HPU Information Literacy Assessment Report

Overview of the Assessment Project

In Fall 2019, HPU launched its third, campus-wide initiative designed to assess information literacy in general education, undergraduate capstone or UD courses that focus on information literacy in the discipline, and graduate capstone courses. This assessment project is the fourth in a series of annual assessments of institutional learning outcomes: written communication, oral communication, information literacy, and quantitative reasoning.

Method

During the academic year 2019 – 2020, a total of 17 General Education course sections 19 undergraduate capstone course sections and 15 graduate course sections participated in this information literacy assessment project, all in spring 2020.

The Academic Assessment and Program Review Shared Governance Committee established the following criteria for assessment:

- Student can access needed information with appropriate strategies
- Student can interpret and critically evaluate sources and apply information effectively
- Student can use information ethically and legally.

Based on these criteria, a few committee members drafted three quizzes in summer 2019 and sample questions were presented at Assessment Day in August 2019. Afterward, librarians reviewed the quizzes and provided feedback, then a pilot with three sections of WRI 1200 was implemented in Fall 2019. The quizzes were revised based on the results of the pilot, and the quizzes were deployed in the Blackboard LMS in February 2020. Once the drop date for spring 2020 had passed, the committee members enrolled students in the classes identified for this assessment project in a special Blackboard classes that contained the quizzes. (Two courses were used to distinguish general education and UD/grad in both 8A and Term 1 plus 8B for a total of four Blackboard courses.)

The committee then wrote a letter to the faculty who had been selected to participate in the project to explain the following:

- The purpose of the project was to assess the Information Literacy Institutional Learning Outcome in General Education. and capstone undergraduate and graduate courses taught in Spring 2020.

- At the general education level, faculty would be assessing all students taking WRI 1200 or 1250.

- For upper division and graduate classes courses selected to participate in this assessment project were either a capstone course (especially if there is one where information literacy skills are applied or taught) or the highest-level course where information literacy skills were being taught in the major.

- The committee had prepared a set of three information literacy quizzes, which would be made accessible to students in Blackboard by mid-February 2020 for Term 8A and 8B courses and by late January for Term 8A courses.

- Students in classes selected for this assessment would be automatically enrolled in the appropriate Blackboard course, either Information Literacy Assessment-Gen Ed or Information Literacy Assessment--Upper Division.

- Students would be asked to complete these quizzes online by April 3, 2020.

- The quizzes would be automatically scored.
- Faculty did not have to use class time for the assessment, other than a few minutes to explain to students where to find them and why the university is asking them to take these quizzes.

- Instructors who wished to use class time to review or teach information literacy would be provided resources designed to help students in WRI 1200 classes or upper-division classes who were working on projects or papers involving the use of information.

- Instructors could review the original quizzes while planning their spring courses by contacting the Blackboard instructional designer to request access to the Blackboard Course, titled "Information Literacy Assessment," so they could view and take the quizzes.

To deploy the quizzes in their Spring 2020 courses, the committee suggested that instructors do the following:

- include the quizzes as a homework assignment and award a few points for completion of the quizzes to ensure that most students would participate in this exercise and would be included in our University-wide assessment project;

- assign extra credit for completing all three quizzes by April 3rd;

- add this to the course events/calendar portion of their syllabi by asking students to complete this "assignment" by April 10, 2020 so the committee would have a few weeks to determine how many students had responded could take any necessary action to increase the response rate before the end of the semester;

- inform students that the start date for taking the quizzes could be any time after they are made available, which should be around Feb. 20th;

- schedule any planned librarian visit or other information literacy instruction in their course before the date when students were assigned to take the quizzes, with an allowance of at least a two – three-week period during which to take them.

- include the following suggested wording in their syllabi:

    - Students in this course will be participating in a university-wide assessment of the following Institutional Learning Outcome: "Students will demonstrate the ability to recognize and articulate an information need, and to access, evaluate, and use relevant source material effectively, ethically, and legally in their academic pursuits." To participate in this assessment, you will need to log into a special Blackboard course (to which I will direct you later in the semester) and take three quizzes. You should complete each quiz in one session, but you may take the three quizzes at different times. [Completion of each quiz is worth 5 homework points—or fill in however you are counting the assignment]

In Summer 2020, HPU presented its assessment findings at the university assessment day in

hopes of engaging deans, department and program chairs, and members of the academic assessment and program review shared governance committee in a thoughtful discussion of the implication of these results for continuous, quality improvements to the curriculum. The committee presented these assessment results as the percentage of students who performed at a given performance level for each rubric criterion. Also, the committee focused its presentation on actionable data. Finally, the committee set targets for performance by which to reflect on these findings.

Assessment Findings

General Education Information Literacy Assessment Findings

The committee set the following target for the general education courses participating in this project: 85% of students enrolled in general education courses will achieve an initial, emerging, developed, or highly developed score for each criterion.

An analysis of these findings revealed the following:

- Student can access needed information with appropriate strategies (100%)
- Student can interpret and critically evaluate sources and apply information effectively (98%)
- Student can use information ethically and legally (95%)

These results exceeded the target in all areas.

The general education information literacy assessment results are depicted in Table 1 below. 17 sections invited representing 100% of scheduled WC&IL II courses for spring 2020 as of Jan. 10, 2020 (An additional small online section was added after classes began that was not included). 289 students were enrolled, 220 or 76% participated. Some of these students completed only one or two quizzes but 181 or 62.6% of all enrolled students took all 3 quizzes.

The committee determined that the results represented an appropriate sample size. A possible means of achieving even greater participation would involve requiring WC&IL I instructors to count completion of the quizzes as a graded part of the class. Results were compared between 15-week and 8-week sections and those results are included in the appendix.

Table 1. General Education Information Literacy Assessment Results by Criterion

Information Literacy Rubric Criteria (N = 181)	Score				
	4	3	2	1	0

	Highly Developed	Developed	Emerging	Initial	Not Present
	%	%	%	%	%
Access Information w/ Appropriate Strategies	9%	34%	41%	16%	1%
Evaluate Sources and Apply Information	9%	38%	37%	14%	0%
Use Information Ethically and Legally	3%	17%	41%	34%	5%

Undergraduate Capstone Information Literacy Assessment Findings

The committee set the following target for the undergraduate capstone courses participating in this project: 85% of students enrolled in undergraduate capstone courses will achieve an emerging, developed, or highly developed score for each criterion.

An analysis of these findings revealed that undergraduate capstone students performed for each criterion as follows:

- Student can access needed information with appropriate strategies (89%)
- Student can interpret and critically evaluate sources and apply information effectively (86%)
- Student can use information ethically and legally (69%)

These results exceeded the target in the areas of accessing information with appropriate strategies and interpreting and critically evaluating sources and applying information effectively. These results fell short of the target in the area of using information ethically and legally, suggesting the need for increased emphasis in this area. Quiz fatigue may have been a factor because this was the third quiz and required the most concentration but students spent the least amount of time on it.

The undergraduate capstone information literacy assessment results are depicted in Table 2 below. To increase the sample size for future information literacy assessment projects, the committee recommends that instructors collect artifacts from all undergraduate capstone courses during both the Fall and Spring semesters so that these results may also be used for program-level assessment and review purposes. However, the majority of capstones are offered in the spring and the problem was primarily lower participation within the selected courses. 23 courses were identified but students participated in only 19 sections and sometimes only a few students participated from a given course. Overall 279 students were enrolled in the invited courses. 153 students or 55% took at least one quiz and 141 or 50.5% completed all three quizzes. This sample represents a confidence interval of 5.8 with a confidence level of 95%. However, participation was uneven by program with some not participating. (Some program remedied this by doing targeted assessments in Fall 2020). Very few programs have an upper division course devoted to teaching information literacy skills for their discipline. Perhaps resurrecting the upper division research and writing requirement as part of the general education program would both improve scores and participation rates. The committee also recommends comparing any results from online and face to face delivery modalities.

Table 2. Undergraduate Capstone Information Literacy Results by Criterion

Information Literacy Rubric Criteria (N = 141)	Score				
	4	3	2	1	0
	Highly Developed	Developed	Emerging	Initial	Not Present
	%	%	%	%	%
Access Information with Appropriate Strategies	9%	48%	32%	10%	2%
Evaluate Sources and Apply Information	17%	42%	27%	12%	1%
Use Information Ethically and Legally	12%	22%	35%	29%	1%

Graduate Capstone Information Literacy Assessment Findings

The committee set the following target for the graduate capstone courses participating in this project: 85% of students enrolled in graduate capstone courses will achieve an emerging, developed, or highly developed score for each criterion.

An analysis of these findings revealed that graduate capstone students performed for each criterion as follows:

- Student can access needed information with appropriate strategies (84%)
- Student can interpret and critically evaluate sources and apply information effectively (92%)
- Student can use information ethically and legally (60%)

These results exceeded the target in the area of interpreting and critically evaluating sources and applying information effectively. They closely approached the target in the area of accessing needed information with appropriate strategies. They fell short of the target in the area of using information ethically and legally, suggesting the need for additional emphasis in this area.

17 sections were invited with 133 students enrolled. 15 of those sections had at least one student participate but often only one or two students participated. Only 51 grad students out of 133 or 38% participated, and only 44 or 33% took all three quizzes. Thus, the graduate capstone information literacy assessment results depicted in Figure 2 below represent an extremely small sample size, so the committee recommends that instructors collect artifacts from all capstone courses during both the Fall and Spring semesters so that these results may also be used for program-level assessment and review purposes. Choosing the capstone may not work well for motivating students to participate when they are working independently on a thesis or professional paper and there is no way for participation to bear on the students' grade. If a program has an earlier course where students learn research methods for the discipline, this would be a better choice than the capstone. The committee also recommends comparing any results from online and face to face delivery modalities.

Table 3. Graduate Capstone Information Literacy Results by Criterion

	Score

Information Literacy Rubric Criteria (N = 44)	4	3	2	1	0
	Highly Developed	Developed	Emerging	Initial	Not Present
	%	%	%	%	%
Access Information with Appropriate Strategies	6%	41%	37%	17%	0%
Evaluate Sources and Apply Information	16%	40%	36%	7%	2%
Use Information Ethically and Legally	2%	28%	30%	33%	7%

Discussion

In closing the loop on this assessment project, as depicted in Figure 1 below, the committee posed several questions:

- How accurately do we think these findings reflect the actual level of competence of our students?
- Were there certain artifacts that were not appropriate for the kind of assessment conducted?
- Were there other problems with the process?
- How shall we use these findings?
- Are we satisfied with the results?
- If not, what are we going to do about it?

In response to these questions, the committee formulated several recommendations.

1. General education information literacy course instructors should increase their focus in the area of using information ethically and legally

2. Graduate instructors should increase their focus in the area of using information ethically and legally

1. To increase the sample size for the purposes of assessment and program review, the committee recommends that instructors collect artifacts from all general education information literacy courses and all undergraduate and graduate capstone courses or courses with an information literacy in the discipline focus during both the Fall and Spring semesters.

2. The committee recommends comparing any results from online and face to face delivery modalities.

3. To set the stage for a thoughtful reflection on the performance of students on this assessment across the university, the committee recommends that, in future information literacy assessment projects, each degree program should provide the committee with an analysis of the data from their own program

4. In future information literacy in assessment projects, the program chairs may wish to respond to the following questions:

    - Does the program-level data accurately reflect the information literacy

competency of students enrolled in the program over the long term?

- If it does reflect the reality of the information literacy competency of the students enrolled in the program, are there changes that should be implemented in the degree program?

- If it does not reflect the reality of the information literacy competency of the students enrolled in the program, can the program faculty explain why they came to this conclusion?

- What changes should be implemented to achieve more accurate results in the future?

Future program-level analyses may yield yielded varying results:

- In some cases, the program will agree that the quizzes used for this assessment project were suitable and the results met expectations for information literacy. Therefore, no further action would be needed.

- In other cases, the program may find that one or more of the quizzes was not suitable for assessment of one or more established criteria, thus the results may not reflect an accurate representation of the students' information literacy skills. In these cases, the programs may wish to repeat this aspect of the assessment with a more suitable artifact to determine how well their students met expectations for information literacy.

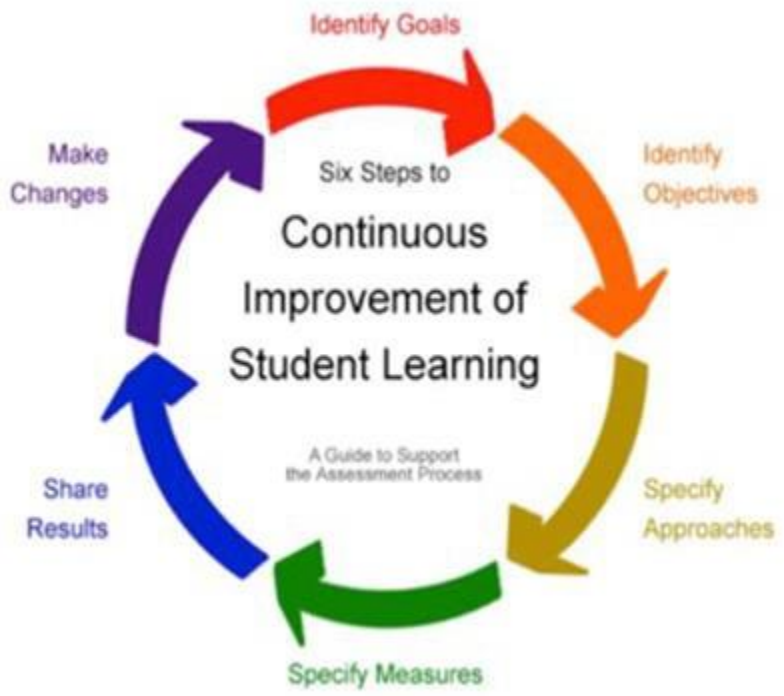
- Finally, in a few cases, the program may feel that the quizzes were suitable for this assessment project, but the results were unexpectedly low. In these cases, the programs would want to develop an action plan for improvement of information literacy within their program curriculum.

Conclusion

In sum, as members of a learning institution, the committee will endeavor to follow the six steps of the assessment process in its future inquiries into our students' performance on this and other institutional learning outcomes:

1. Identify in broad terms what mission and educational goals are valued.
2. Articulate measurable objectives for each goal.
3. Select appropriate approaches to assess how well students are meeting articulated objectives.
4. Select appropriate measures that can be administered, analyzed, and interpreted for evidence of student learning outcomes.
5. Communicate assessment findings to those involved in the process.
6. Use feedback to make changes and inform curricular decisions and reevaluate the assessment process with the intent to continuously improve the quality of student learning.

Figure 1. Six Steps to Continuous Improvement of Student Learning



"Six Steps to Continuous Improvement of Student Learning (Closing the Loop).." Accreditation, Assessment and Learning, Kent State University. https://www.kent.edu/aal/six-steps-continuous-improvement-student-learning-closing-loop

Appendix A.

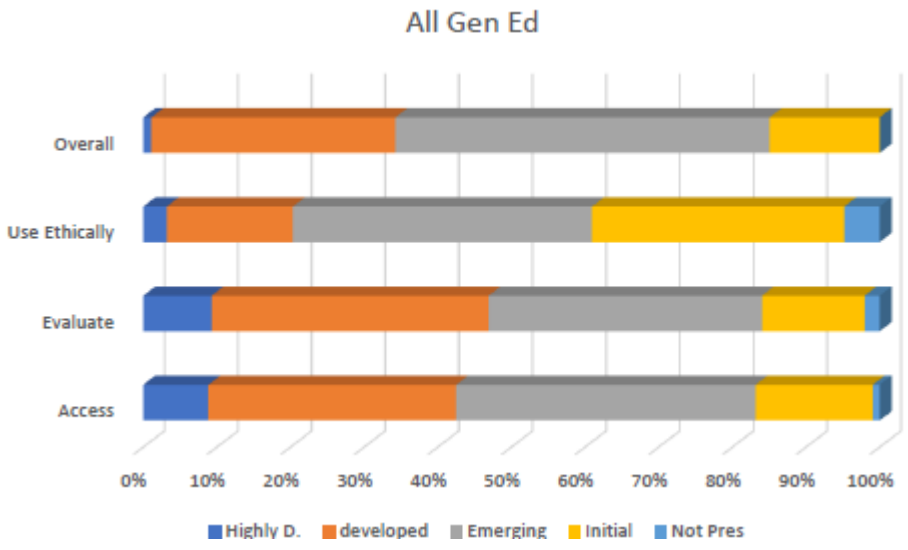
Information Literacy ILO Assessment Results at the General Education Level – Spring 2020

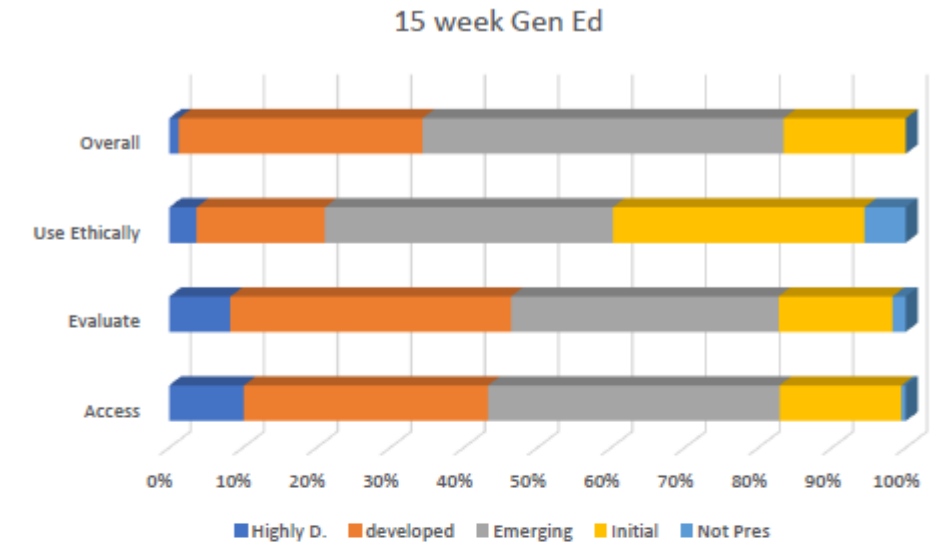
Students will demonstrate the ability to recognize and articulate an information need, and to access, evaluate, and use relevant source material effectively, ethically, and legally in their academic pursuits at the associate's or bachelor's degree level.

- Access: Student can access needed information with appropriate strategies
- Evaluate: Student can interpret and critically evaluate sources and apply information effectively
- Use Ethically: Student can use information ethically and legally.
- Overall: Students who took all three quizzes averaged that level of proficiency across all.

There were 28 8-week participants and 192 15-week participants. 181 took all three quizzes with usable scores (24 8-week and 157 15 week). Scores of students who left a quiz after answering fewer than 4 questions (in most cases 0 questions) were dropped.

0%




15 week Gen Ed
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Highly D.
developed
Emerging
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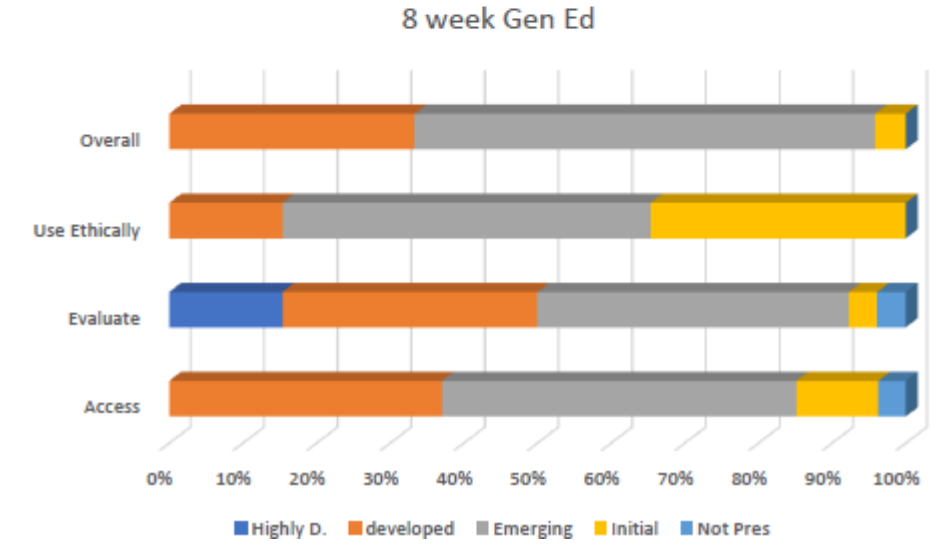

8 week Gen Ed
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Highly D.
developed
Emerging
Initial
Not Pres

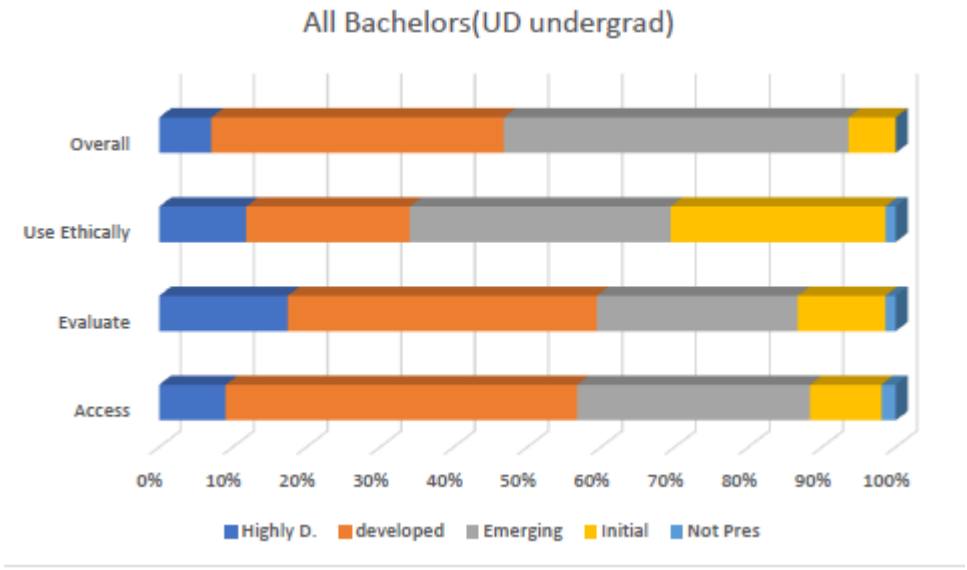
Appendix B.

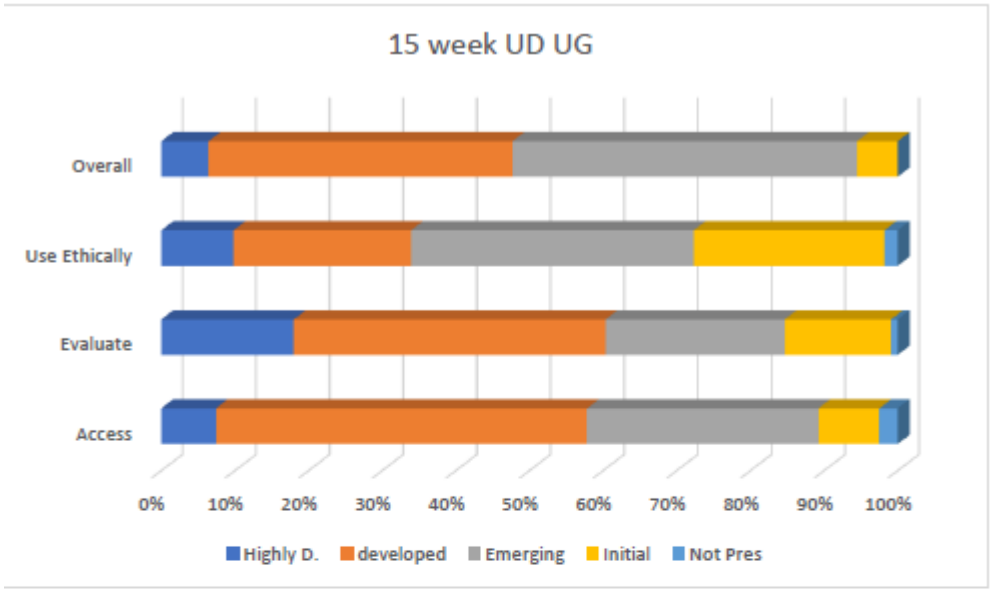
Undergraduate ILO Assessment Results at the Bachelor's Level – Spring 2020

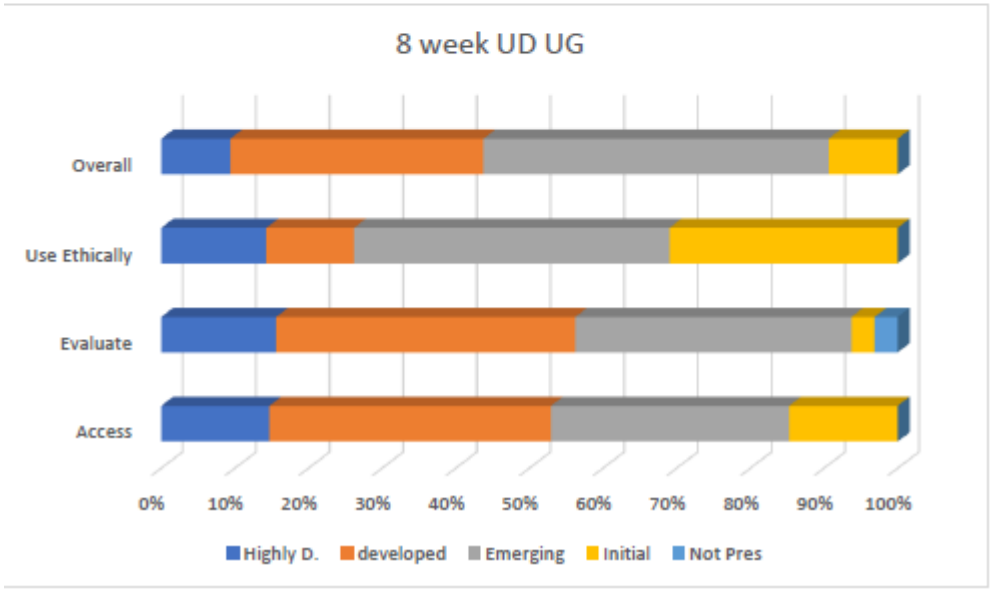
Students will demonstrate the ability to recognize and articulate an information need, and to access, evaluate, and use relevant source material effectively, ethically, and legally in their academic pursuits at the bachelor's degree level.

- Access: Student can access needed information with appropriate strategies
- Evaluate: Student can interpret and critically evaluate sources and apply information effectively
- Use Ethically: Student can use information ethically and legally.
- Overall: Students who took all three quizzes averaged that level of proficiency across all.

There were 34 8-week participants and 119 15-week participants. 141 took all three quizzes with usable scores (32 8-week and 109 15 week). Scores of students who left a quiz after answering fewer than 4 questions (in most cases 0 questions) were dropped.




15 week UD UG
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Highly D.
developed
Emerging
Initial
Not Pres


8 week UD UG
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Highly D.
developed
Emerging
Initial
Not Pres

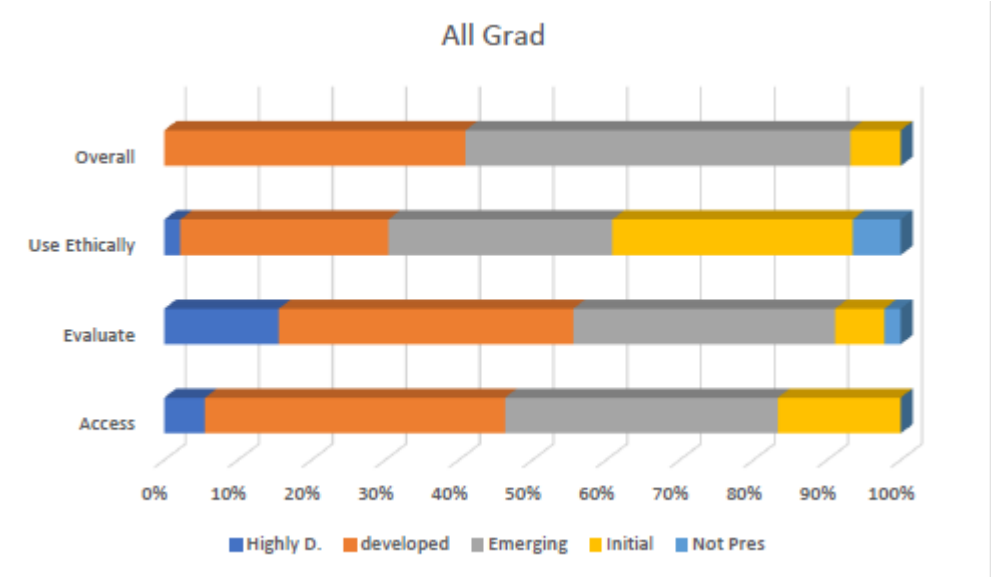
Appendix C.

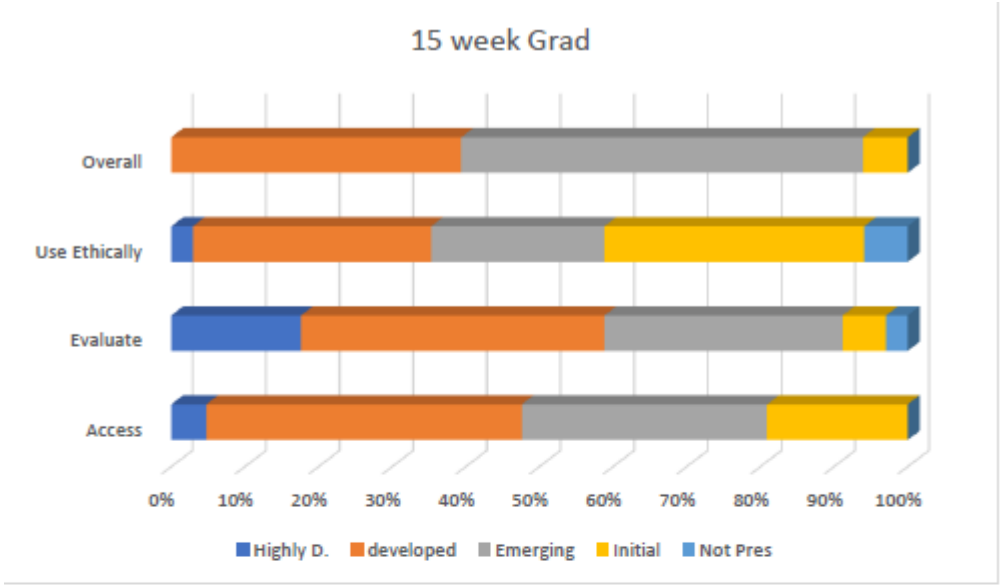
Information Literacy ILO Assessment Results at the Graduate Level – Spring 2020

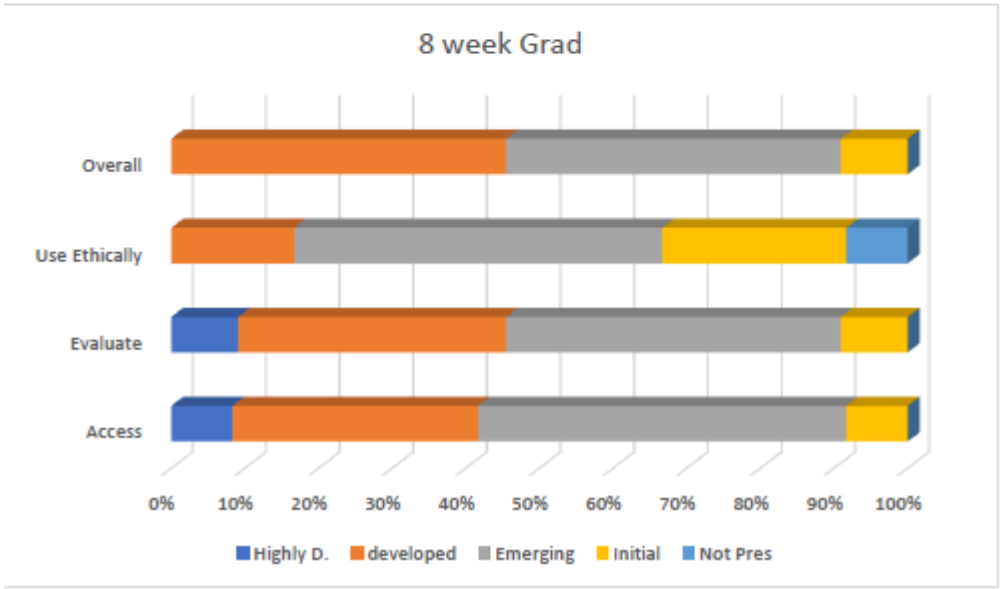
Students will demonstrate the ability to recognize and articulate an information need, and to access, evaluate, and use relevant source material effectively, ethically, and legally in their academic pursuits at the associate's or bachelor's degree level.

- Access: Student can access needed information with appropriate strategies
- Evaluate: Student can interpret and critically evaluate sources and apply information effectively
- Use Ethically: Student can use information ethically and legally.
- Overall: Students who took all three quizzes averaged that level of proficiency across all.

There were 12 8-week participants and 42 15-week participants. 44 took all three quizzes with usable scores (11 8-week and 33 15 week). Scores of students who left a quiz after answering fewer than 4 questions (in most cases 0 questions) were dropped.




15 week Grad
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Highly D.
developed
Emerging
Initial
Not Pres


8 week Grad
Overall
Use Ethically
Evaluate
Access
0%
10%
20%
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Highly D.
developed
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Initial
Not Pres