2020-2021
Outcomes Assessment Report

Harper College

Go Forward®

Overview

Outcomes assessment at Harper College is the process of collecting, analyzing, and using data about student learning to focus institutional efforts on improving student achievement and the learning experience. Learning assessment at Harper is based on the following principles:

- The most effective assessment processes are faculty driven.
- Assessment is an ongoing process that leads to change and improvement.
- Assessment is never perfect.
- Academic freedom can be maintained while engaged in assessment.
- Assessment is not a task solely performed as a requirement of accrediting agencies; the reason for assessment is improvement.
- Assessment is not linked to faculty evaluation, and results will not be used punitively.
- The use of data to support change leads to the most meaningful improvements.
- Course-embedded assessment is the most effective authentic method of conducting assessment.
- Assessment raises as many questions as it answers.
- Assessment focuses the attention of the College on continuous quality improvement.

The Nichols five-column model of assessment has been adopted by Harper College. This model organizes the assessment process by guiding programs and departments through the process of developing an assessment plan, collecting evidence of student learning, communicating results, and developing data-based action plans focused on continuous improvement. The five columns represent the following:

- Identifying the program or department mission (Column 1)
- Defining outcomes (Column 2)
- Selecting assessment measures and establishing the criteria for success (Column 3)
- Implementing assessments and collecting data (Column 4)
- Using assessment results to improve student learning or department quality (Column 5)

Academic course-level and program-level assessment as well as student support and administrative services assessment follow an annual cycle in which the assessment plan is developed during the fall semester, the assessment is conducted during the spring semester, assessment results are entered in summer, and improvement plans are completed through department discussions the following fall semester (see Table 1).

Outcomes Assessment at Harper

The department chair or program coordinator is customarily responsible for ensuring the annual assessment process is followed. In some cases, the dean may appoint a faculty designee other than the chair or coordinator to oversee the assessment process within the department. All faculty members within a department are expected to participate in the assessment process as defined by the department's assessment plan.

Table 1 – Annual Outcomes Assessment Process

PLAN ✓ **Columns 1-3** Enter Mission Statement, Student Learning Outcomes, Assessment Methods, and Criteria for Success	October to December	Create assessment plan based on discussion with faculty and dean. Submit assessment plan in Nuventive[1] (Columns 1-3). Assessment plan includes mission statement, learning outcomes, assessment methods, and criteria for success. Plan for assessment shared with the faculty (Columns 1-3).
IMPLEMENT ✓ Collect assessment data	January to May	Implement assessment plan and collect data.
ANALYZE ✓ **Column 4** Enter Results	May to August	Analyze assessment data to identify trends, areas for improvement, and initiatives to improve student learning. Enter results into Nuventive in preparation for the beginning of the fall semester (Column 4).
IMPROVE ✓ Discuss findings with appropriate constituents ✓ **Column 5** Enter Use of Results	August to early October	Discuss results among department faculty during Orientation Week. Meet with Dean to review findings and initiatives from previous cycle, and discuss interventions and resources needed to initiate changes. Based on conversations with department faculty and dean, enter use of results (Column 5) in Nuventive. Assessment report completed (Columns 1-5). Begin planning for current academic year's assessment.
CLOSE THE LOOP ✓ Initiate changes defined above ✓ Begin new assessment cycle (Plan)	October	New assessment cycle begins. (See "Plan" above.) Incorporate revisions from last year.

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[1] Nuventive is Harper's assessment management system. For more information, please visit Assessing Our Students on the HIP.

Course-Level Outcomes Assessment

Academic departments without AAS degrees or certificates of 30 hours or more participate in the course-level assessment process.[2] In 2020-2021, the total number of academic departments involved in course-level outcomes assessment was 25. Table 2 contains information about the outcomes assessment activities of these departments.

Table 2 – Course Outcomes Assessment Analysis, 2020-2021

Assessment Submissions	Number of Departments (%)
Documented consultations*	24/25 (96%)
Assessment Plan submitted (Columns 1-3)	25/25 (100%)
Assessment Report submitted (Columns 4-5)	25/25 (100%)
Results	**Number of Items (%)**
Outcomes process issues	30/101 (30%)
Criteria met, no further action	32/101 (32%)
Criteria met, action taken	20/101 (20%)
Criteria not met, no further action	6/101 (6%)
Criteria not met, action taken	13/101 (13%)
Total Assessments	101/101 (100%)**

* Includes meetings, working e-mails, and working phone calls.
** Percentage equals 100% when not rounded.

In 2020-2021, the completion rates of columns 1-5 remained constant, with 100% of departments completing the full outcomes assessment cycle for the second year in a row. Though, it is important to note that 30 of the 101 individual assessment items (30%) were not conducted due to the COVID-19 pandemic, as numerous courses remained online. COVID-19 variants slowed the transition back to campus, resulting in a lower number of laboratory assessment activities. Health and safety remain a top priority at the college.

Faculty are encouraged to identify actions for improving student achievement of learning outcomes. Data indicate that 33 of the 101 course-level assessment results (33%) led to improvements in course content, pedagogy, or assessment methods. Following are samples of action plans that were created to improve student learning as a result of course-level assessment findings.

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[2]Some departments conducted formal assessments at both the program and the course level: Accounting, Business Administration, and Computer Information Systems.

Accounting—ACC101

The Accounting department compared success rates of students who completed course homework to students who did not complete homework. Faculty collected baseline data from the first exam and overall grade and found that even for students who completed homework, there were very few A's. However, students who completed homework had higher success rates than those who did not complete homework on both the first exam and for the overall grade. Faculty will discuss the results and adjust homework as well as stress the importance of homework completion. The use of a project is also being explored to help students better understand the content covered in Accounting 101.

Anthropology/Sociology—SOC101

To assess the outcome, "Demonstrate an ability to think sociologically and to engage in complex and critical reasoning," students were given an exam, and faculty evaluated students' responses related to these concepts and skills. Overall, success rates on the questions were lower than expected. As a result, faculty will prepare a brief, self-directed activity for students that will be designed to reinforce the concepts reflected in the outcomes. The activity will be shared with department faculty who will integrate it into their course design, with the goal of improving student learning in these areas.

Biology—BIO160

In 2020-2021, the department evaluated students' ability to identify both microscopic and gross anatomy of body systems. To evaluate this outcome, faculty analyzed data from lab practical exams. Success rates of students overall identified areas for improvement. It is important to note that all lecture and laboratory components were conducted online, due to COVID-19 restrictions, which likely affected student success rates. Going forward, the goal of the department is to implement changes in both BIO160 and BIO161, prerequisites for 200-level courses. The impetus for that is that many students seem unprepared to take a course of this difficulty, and the 100-level course designation is misleading for time and effort necessary to succeed. The low success rate of the first exam supports this case.

Health Science Core—HSC165

The department investigated students' skills related to medication and dosage calculations. Baseline exam data was collected from multiple instructors and sections, and results indicated that students who had completed college-level math performed better on dosage calculations across multiple sections of the course. While the department cannot change the prerequisite for the course, they will be adding language to orientation and the syllabus to better inform students that college-level math is helpful in mastering dosage calculation units. Division faculty will meet in the fall to discuss a study guide for this unit and whether or not it would be helpful to add as an optional assignment in the course.

Career Program Outcomes Assessment

Associate of Applied Science (AAS) degrees, various certificate programs, developmental math, and English as a Second Language are involved in academic program outcomes assessment activities. During the 2020-2021 academic year, 40 total academic programs/departments were involved in program-level outcomes assessment. Table 3 contains an analysis based on the outcomes assessment activities of these programs/departments.

Table 3 – Program Outcomes Assessment Analysis, 2020-2021

Assessment Submissions	Number of Programs (%)
Documented consultations*	38/40 (95%)
Assessment Plan submitted (Columns 1-3)	39/40 (98%)
Assessment Report submitted (Columns 4-5)	39/40 (98%)
Results	**Number of Items (%)**
Outcomes process issues	10/279 (4%)
Criteria met, no further action	148/279 (53%)
Criteria met, action taken	77/279 (28%)
Criteria not met, no further action	7/279 (3%)
Criteria not met, action taken	37/279 (13%)
Total Assessments	279/279 (100%)**

* Includes meetings, working e-mails, and working phone calls.
** Percentage equals 100% when not rounded.

In 2020-2021, the completion rates of columns 1-5 remained constant, with 98% of programs completing the full outcomes assessment cycle for the second year in a row. The COVID-19 pandemic disrupted some program assessment activities, as 10 of the 279 items were not conducted. Data indicate that 114 of the 279 assessment results (41%) were used to improve course content, pedagogy, or assessment methods. Following are samples of action plans that were created to improve student learning as a result of program-level assessment findings.

Computer Information Systems

In 2020-2021, the Computer Information Systems program measured the outcome, "Demonstrate professional and effective communication skills." Students were asked to write an essay, and faculty utilized a communication rubric that provided detailed assessment of five competency areas for further analysis. Although the majority of students achieved a passing score on the communication rubric, students' scores were lower in the competency area of sources and evidence. After discussing these results, the majority of faculty members determined that traditional sources and evidence should not be a requirement for the type of writing required in their courses, but communications activities should continue to be encouraged. Going forward, the

department will discuss whether to require a specific minimum amount of communication activities in all courses and whether we need to assess specific courses going forward as future department-wide assessment in this area may be unnecessary.

Diagnostic Medical Sonography

In order for the Diagnostic Medical Sonography program to evaluate the outcome, "The graduate recognizes significant clinical information that impacts the sonographic examination," student interns were asked to complete a locally developed examination designed to assess the student's ability to recognize significant clinical information that would impact the sonographic examination. Many of the students struggled with obtaining a 75% or higher on the exam. Based on these results, changes will be made to the Diagnostic Medical Sonography curriculum to increase recognition of significant clinical information that impacts the sonographic examination. The outcome will be reassessed in the next cycle.

Electronics Engineering Technology

In 2020-2021, the Electronics Engineering Technology program evaluated students' skills related to electrical safety procedures in a laboratory. Students were assessed in their ability to practice appropriate safety procedures when using the ELENCO Electronics Training kit and were evaluated in an online format. Results of the assessment showed that 100% of the students practiced appropriate safety procedures during the one-on-one evaluation with the instructor. Faculty will continue to evaluate video "virtual labs and demonstrations" to reinforce safety in an online environment. Additionally, faculty will continue to evaluate the plethora of various "electronic training kits" for students to use at home further enhancing their online experience.

Surgical Technology

To evaluate the outcome, "Maintain an operating room environment that is consistent with aseptic standards and patient safety," students were evaluated on their clinical skills competencies. In the Surgical Technology Program, students are required to pass all their competencies to move on to clinical. All of the students who were assessed passed their competencies. The purpose of this assessment was to identify any clinical skill that students may struggle to learn and adjust teaching to fit the students' learning styles. It is also used to identify functional or cognitive abilities that are needed to be successful in a clinical rotation without having a student falter in a clinical setting, which can jeopardize patient and surgical team safety. The program will continue to measure next year to determine if results are the same.

General Education Outcomes Assessment Activities

Harper College's five General Education Learning Outcomes are achieved as a result of successful completion of the general education requirements for any degree program. These five outcomes and their definitions are listed below:

- Communication: Communicate information and concepts in oral and written formats.
- Critical Thinking: Use evidence to develop arguments, make decisions, and evaluate outcomes.
- Diverse Perspectives and Cultures: Examine diverse perspectives and cultures as they relate to the individual, the community, and the global society.
- Information Literacy: Apply a variety of credible sources to support a given topic.
- Quantitative Reasoning: Use quantitative analytical skills to interpret and evaluate problems.

Harper conducts general education assessment annually. The Learning Assessment Committee and its Work Groups lead the assessment, and faculty members across the College measure the outcome within their courses. At least one General Education learning outcome is assessed each year according to a rotating schedule. Once a primary assessment has been conducted for an outcome in the first fiscal year, the next year the results are reviewed, and an improvement plan is developed. In the third fiscal year of the cycle, the improvement plan is implemented, and in the fourth fiscal year, a follow-up assessment is conducted. The fifth year is a time when the outcome is reviewed and revised if needed. The activities that occurred for each outcome in the fiscal year 2020-2021 are summarized below.

Quantitative Reasoning – Full-scale Assessment

In 2020-2021, the Learning Assessment Committee and the General Education Quantitative Reasoning Work Group assessed the Quantitative Reasoning outcome. The assessment was conducted with a random sample of class sections from courses mapped to the Quantitative Reasoning general education outcome. The sampling technique also focused on sections with a relatively high percentage of students with 45 or more credit hours earned. Administered by faculty, students were presented with data and answered six multiple choice questions related to graph reading, table reading, table evaluation, and number sense, and also provided written explanations for the questions related to number sense. The assessments were collected and processed through the Outcomes Assessment Office.

In total, 1,291 assessments were scored, and the results were analyzed to identify success rates of students by credit hours earned. Success rates ranged from 58.9% to 67.2% with students in the 31-44 credit hour range scoring the lowest. Students with 45 or more credit hours achieved a score of 60.9%, similar to the overall success rate of 61.7%. Results for students by earned credit hours are reported in Table 4.

Table 4 – Overall Spring 2021 Quantitative Reasoning Results by Earned Credit Hours

Earned Credit Hours	% Answering at least 5 of 6 Questions Correctly
0 - 15 (n=141)	63.4
16 - 30 (n=243)	67.2
31 - 44 (n=270)	58.9
45 or more (n=637)	60.9
All students (n=1,291)	61.7

When analyzed by question, overall results indicate that students have stronger abilities in table reading and evaluation than graph reading and number sense. Overall results by question are reported in Table 5.

Table 5 – Overall Spring 2021 Quantitative Reasoning Results by Question

Earned Credit Hours	% Correct by Question					
	Q1	Q2	Q3	Q4	Q5	Q6
	(Graph Reading)		(Table Reading)	(Table Evaluation)	(Number Sense)	
0 - 15 (n=141)	73	82	92	86	84	61
16 - 30 (n=243)	73	78	93	82	84	66
31 - 44 (n=270)	71	83	89	81	79	62
45 or more (n=637)	75	76	91	82	83	59
All students (n=1,291)	73	78	91	82	82	61

The results of the Spring 2021 Community College Survey of Student Engagement (CCSSE) and the Harper Follow Up Survey indicate a similar perception from students when asked how much their college experience contributed to their knowledge, skills, and personal development with solving numerical problems and evaluating quantitative problems. Prior to the next assessment of this outcome, further analysis of this data as well as addressing specific student success gaps will be evaluated to incorporate next steps for student improvement.

Please see Quantitative Reasoning on the HIP for more detailed results. Review of results and development of the improvement plan are scheduled for 2021-2022.

Information Literacy – Improvement Plan Development

After reviewing the 2019-2020 Information Literacy assessment results, and feedback gathered in fall 2020, the Work Group developed the Information Literacy Improvement Plan in spring 2021. The plan focuses on faculty development, including developing resources for faculty to help improve students' skills in information literacy.

The Learning Assessment Committee, General Education Information Literacy Work Group, and Outcomes Assessment Office will work jointly to implement this plan throughout the 2021-2022 academic year. These groups will partner with the Academy for Teaching Excellence for faculty development initiatives as well as other campus stakeholders in an effort to improve students' information literacy skills.

Please see Information Literacy on the HIP for more detailed results.

Communication – Improvement Plan Implementation

In 2020-2021 the Communication Improvement Plan was implemented. Much of the plan focused on exploring and developing resources for faculty on improving students' communication skills. This included evaluating the current resources on HIP and streamlining what was useful and relevant for faculty.

Please see Communication on the HIP for more detailed information.

Critical Thinking – Follow-up Assessment

In spring 2021, the General Education Critical Thinking Work Group conducted a follow-up assessment to the 2018 large-scale assessment. For the follow-up assessment, the Work Group used an instrument that was similar to the instrument used in 2018, and faculty who were part of the full-scale assessment, as well as faculty whose courses mapped to the outcome, were asked to participate. Based on the results of spring 2021, improvement was shown in the area related to making decisions; however, student performance decreased in the areas related to developing arguments and evaluating outcomes. Prior to conducting the next full-scale assessment of this outcome, further analysis of this data will be evaluated to incorporate next steps for student improvement. These results will be used to inform the next assessment of this learning outcome and will be addressed in the Critical Thinking Work Group.

Please see Critical Thinking on the HIP for more detailed information.

Diverse Perspectives and Cultures

In 2020-2021, the Diverse Perspectives and Cultures Work Group reviewed assessment results from the follow-up assessment that was conducted in spring 2020. The next full-scale General Education Diverse Perspective and Cultures Assessment will be conducted in spring 2022.

More information on the Diverse Perspectives and Cultures assessment, and improvement resources, can be found on the [Diverse Perspectives and Cultures General Education HIP page](#).

Student Support and Administrative Services Outcomes Assessment

During the 2020-2021 academic year, 35 total student support and administrative units took part in the outcomes assessment process. Units from across all non-academic divisions participated, such as the Center for New Students and Orientation, Facilities Management, and Harper Wellness. Table 6 contains an analysis based on the outcomes assessment activities of these units.

Table 6 – Student Support and Administrative Services Outcomes Assessment Analysis, 2020-2021

Assessment Submissions	Number of Programs (%)
Programs unable to assess due to transition in leadership and COVID-19 pandemic	1* (this program not included in data)
Documented consultations**	34/35 (97%)
Assessment Plan submitted (Columns 1-3)	35/35 (100%)
Assessment Report submitted (Columns 4-5)	34/35 (97%)
Results	**Number of Items (%)**
Outcomes process issues	8/93 (9%)
Criteria met, no further action	13/93 (14%)
Criteria met, action taken	44/93 (47%)
Criteria not met, no further action	3/93 (3%)
Criteria not met, action taken	25/93 (27%)
Total Assessments	93/93 (100%)

* Harper Police
** Includes meetings, working e-mails, and working phone calls.

In 2020-2021, the completion rates of columns 1-5 remained constant, with 97% of units completing the full outcomes assessment cycle for a second year in a row. Among the non-instructional assessments for 2020-2021, 74% led to improvements in services, programs, or other operations, similar to the rate of 77% achieved in 2019-2020, as areas all across the College sought ways to continue to support students during the COVID-19 pandemic in a remote environment. The Outcomes Assessment Office continues to support all non-instructional areas through online materials, assessment handbooks, drop-in sessions, and individual consultations on an as-needed basis. Following are samples of plans and actions taken as a result of assessment findings.

Community Relations
One of the 2020-2021 goals of the department was to increase faculty and staff knowledge of current community partnerships. The department worked to post information on HIP including Frequently Asked Questions, the four types of organizations that fall under the scope of Community Relations, and current community partners. Having a central location for information

has allowed faculty and staff to easily access information and also helped identify and reduce redundancies. Additionally, the department developed a dashboard that outlines the levels of engagement with community organizations and started sharing the Community Relations newsletter with the Executive Council, Marketing, and Communications to create awareness of the information being shared with community partners. Lastly, in conjunction with the Partnership Strategic Goal Team, a rubric was created that identifies the relationship levels of current community partners. The department will continue to increase communications using these methods and resources next year.

Early Childhood Laboratory School
To evaluate the outcome, "Fulfill the need for early education and childcare services for children ages 3-5 years," a Parent Survey was developed in 2020-2021 to assess parents' attitudes toward the shift to an online format due to the COVID-19 pandemic. Based on the survey results, various modifications to the virtual learning activities were implemented to help improve the online experience. Virtual meeting times were extended, and teachers met with children daily for an hour. Children were provided with a daily routine, which included greeting time, story time, music time, and activity time in different curriculum areas such as math, science, language, social studies, and art. Finally, more resources were added for "at home learning activities" for parents. A new survey will be developed for 2021-2022.

Library
In 2020-2021, the Library promoted the online chat service to support students and the campus community in an online environment. Through a partnership with consortium libraries, the live service allows students to chat online with a librarian 24 hours a day, seven days a week. The chat was promoted multiple times per year by the divisional librarians. Additionally, the service was given a more prominent place on the Library's web page and was also included on research guides. Usage of the chat service increased dramatically in 2020-2021 and was used 2,063 times, compared to an average of 479 times for the previous two years. The chat proved to be especially important during the pandemic as a way for students to get help. Outreach efforts will continue, and data will continue to be monitored to see if usage continues when students return to campus.

Marketing Services
In 2020-2021, Marketing Services worked to improve access to information through the Harper College mobile site. The department tracked mobile traffic to academic program web pages through Google Analytics. The goal was for at least 30% of traffic to the Harper College external website and key landing pages to come from mobile devices with improved accessibility and functionality. The results showed that mobile usage accounted for more than 45% of site traffic and continues to grow. The mobile optimization effort for next year includes ongoing web page redesign to improve mobile performance as well as the development of additional features throughout the site such as sliders and drop-downs to improve mobile accessibility and user experience.

Other Assessment Efforts at Harper College

In addition to the assessment processes and outcomes analyses described above, the College continued its assessment efforts in 2020-2021 through:

- The 12th Annual Assessment Conference and Share Fair, held on September 25, 2020. Held virtually due to the COVID-19 pandemic, this professional development event featured Dr. Tia Brown McNair, who presented the keynote address, "Creating and Sustaining a Culture of Equity." Other sessions included the faculty workshop, "Assessment Through an Equity Lens" and "Assessing Outcomes in a Remote Environment." More than 130 faculty and staff attended the conference.

- The development of a Data Literacy Basics Badge. In conjunction with the Institutional Research Department, the Institutional Effectiveness and Outcomes Assessment Office created a badge, available to all Harper employees, who would like to gain confidence and skills in basic data literacy. Participants learn why data literacy is important as well as understand different types of data and know which data to use to solve different problems and answer different questions.

- The formation of an information literacy-based Community of Practice (CoP). The Learning Assessment Committee and Information Literacy Work Group developed the CoP, "Teaching Information Literacy at Harper" to explore the concept of information literacy and how to teach and incorporate it across departments at Harper.

- The Student Learning blog, which provides biweekly updates to faculty and staff regarding student success and learning assessment. The blog is posted on the Academy for Teaching Excellence website and in its newsletters.

- A transition to virtual drop-in sessions. The Outcomes Assessment Office conducted 33 virtual drop-in sessions to offer continued support of assessment activities throughout the COVID-19 pandemic. Sessions included assistance for courses, programs, student support and administrative areas, and Harper's general education outcomes assessment activities.

- Outcomes Assessment Office support of faculty and staff assessment efforts, including individual consultations, workshops, targeted drop-in sessions, and the development of assessment guides and online support materials.