle States Commission (2003) further states that "these skills include the ability to":

- Determine the nature and extent of needed information;
- Access information effectively and efficiently;
- Evaluate critically the sources and content of information;
- Incorporate selected information in the learner's knowledge base and value system;
- Use information effectively to accomplish a specific purpose;
- Understand the economic, legal and social issues surrounding the use of information and information technology; and
- Observe laws, regulations, and institutional policies related to the access, and use of information

Based on the ACRL Standards and those of the Middle States Commission, in 2005, the Duquesne University Information Literacy Steering Committee offered—and subsequently revised in 2013—a definition of IL to be employed at Duquesne:

Information literacy is an intellectual framework for identifying, finding, understanding, evaluating, and using information. Mastery of these skills is essential for lifelong learning and is the foundation of Duquesne University's special trust of seeking truth and disseminating knowledge within a moral and spiritual context. (Duquesne University, 2013)

The Information Literacy Steering Committee provides a list of skills that reproduces almost word for word those of the Middle States Commission.

At Duquesne University, IL is spread throughout the curriculum. Statements on academic integrity issues like plagiarism appear on most syllabi. Librarians, whether generalists or subject specialists, are regularly called upon to visit classes to train students in the use of library databases or the online catalog to find materials

specific to the assignments they are doing. These may be one-shot sessions or encompass a series of visits. Librarians may also be called upon by teaching faculty to assist in the creation of assignments highlighting the use of specific library resources in their particular discipline.

But the most direct and pervasive example of IL training at Duquesne is a core course, UCOR 030, *The Research and Information Skills Lab*, whose course objectives and outcomes are based on the Duquesne definition of IL. This is a one-credit course that all students must pass in order to graduate. It is usually taken in the first semester of students' freshman year. Around 35 sections of the course are offered each fall semester, with two or three additional sections offered in the spring. Sections are taught by full-time librarians of Duquesne University's Gumberg Library as well as by adjunct faculty. In addition to many general sections of UCOR 030, there are also versions of the course geared specifically to Music and Education majors and, more recently, to students in the Health Sciences. The course covers academic integrity, finding information, evaluating information, and reading for research. The final captstone assignment in the course asks students to describe a search, critique it, and then cite and evaluate relevant sources.

Libraries and Learning Communities

Learning communities can provide a mutually beneficial point for collaboration between library faculty and teaching faculty (Lindstrom & Shonrock, 2006). This collaboration can appear as instruction sessions within learning community courses (Matoush, 2003; Young & Duvernay, 2006), with librarians instructing faculty on how to teach information literacy in the curriculum (Hurvitz, Benvau, & Parry, 2015), or as pairing an information literacy course with learning community courses (Burgoyne & Chuppa-Cornell, 2015; Rapchak & Cipri, 2015). These partnerships typically, though not always, focus on the first-year writing courses to bolster student proficiency at researched writing.

Assessment data on the integration of library faculty with learning communities remains limited, though some positive results have been found. When librarians at Chandler-Gilbert Community College taught a for-credit course linked to one of the English first-year composition courses, students increased their persistence, completion rates, and A grades—increases that did not occur when librarians embedded their instruction in the course (Burgoyne & Chuppa-Cornell, 2015). Additionally, in a comparison of pre- and post-test data, more students moved from *developing* to *competent* or *excelling* when the for-credit class was taught at Chandler-Gilbert Community College (Burgoyne & Chuppa-Cornell, 2015). In a pilot of integrating an information literacy for-credit class in a learning community at Duquesne University, the scores of the students in the learning community were not significantly different from two other sections taught by the same instructor. However, the writing instructor saw improvement of the research

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skills of students in the learning community compared to those who were not in the learning community (Rapchak & Cipri, 2015). After library sessions in a learning community at San Jose State University, pre-test scores and post-test scores showed improvements in student search strategies, evaluation, and competence, although this was not compared with students who were not in the learning community (Matoush, 2003). At Arizona State, final paper grades improved from first year to third year when a librarian was embedded in a learning community. (Young & Duvernay, 2006). At Grossmont College, students in the Freshman Academy, which included information literacy instruction, saw greater success rates, and students reported that they used skills from their information literacy courses to help with other courses at a higher rate than those students who were not in the Freshmen Academy (Hurvitz et al., 2015). Overall, assessment data indicates that including information literacy in a learning community has a positive impact on student success.

Learning Communities at Duquesne

Nearly all the students at Duquesne's McAnulty College of Liberal Arts, which includes majors such as English, Philosophy, Communication, and Psychology, are in a learning community. In the 2014-2015 academic year, there were nine learning communities. Students in the learning communities live in the same residence hall, take four courses together in the fall and one or two in the spring, and complete integrative assignments. The learning community curriculum at Duquesne University is built around a theme, common reading, and paired assignments that link information literacy with the other courses in the learning community. For example, in one learning community, the overarching theme deals with the impact of technology in society. This theme is imparted throughout a writing intensive course, an ethics course, an information literacy course, and community engaged learning activities.

While each learning community contains unique classes, all learning communities include UCOR 030, Research and Information Skills Lab, and all but one include UCOR 101, Thinking and Writing Across the Curriculum. On the other hand, students who are not in the McAnulty College of Liberal Arts, like those in the professional schools, sciences, and business, take UCOR 030 or one of its equivalent courses in Education or Music. The Research and Information Skills Lab was piloted in the learning communities in 2012 and was included in all learning communities the following year. Students participate in co-curricular activities as a learning community and with all students in the learning communities. For example, in TERRA, students used what they learned in their courses on environmental history and food ethics, along with Thinking and Writing and Research and Information Skills, to inform their work at a community garden.

Assessing Information Literacy with Rubrics

Pre -and post-class surveys and reflections provide valuable insight as assessment methods; however, applying rubrics to student projects allows for direct assessment of student work where the goals are to determine whether learning objectives are being met and, ultimately, to improve student learning. Rubrics are also effective assessment tools for informing library instruction (Samson, 2010). Applying a standardized instrument can expand programmatic assessment of information literacy within a learning community by delivering a "reliable and objective method for analysis and comparison" (Knight, 2006).

The Association of American Colleges and Universities (AAC&U) Information Literacy Valid Assessment of Learning in Undergraduate Education, or VALUE, rubric, was published in 2010. This standardized rubric provides common criteria to apply to assignments with information literacy components, such as the ability to determine the extent and type of information needed and how to access, evaluate, and use information effectively and ethically. Many academic libraries have used the Information Literacy VALUE rubric to align library instruction goals with institutional learning outcomes (Oakleaf, 2011). In our study, the rubric connects the UCOR 030 capstone assignment, the final assignment of the course where students apply a multitude of skills learned, with learning outcomes regardless of whether or not the course was connected with a learning community. The Assessment of Learning Outcomes Committee at Duquesne offered a small stipend to support assessment with a VALUE rubric. The grant supported a comparison of IL outcomes for learning community students and non-learning community students and was further used in other information literacy assessment

One benefit of using the VALUE rubric is that it requires assessment not only of the students' coursework but also of the capstone assignment itself, since we ask whether students successfully demonstrate the skills necessary to achieve success and whether an assignment sufficiently addresses the course learning objectives. Using a rubric allows for authentic assessment of work in which students apply knowledge to perform a task. Authentic assessment indicates not only that students have "mastery of content, but also the ability to use content knowledge for problem solving, analysis, communication with others, ethical reasoning, or other learning outcomes and to apply content knowledge in a 'real-world' situation' (Rhodes & Findley, 2013).

Capstone Assignment

While the ACRL standards for information literacy inspired the learning goals for UCOR 030, the course also aligns with several of the frames from the *Framework for Information Literacy in Higher Education* (American Library Association, 2015). The capstone assignment in UCOR 030 requires students to

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choose a topic (or choose from a list of topics) that they will research throughout much of the course, a research process that reflects many of the knowledge practices of the frames from the *Framework*, including "Research as Inquiry" and "Searching as Strategic Exploration." For learning community students, the capstone topic is relevant to the learning community theme. Assessing the capstone assignment for learning community sections and non-learning community sections provides insight into the skills students acquire through both versions of the course. It also allows for a comparison of the skills gained for students in a learning community (LC) and students who take the standard version of UCOR 030.

The capstone assignment relates to the VALUE rubric because it asks students to describe their research question (*Determine the Extent of Information Needed*), describe their search strategies (*Access the Needed Information*), evaluate their sources (*Evaluate Information and its Sources Critically*), and cite the sources (*Access and Use Information Ethically and Legally*). The rubric itself came from the ACRL standards, so it is an effective assessment tool for the learning outcomes of the course. We did not use one of the learning outcomes from the rubric, *Use Information Effectively to Accomplish a Specific Purpose*; however, students in both LC and non-LC courses are encouraged to use a genuine research topic they are exploring for another course project so that they will actually make use of the information found in the capstone assignment.

Methodology

Using the Information Literacy VALUE rubric, which includes a score of 1 for Benchmark, 2 or 3 for Milestones, and 4 for Capstone ratings, we assessed a sample of capstone assignments from a sample of learning community sections and a sample of non-learning community sections of UCOR 030 taught in fall of 2014. We randomly collected five assignments from six randomly selected sections of the LC and non-LC course, for a total of 60 capstone assignments to be assessed. These were anonymized by an outside party according to the IRB so that the raters did not know the student or the instructor of each assignment. We used a norming session to improve inter-rater reliability and realized that the Access and Use criterion needed to be revised to better reflect the citing requirements of the assignment. Thus, we changed it to focus on the correctness of the citation rather than correctly summarizing or paraphrasing material or legal issues; this will be referred to as Cite in this report. Our modified rubric can be found in Appendix A. Once we were ready to assess the assignments, at least two members rated each capstone assignment. For categories with a discrepancy higher than one point in the two ratings, a third rater was used. Once the results were compiled, an independent ttest was run using SPSS to indicate significant differences in mean ratings between LC and non-LC student information literacy learning outcomes. Additionally, we identified 2.5 (the midpoint of the *Milestones* categories) as the cutoff point for a

successful rating and established the percentage of student assignments that reached this level or above for each category.

Additionally, at the end of the course, we asked all UCOR 030 students to rate their agreement on a five-point scale regarding their attitude toward the course. They responded to the following questions: This course taught me information skills I need for my studies at Duquesne and This course taught me information skills I will need for my career. SPSS was used to conduct an independent samples t-test to compare the mean ratings of LC and non-LC students. At the beginning of the course and the end of the course, we asked students to rate their confidence levels on a five-point scale for the following IL skills: finding good websites for research; locating books for research; evaluating information sources; searching for scholarly journal articles; and conducting academic research. This allowed us to compare student confidence ratings before and after the course.

At the same time that we were gathering data for this assessment, we were completing our assessment of the Thinking and Writing Course, UCOR 101, which is paired with UCOR 030 in most of the learning communities. In that assessment, information literacy criteria developed by the Director of First-Year Writing and the Instruction Librarian were used to compare student scores in the learning communities and the non-learning communities in a final research paper students completed in fall 2014 (see Appendix B).

Results

According to the descriptive statistics for all assignments assessed, the mean for each criterion is between 2.5 and 2.75, which is in the middle of the *Milestones* criterion of the rubric (see Table 1). *Evaluate* was rated highest (2.74) and *Access* was rated lowest (2.57). There are some minimum ratings of zero because students did not include these sections in their assignments, but these scores were not included in the evaluation.

Table 1
Descriptive Statistics

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
determine	60	1.00	4.00	2.7333	.69176
access	55	.00	4.00	2.5727	.60414
evaluate	60	1.00	4.00	2.7417	.69191
cite	60	.00	4.00	2.6000	.72369
Valid N (listwise)	55				

LC and Non-LC Comparisons

In comparing the assignments of the learning communities and the non-learning communities, those from the learning communities rated lower in all

categories (see Table 2). According to an independent samples t-test, these were significantly lower in all categories (p < .05) except in Cite (p=.86). However, only the mean for Access is lower than a 2.5 for LC students. Five assignments did not include sections that could be evaluated for the Access criterion. Assignment means from the non-learning communities ranged between 2.62 and 2.93. For learning community assignments, mean ratings ranged from 2.26 to 2.58. Thus, means for the students' assignments reached the Milestones level in the Information Literacy VALUE rubric for all learning outcomes for both learning community and non-learning community students. If we consider student success as a 2.5 rating or above (middle of the Milestones category or above), then a higher percentage of non-learning community students than learning community students reach a successful rating in all criteria (see Table 3). Overall, only 53.33% of the LC assignments had an average over all 4 categories of 2.5 or above. For non-learning community student assignments, 76.67% had an overall average rating for all categories of 2.5 or above.

Table 2 Group Statistics – 4 Point Scale

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	LC or			_	Std. Error
	not LC	N	Mean	Std. Deviation	Mean
determine	LC	30	2.5333	.74201	.13547
	Not LC	30	2.9333	.58329	.10649
access	LC	25	2.2600	.56125	.11225
	Not LC	30	2.8333	.51417	.09387
evaluate	LC	30	2.5500	.67403	.12306
	Not LC	30	2.9333	.66609	.12161
cite	LC	30	2.5833	.74375	.13579
	Not LC	30	2.6167	.71539	.13061

Table 3
Percent of Successful Student Assignments

	LC	Not LC
determine	60%	83.33%
access	60%	86.67%
evaluate	70%	76.67%
cite	66.67%	76.67&
Overall mean	53.33%	76.67%

In pre-class student attitudes, LC students rated themselves as less comfortable with all IL skills (see Table 4). After the course, students in both LC and non-LC courses rated themselves higher in every category; the rate of change was very similar for LC and non-LC (see Table 5). In the comparison of student attitudes at the end of the course, LC students rated more favorably in both

categories (see Table 6). The difference was significant for one of the questions: *This course taught me information skills I need for my studies at Duquesne* (p<.05).

Table 4
Pre-Class Student Confidence Ratings – 5 point scale

	LC	Non LC
Finding good websites	3.48	3.66
Locating books for research	2.88	2.98
Evaluating information sources	3.27	3.42
Searching for scholarly journal articles	2.86	2.96
Academic Research	3.19	3.42

Table 5
Post-Class Student Confidence Ratings – 5 point scale

	LC	Change LC	Non LC	Change Non LC
Finding good websites	4.07	16.95%	4.26	16.39%
Locating books for research	3.61	25.34%	3.60	20.81%
Evaluating information sources	4.13	26.3%	4.33	26.61%
Searching for scholarly journal articles	4.27	49.3%	4.44	50%
Academic Research	4.09	28.21%	4.29	25.44%

Table 6 Group Statistics – 5 Point Scale

	LC or not	N	Mean	Std. Deviation	Std. Error Mean
This course taught me information skills I need	LC Non LC	123	4.3008	.66450	.05992
for my studies at Duquesne.	Non Lo	574	4.1359	.84113	.03511
This course taught me	LC	123	3.8455	.75783	.06833
information skills I will need for my career.	Non LC	573	3.7661	.93557	.03908

For UCOR 101, students in the learning communities scored higher in all but one of the information literacy criteria assessed for fall 2014 (see Appendix B). However, the scores were not significantly different between learning community and non-learning community students.

Limitations

This study has several limitations. One is the relatively small sample size used in the assessment. Another is that, while we assessed students across classes, we collected data from one institution, so our results may not be applicable to all

institutions. Perhaps the greatest limitation is that we did not have a pre-test or baseline for determining information literacy skills. With the authentic assessment we conducted, establishing a baseline would have been difficult, but a pre-test could have given some indication of the information literacy skills of students.

Discussion

Using the Rubric

Several adaptations were made to the rubric so that we could effectively assess the capstone assignments. We could not employ the *Use Information Effectively to Accomplish a Specific Purpose* criteria, which we anticipated, because it was beyond the scope of the objectives of the assignment. However, we also had to change *Access and Use Information Ethically and Legally* to focus purely on citation since the assignment did not require students to demonstrate their full understanding of the ethical and legal restrictions in published, confidential, and/or proprietary information.

While we anticipated that the learning communities students would be rated higher in thinking about relevance in their evaluation, the *Evaluate Information and its Sources Critically* criterion on the rubric does not allow for this level of analysis. The evaluation criterion does not consider the quality of the evaluation or critical thinking that went into the evaluation, and we found we were rating higher than what we felt students were achieving. The students met the criterion, but the quality was often lacking.

We also found that we had to indicate "Not Applicable" in some categories; for example, if the students did not describe the search strategy used, we could not give them a score for *Access the Needed Information*.

Implications for the Learning Communities

We cannot say for certain why there is a difference in the ratings between LC and non-LC student assignments. Many of the same instructors teach both LC and non-LC sections, so it is unlikely that it is an instructor difference. Pre-class data indicates that the confidence levels of LC students start at a lower level, but pre-class levels of actual ability in these information literacy competencies for all the VALUE rubric criteria were not assessed. Perhaps the non-LC students, who are enrolled in the business, health sciences, and natural and environmental sciences have developed habits of mind that allow for a more systematic approach to research that is preferred for this class.

Additionally, perhaps the low LC scores, particularly in *Access*, are due to an overload of content. The instructors often find themselves trying to do more with the LC classes. The LC students themselves could be overloaded with LC activities.

The pre-defined topics for the LC students do not always follow a straightforward research process as do some of the topics outside the liberal arts. For example, some UCOR 101-C (C is the designation for learning community classes) students are required to write a local problem/solution paper. This type of research relies heavily on newspaper and web sources related to the Pittsburgh region. These may be more difficult to find and may be found in resources not covered in 030.

While the assessment ratings for the capstone assignments of LC students were significantly lower in all areas of the VALUE rubric used in this study except *Cite*, it does not appear that there is enough evidence to recommend decoupling the research course from the learning communities. For one, students themselves rated their experience as being more useful for their studies and careers, with the difference being significant for the former. Students also rated themselves lower in skills in a pre-class survey, and their rate of growth in confidence was very similar to those students in non-LC courses. Additionally, the transfer of skills appears stronger because the UCOR 101 assessment rated LC students stronger in four out of five information literacy learning objectives. Still, learning community instructors need to focus on appropriately covering IL outcomes, particularly emphasizing how to use the best search strategies in the most appropriate resources for particular topics. Offloading some topics or team-teaching in other classes in the learning communities could assist instructors in focusing more on the skills that are only covered in information literacy courses.

Conclusion

One conclusion we draw from our research is that while the IL education efforts made for those beginning to do research at the university level are certainly useful, more rigorous IL instruction in upper level courses is needed since, according to our research with the VALUE Rubric, most students only reached the *Milestones* rather than the *Capstone* level regarding course content. This upper level IL training would focus on resources and research methods geared to specific disciplines and topics that there is no time to cover in a basic information literacy course. Further training could also be done on constructing subject-specific searches.

Although we mention the possibility of offloading some content from LC sections of UCOR 030 so that the IL instructors can concentrate on the unique content that only the UCOR 030 instructors can give, there may be other alternatives for integrating the IL and writing courses within the learning communities, and making the planning of integrative assignments more seamless. To this end, in the fall of 2016, Duquesne University will pilot an approach that has instructors in the writing courses also teach the LC sections of UCOR 030

Finally, further research is needed to make decisive conclusions regarding the role of information literacy and librarians in learning communities. That the IL

content is valuable and helpful seems to us to be a given, but further research will help us to discover the best ways to deliver this essential content to this population of students. As librarians and faculty work together in unique ways to integrate information literacy in learning communities—embedding librarians in courses, librarians training faculty, librarians teaching courses outside of information literacy, incorporating the use of online modules—there is opportunity to explore and assess what has the greatest impact on student learning. Rubrics can provide one method of assessing student learning through authentic assessment, but they cannot give the complete picture of the student experience.

References

- Association of American Colleges and Universities (2010). Information literacy VALUE rubric. Retrieved from
 - http://www.aacu.org/value/rubrics/Information Literacy.cfm
- Association of College & Research Libraries (2015). Framework for information literacy for higher education. Retrieved from http://www.ala.org/acrl/standards/ ilframework
- Association of College & Research Libraries (2000). Information literacy competency standards for higher education. Retrieved from ACRL website: http://www.ala.org/acrl/standards/informationliteracycompetency
- Burgoyne, M. B., & Chuppa-Cornell, K. (2015). Beyond embedded: Creating an online-learning community integrating information literacy and composition courses. *The Journal of Academic Librarianship*, 41(4), 416-421. doi: http://dx.doi.org/10.1016/j.acalib.2015.05.005
- Duquesne University, Information Literacy Steering Committee. (2013).

 Duquesne University definition of information literacy. Retrieved Duquesne University Academic Affairs website:

 http://www.duq.edu/Documents/academic-affairs/_pdf/Info_Literacy_Definition.pdf
- Hurvitz, T., Benvau, R., & Parry, M. (2015). Collaborative approaches to deepen student learning: Information literacy, curriculum design, and student learning workshops. *Learning Communities Research and Practice*, *3*(1), Article 3. Retrieved from http://washingtoncenter.evergreen.edu/lcrpjournal/
- Knight, L. A. (2006). Using rubrics to assess information literacy. *Reference Services Review*, 34(1), 43-55.
- Lindstrom, J. and Shonrock, D.D. (2006). Faculty–librarian collaboration to achieve integration of information literacy. *Reference and User Services Quarterly* 46(1): 18–23.
- Matoush, T. (2003). Information literacy in a freshman learning community. *Academic Exchange Quarterly*, 7(3), 78.

- Middle States Commission on Higher Education. (2003). Developing research & communication skills: Guidelines for information literacy in the curriculum: Executive summary. Retrieved from Middle States website: https://www.msche.org/publications/devskill050208135642.pdf
- Oakleaf, M. (2011). Are they learning? Are we? Learning outcomes and the academic library. *The Library*, 81(1), 61-82.
- Rapchak, M., & Cipri, A. (2015). Standing alone no more: Linking research to a writing course in a learning community. *portal: Libraries and the Academy*, 15(4), 661-675.
- Rhodes, T. L., & Finley, A. P. (2013). *Using the VALUE rubrics for improvement of learning and authentic assessment*. Association of American Colleges and Universities. Retrieved from the Eastern Oregon University's Center for Teaching and Learning website: https://www.eou.edu/ctl/files/2012/10/E-VALRUBR2.pdf
- Samson, S. (2010). Information literacy learning outcomes and student success. *The Journal of Academic Librarianship, 36*(3), 202-210.
- Young, S., & Duvernay, J. (2006). Learning communities and librarians at Arizona State University. *IATUL Annual Conference Proceedings*, 16, 62-6.

Appendix A

Information Literacy VALUE Rubric: UCOR 030 Capstone Project Adaptation

	Capstone	Milestones		Benchmark
	4	3	2	1
Topic and Research Questions (Determine the Extent of Information Needed)	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.	Has difficulty defining the scope of the research question or thesis. Has difficulty determining key concepts. Types of information (sources) selected do not relate to concepts or answer research question.
Search Strategy (Access the Needed Information)	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.	Accesses information randomly, retrieves information that lacks relevance and quality.

Evaluate sources using the CRAAP Analysis (Evaluate Information and its Sources Critically)	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using all of the criteria used such as currency, relevance, authority, accuracy, and purpose.	Chooses a variety of information sources appropriate to the scope and discipline of the research question. Selects sources using multiple criteria, such as currency, relevance, authority, accuracy, and purpose.	Chooses a variety of information sources. Selects sources using <i>basic</i> criteria, such as such as currency, authority, accuracy, or purpose.	Chooses a few information sources. Selects sources using limited criteria, such as currency or relevance to the research question.
Citation (Access and Use Information Ethically and Legally)	Citations follow a standard citation style and have no errors.	Citations follow a standard citation style and have few errors.	Citations follow a standard citation style and have many errors.	Citations do not follow a standard citation style, or citations contain many errors.

Adapted from AAC&U Information Literacy VALUE Rubric, www.aacu.org/value/rubrics/InformationLiteracy.cfm

Appendix B

UCOR 101 Proposal Paper Assessment Rubric

Evaluation Criteria	Unsatisfactory	Developing	Proficient
Sources advance the argument	Sources appear superfluous, misunderstood by the student, and/or out of context given the argument of the essay	The sources relate to the concepts being explored in the argument, but the work does not explicitly employ these resources to illustrate, explain, support, defend, and/or argue against a claim	Sources are employed to illustrate, explain, support, defend, and/or argue against a claim in a sophisticated manner that shows an understanding of the content of the sources and their arguments
Sources integrated grammatically into the work	Use of quotations frequently introduces grammatical errors into the paper (e.g., creates run-on sentences, comma splices, or simply nonsensical sentences)	Use of quotations occasionally introduces grammatical errors into the paper, or interferes with the fluidity of the student's own prose	Use of quotations fits seamlessly which the student's own prose, without grammatical errors
Sources fit logically within the organization of the argument	Relations between claims and source materials are unclear	Relations between claims and source materials exist, but are not sufficiently developed or explained	Relations between claims and source materials are clear and explicit
Sources are appropriate given the subject matter and the assignment	Does not meet the research requirements of the assignment; uses sources that are insufficiently rigorous for the subject matter	Meets the minimum research requirements of the assignment; some sources used are relevant and useful to the subject matter, but not all	Meets the requirements of the assignment and shows an understanding of the most relevant, useful resources given the subject matter.

Sources are used	Too much or too little	Paper generally	Choice of quotation,
efficiently	information from	provides adequate	paraphrase, or
	sources is provided	information from	summary provides
		sources, but with little	adequate information
		variation in	to comprehend the
		presentation of sources	sources' claims and
		(e.g., overreliance on	relevance to the
		quotation, refusal to	argument, without
		quote, etc.).	overwhelming the
			argument.