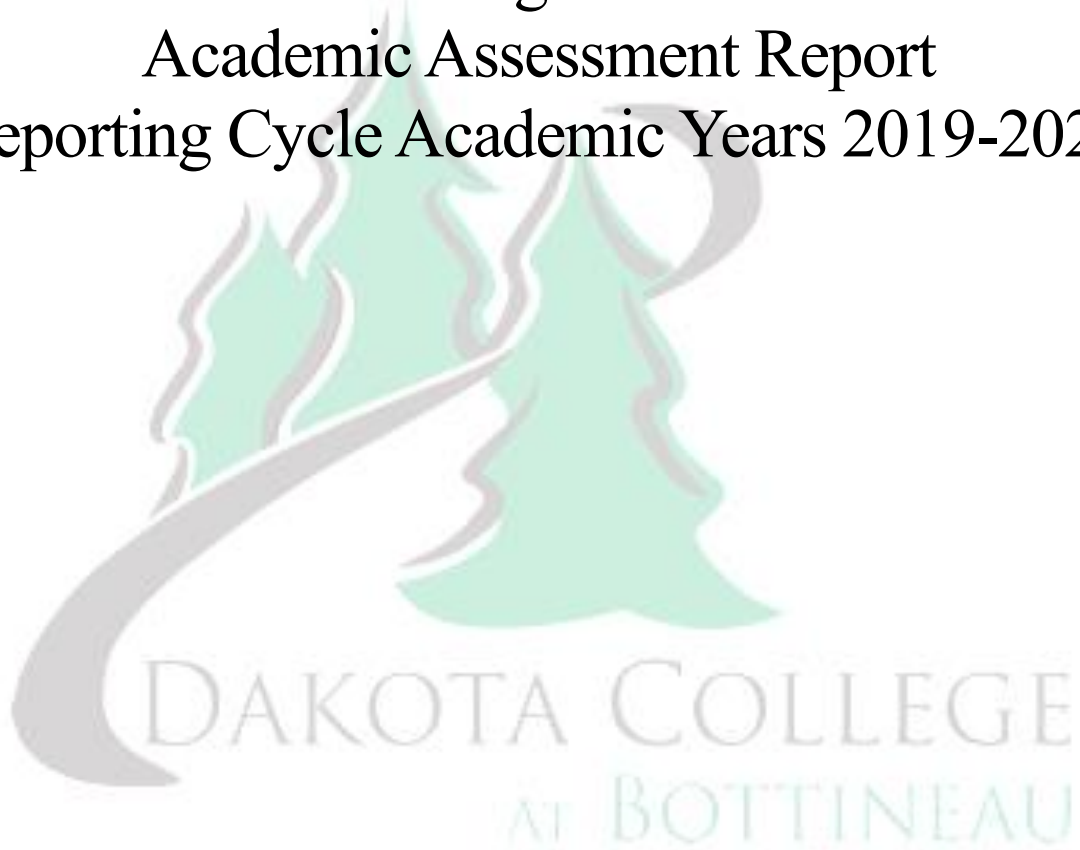


Dakota College at Bottineau
Academic Assessment Report
Reporting Cycle Academic Years 2019-2021



Introduction

Assessment reporting at Dakota College at Bottineau (DCB) is done on a two-year cycle. Each department or program is required to assess learning objectives (LO) on a rotating basis. The two-year cycle includes one semester of planning for how the LO will be assessed, two semesters of data collection for that specific LO and a fourth semester for reporting the results.

Each program also identifies which classes within their discipline are to be assessed under the LO's. Table 1 shows a master list of all departments and programs under the two core areas of general education and career and technical education (CTE). Some assessment happens at the program level and some happens at the department level, usually depending on the similarity of the classes offered in each program as it relates the department. There are seven departments focusing on general education and 10 departments with CTE disciplines. Within those 10 CTE departments there are 32 unique disciplines.

At the beginning of each cycle, planning for assessment of the selected LO occurs. Because doing two-year cycles is a new venture at DCB and many departments overhauled their LO's, many departments are reporting on their first learning objective in the 2019-2021 cycle. A list of LO's reported on by department is included in table 2. During the planning cycle, departments can also reflect on any new courses added and update their overall assessment plans. Department Assessment Plans reflect how the course will be assessed as they fall under each specific LO. Some courses may fall under only one LO, while other may fall under multiple LO's. The only courses that fell under multiple LO's in this reporting cycle were CSCI 101 and PHOT 180. The goal for the department is to think about the main focus from each class and how they related back to the department's chosen LOs to identify the most appropriate place for the class to be assessed. Table 3 shows the unique classes that will be assessed for the 2019-2020 reporting cycle under each department LO. A total of 108 unique courses were assessed.

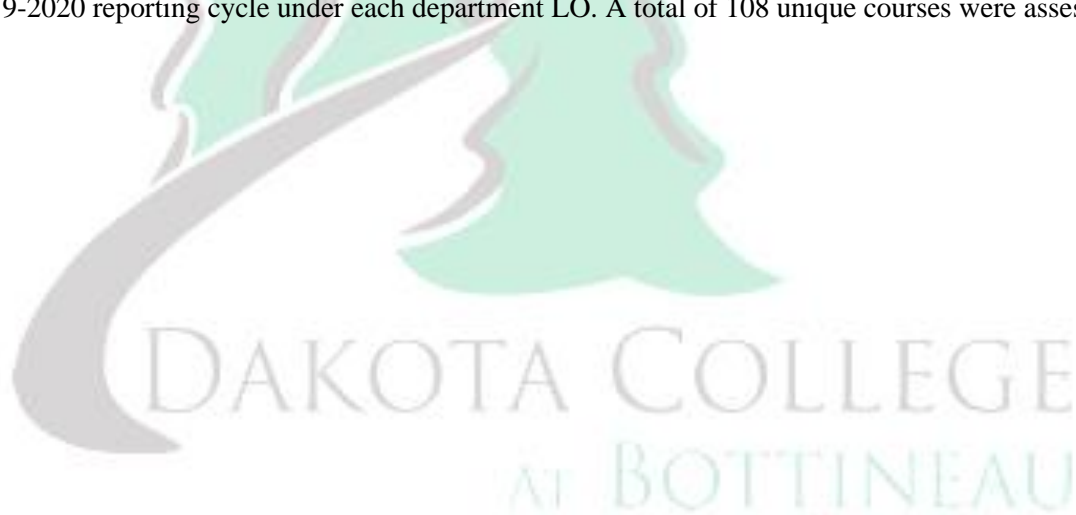


Table 1. List of Department and Programs by Area

Core Area	Department	Program/Discipline
General Education	General Education	Mathematics
General Education	General Education	Science
General Education	General Education	Information Technology
General Education	General Education	Wellness/HPER
General Education	General Education	Social Sciences
General Education	General Education	Communications
General Education	General Education	Arts & Humanities
Career and Technical Education	Agriculture	Agriculture Management and Technology
Career and Technical Education	Horticulture	Horticulture
Career and Technical Education	Business	Accounting Technology
Career and Technical Education	Business	Advertising & Marketing
Career and Technical Education	Business	Human Resource Management
Career and Technical Education	Business	Information Management - Admin Asst?
Career and Technical Education	Business	Small Business Management
Career and Technical Education	Business	General Office Aide
Career and Technical Education	Business	Reception Services
Career and Technical Education	Business	Bookkeeping
Career and Technical Education	Computer Technology	Computerized Office Management
Career and Technical Education	Computer Technology	Information Technology
Career and Technical Education	Computer Technology	Computer Technology - Webmaster
Career and Technical Education	Computer Technology	Information Technology - Web Design
Career and Technical Education	Education and Human Development	Caregiver Services
Career and Technical Education	Education and Human Development	Paraprofessional Education K-12
Career and Technical Education	Education and Human Development	Paraprofessional Education Early Childhood
Career and Technical Education	Education and Human Development	Child Development Associate

Table 1. List of Department and Programs by Area (cont'd)

Core Area	Department	Program/Discipline
Career and Technical Education	Health Professions/Allied Health	Medical Assisstant
Career and Technical Education	Health Professions/Allied Health	Medical Administrative Assisstant
Career and Technical Education	Health Professions/Allied Health	Medical Coding
Career and Technical Education	Health Professions	Diagnostic Medical Sonography
Career and Technical Education	Health Professions	Paramedic Technology
Career and Technical Education	Natural Resources	Environmental Lab & Field Technology
Career and Technical Education	Natural Resources	Environmental Technology - Natural Resource Management
Career and Technical Education	Natural Resources	Recreation Management
Career and Technical Education	Natural Resources	Urban Forest Management
Career and Technical Education	Natural Resources	Wildlife and Fisheries Technology
Career and Technical Education	Nursing	Practical Nursing
Career and Technical Education	Nursing	Nursing - Associate Degree
Career and Technical Education	Photography	Photography
Career and Technical Education	Technical Studies	Technical Studies



Table 2. List of Competencies and the Learning Objectives Assessed in the 2019-2021 Cycle by Program/Discipline

Competency	Department	Learning Objective
Goal 1: Identifies the interrelationships between humans and their environment	Science	LO #1: Applies the scientific methods of inquiry
Goal 2: Demonstrates technological literacy	Information Technology	LO #1: Use appropriate application software to complete assignments
Goal 3: Demonstrates the ability to solve a variety of mathematical problems	Mathematics	LO #1: Utilizes mathematical skills to solve problems
Goal 4: Communicates Effectively	Communications	LO #1: Write effectively
Goal 5: Employs the principles of wellness	Wellness	LO #1: Demonstrates physical wellness
Goal 6: Demonstrates knowledge of social structures	Social Sciences	LO #1: Examines the experience of the individual
Goal 7: Evaluates principle of arts and humanities	Arts and Humanities	LO #1: Creates art
Goal 1: Employs industry specific skills in preparation for workplace readiness.	Agriculture	LO #1: Demonstrate problem-solving aptitude
	Horticulture	LO #2: Develop human relation skills
	Business	LO #1: Utilize industry specific technologies
	Computer Technology	LO #1: Complete course requirements using appropriate application software
	Education and Human Development	LO #3: Demonstrate effective oral and written communication
	Allied Health	LO #1: Identify skills basic to the practice of their disciplines
	Diagnostic Medical Sonography	Not Available
	Paramedic Technology	Not Available
	Natural Resources	LO#1: Demonstrate program specific knowledge

Table 2. List of Competencies and the Learning Objectives Assessed in the 2019-2021 Cycle by Program/Discipline (cont'd)

Goal 1: Employs industry specific skills in preparation for workplace readiness.

Practical Nursing

LO#1: Participate as a member of the interdisciplinary health care team through effective communication in the delivery and management of client care

Nursing - Associate Degree

LO#1: Collaborate with clients and members of the interdisciplinary health care team to optimize effective communication, caring behaviors, and management of client needs.

Photography

LO #1: Students will demonstrate proficiency when using professional photography equipment including interchangeable lens cameras, lenses, on camera and studio lighting, and misc. studio equipment.

Technical Studies

Not Available

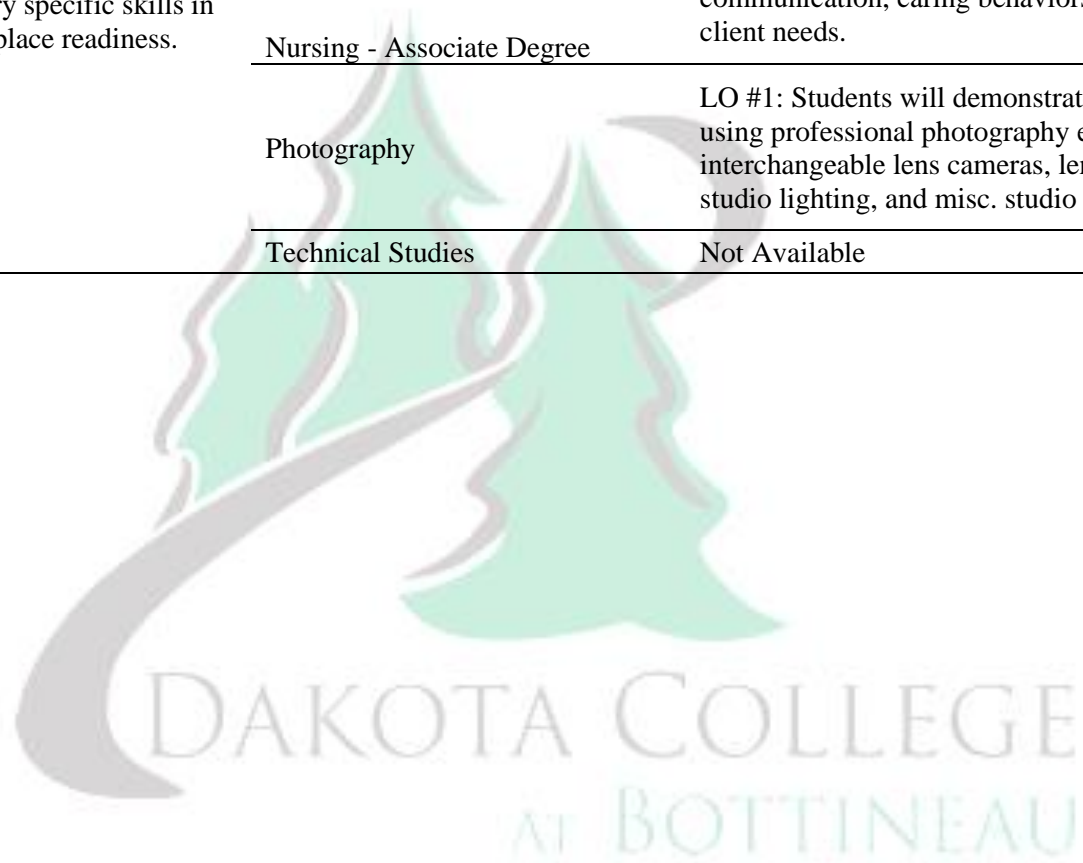


Table 3. List of Unique Courses Evaluated by Department, Discipline, Competency, and Learning Objective

Department	Program/Discipline	Competency	Learning Objective	Prefix and Number
General Education	Science	Goal 1: Identifies the interrelationships between humans and their environment	LO #1: Applies the scientific methods of inquiry	BIOL 111 BIOL 124 BIOL 150 BIOL 200 BIOL 230 CHEM 115 CHEM 121 FWLD 122 GEOL 105 PHYS 120 PHYS 211
General Education	Information Technology	Goal 2: Demonstrates technological literacy	LO #1: Use appropriate application software to complete assignments	CSCI 101
General Education	Mathematics	Goal 3: Demonstrates the ability to solve a variety of mathematical problems	LO #1: Utilizes mathematical skills to solve problems	MATH 102 MATH 103 MATH 104 MATH 105 MATH 107 MATH 165 MATH 166 MATH 210 MATH 265 MATH 266 MATH 277
General Education	Communications	Goal 4: Communicates Effectively	LO #1: Write effectively	ENGL 110 ENGL 120

Table 3. List of Unique Courses Evaluated by Department, Discipline, Competency, and Learning Objective (cont'd)

Department	Program/Discipline	Competency	Learning Objective	Prefix and
General Education	Wellness	Goal 5: Employs the principles of wellness	LO #1: Demonstrates physical wellness	HPER 101 HPER 150 HPER 151 HPER 250 HPER 251
General Education	Social Sciences	Goal 6: Demonstrates knowledge of social structures	LO #1: Examines the experience of the individual	PSYC 111 PSYC 111H PSYC 250 PSYC 270 PSYC 270H PSYC 280 SOC 251
General Education	Arts and Humanities	Goal 7: Evaluates principle of arts and humanities	LO #1: Creates art	PHOT 180 THEA 201 ENGL 211
Agriculture	Agriculture Management and Technology	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #1: Demonstrate problem-solving	AGEC 242 AGEC 244 AGEC 246 AGEC 250 UAS 102 UAS 210
Horticulture	Horticulture	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #2: Develop human relation skills	HORT 127 HORT 175 HORT 176 HORT 222 HORT 235 HORT 281

Table 3. List of Unique Courses Evaluated by Department, Discipline, Competency, and Learning Objective (cont'd)

Department	Program/Discipline	Competency	Learning Objective	Prefix and
Business	All Programs	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #1: Utilize industry specific technologies	ACCT 200 ACCT 201 ACCT 260 ACCT 297 BADM 210 BADM 297 BOTE 147 BOTE 152 BOTE 209 BOTE 217 BOTE 218 BOTE 247 BOTE 297 BUSN 170
Computer	All Programs	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #1: Complete course requirements using appropriate application software	CSCI 101 CIS 180
Education and	Paraprofessional Education K-12; EC; Child Devel.; Caregiver Services	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO#1: Apply pedagogical knowledge grounded in cognitive and developmental sciences	EDUC 101 EDUC 260 SPED 101 SPED 110
Health Professions	Medical Assistant; Med Admn. Asst.; Med. Coding	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #1: Identify skills basic to the practice of their disciplines	AH 134 AH 136 AH 137 AH 231 AH 266 AH 287
Health Professions	Diagnostic Medical Sonography	Goal 1: Employs industry specific skills in preparation for	Not Available	
Health Professions	Paramedic	Goal 1: Employs industry	Not Available	

Table 3. List of Unique Courses Evaluated by Department, Discipline, Competency, and Learning Objective (cont'd)

Department	Program/Discipline	Competency	Learning Objective	Prefix and
Natural Resources	All programs	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO#1: Demonstrate program specific knowledge	FORS 250 FORS 255 FORS 260 FORS 273 FORS 280 RLS 110 RLS 210 RLS 215 RLS 271 RLS 280 RLS 285 RLS 286 RLS 288 RLS 290
Nursing	Practical Nursing	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO#1: Participate as a member of the interdisciplinary health care team through effective communication in the delivery and management of client care	NURS 120 NURS 121 NURS 122 NURS 124 NURS 126 NURS 127 NURS 129 NURS 145
Nursing	Associate Degree Nursing	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO#1: Collaborate with clients and members of the interdisciplinary health care team to optimize effective communication, caring behaviors, and management of client needs.	NURS 224 NURS 225 NURS 226 NURS 227 NURS 228 NURS 229 NURS 237 NURS 259

Table 3. List of Unique Courses Evaluated by Department, Discipline, Competency, and Learning Objective (cont'd)

Department	Program/Discipline	Competency	Learning Objective	Prefix and Number
Photography	Photography	Goal 1: Employs industry specific skills in preparation for workplace readiness.	LO #1: Students will demonstrate proficiency when using professional photography equipment including interchangeable lens cameras, lenses, on camera and studio	PHOT 180 PHOT 190
Technical Studies	Technical Studies	Goal 1: Employs industry specific skills in preparation for workplace readiness.	Not Available	

Total Unique Courses

108



Reporting

Reporting focuses on the overall reports received, the reporting by course, and lastly the outcomes by department.

Overall Reporting

The assessment committee was expecting 20 unique reports; seven from the general education departments and 13 from the CTE programs. Even though there are only ten CTE departments, Health Professions and Nursing have some program specific degrees that require additional accreditation requirements and have different LO's. This creates additional reporting for each, three for health professions (Paramedic Technology, Diagnostic Medical Sonography, and Allied Health) and two for Nursing (Associate Degree Nursing and Practical Nursing).

Table 4 highlights the reporting for each program. Of the 20 unique reports expected, 15 (75%) were received and 5 (25%) were not. Figure 1 shows a breakdown of all the reasons that departments failed to report. Two of the five non-reporting departments were new programs in the last two years; one had a change in the lead instructor on campus in the last year; one had not submitted a plan in 2019; one had not received reports from adjunct instructors for the courses falling under the LO in the reporting cycle. Since this data was collected, work has been done to bring the latter three programs into compliance. The two new programs need to be initiated on assessment. This may highlight a need to define a process for onboarding new faculty and instructors into the assessment process. All of the non-reporting department were CTE programs, which tend to be led by business and industry professionals. These individuals are trained in their discipline and are not trained to teach and track student outcomes. Several of these faculty have noted that they are not familiar with the terminology or process of assessment. Onboarding of faculty to the assessment process could help bridge the gap for these instructors and make them more comfortable with the assessment process.

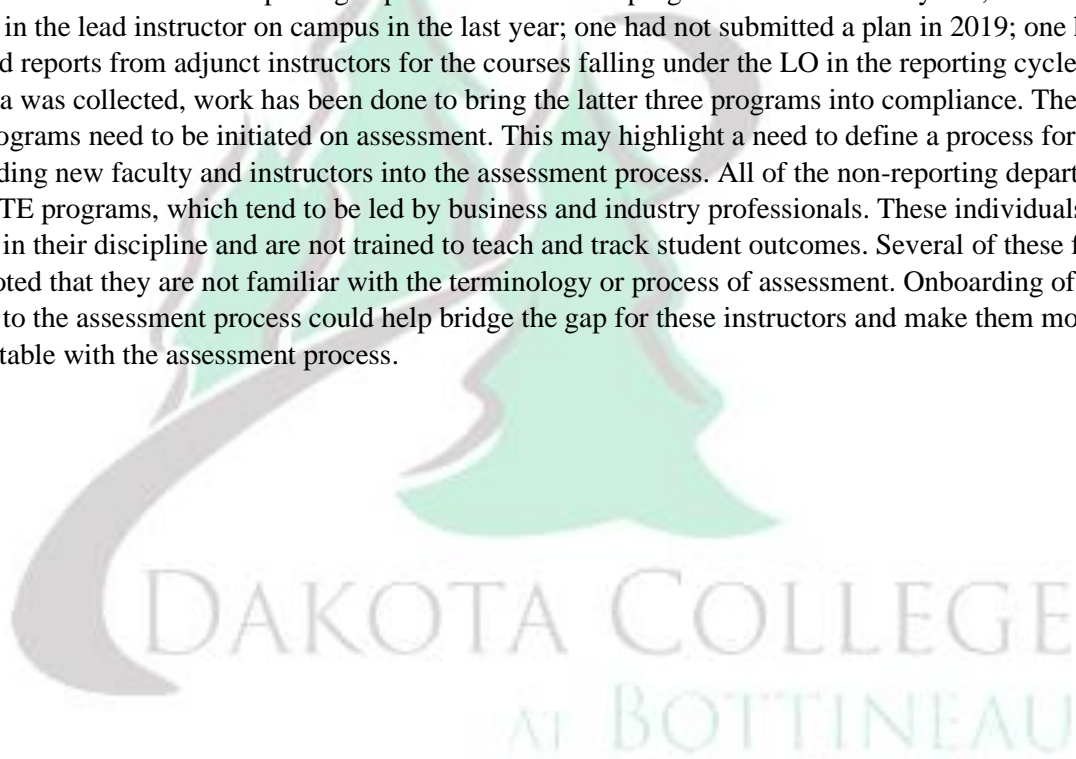
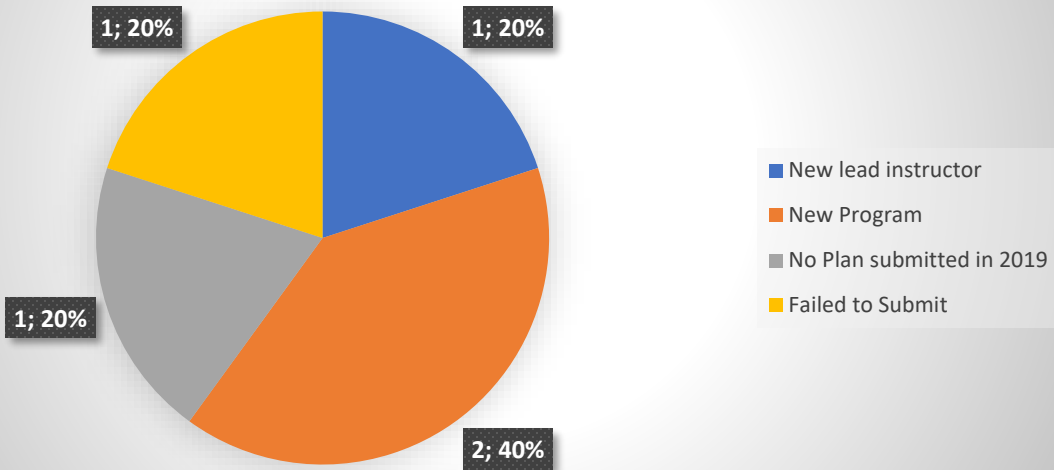


Table 4. Reporting Statistics by Program/Discipline

Department	Program/Discipline	Report Received
General Education	Science	Yes
General Education	Information Technology	Yes
General Education	Mathematics	Yes
General Education	Communications	Yes
General Education	Wellness	Yes
General Education	Social Sciences	Yes
General Education	Arts and Humanities	Yes
Agriculture	Agriculture Management and Technology	Yes
Horticulture	Horticulture	Yes
Business	All Programs	Yes
Computer Technology	All Programs	Yes
Education and Human Development	Paraprofessional Education K-12; EC; Child Devel.; Caregiver Services	Yes
Health Professions	Allied Health (Medical Assistant; Med Admn. Asst.; Med. Coding)	N/A
Health Professions	Diagnostic Medical Sonography	N/A
Health Professions	Paramedic Technology	No
Natural Resources	All programs	No
Nursing	Practical Nursing	Yes
Nursing	Nursing - Associate Degree	Yes
Photography	Photography	Yes
Technical Studies	Technical Studies	No
<i>Total Reporting</i>		15 75%
<i>Total Non-Reporting</i>		5 25%



Figure 1. Reasons for Not Reporting by Department



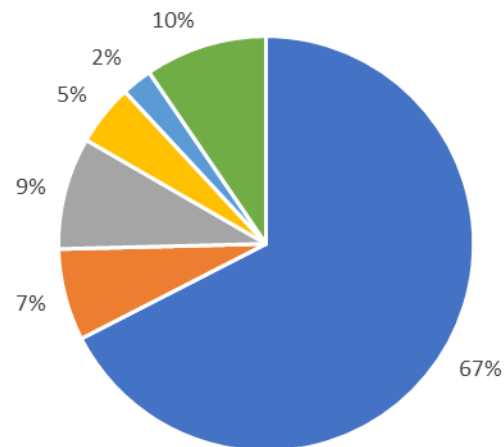
Reports by Course

Table 5 shows the courses evaluated by learning objective. While there were 108 unique courses, there were a total of 278 course sections offered. Of those sections, 152 were reported on for assessment in the 2019-2021 cycle. This is a 54.7% reporting rate.

The lowest reporting rates were for the five programs that did not submit any reporting documents. After that, the lowest rates were in Mathematics on the general education side and Business and Horticulture on the CTE side. Mathematics and Business have a number of non-reporting sections due to adjunct faculty. Horticulture had sections that were cancelled due to low enrollment and one instructor that left mid-reporting cycle, which led to only one of the six courses being reported for assessment. Figure 2 shows a breakdown of reasons that individual courses were not reported. By far the biggest non-reporting group was adjunct faculty.

Several disciplines had 100% reporting rates; five of the 20 reporting disciplines or 25% reported on all courses promised. For these five areas, the faculty are all full-time and very dedicated to fulfillment of assessment objectives. In addition, some of these disciplines also report to outside accrediting agencies and must also present assessment information on a more rigorous schedule, so sending this info to the assessment committee was not a huge disruption of their daily tasks.

Figure 2. Reasons for non-reporting by course



- Adjunct Faculty Not Reporting
- COVID
- Instructor Attrition
- Neither on-campus nor adjunct faculty reporting
- Not Offered
- Section Cancelled

Table 5. Reporting Statistics by Course

Program/Discipline	Learning Objective	Prefix and Number	Number of Sections	Total Expected Courses for the LO	Courses Assessed	Total Submitted	Percent Reported
Science	LO #1: Applies the scientific methods of inquiry	BIOL 111	3		3		
		BIOL 124	3		3		
		BIOL 150	1		0		
		BIOL 200	1		1		
		BIOL 230	1		1		
		CHEM 115	2		2		
		CHEM 121	1		0		
		FWLD 122	1		1		
		GEOL 105	4		4		
PHYS 120	3		3				
				20		18	90.0%
Information Technology	LO #1: Use appropriate application software to complete assignments	CSCI 101	12		5		
				12		5	42%
Mathematics	LO #1: Utilizes mathematical skills to solve problems	MATH 102	4		0		
		MATH 103	13		4		
		MATH 104	3		1		
		MATH 105	2		1		
		MATH 107	9		2		
		MATH 165	2		1		
		MATH 166	2		0		
		MATH 210	4		3		
		MATH 265	1		0		
		MATH 266	1		0		
MATH 277	3		1				
				44		13	29.5%

Table 5. Reporting Statistics by Course (cont'd)

Program/Discipline	Learning Objective	Prefix and Number	Number of Sections	Expected Courses for the LO	Courses Assessed	Total Submitted	Percent Reported
Communications	LO #1: Write effectively	ENGL 110	15		8		
		ENGL 120	12		6		
				27			14
Wellness	LO #1: Demonstrates physical wellness	HPER 100	4		0		
		HPER 101	9		0		
		HPER 150	5		5		
		HPER 151	7		7		
		HPER 250	4		4		
		HPER 251	7		7		
				36		23	63.9%
Social Sciences	LO #1: Examines the experience of the individual	PSYC 111	8		7		
		PSYC 111H	1		0		
		PSYC 250	4		4		
		PSYC 270	3		3		
		PSYC 270H	1		0		
		PSYC 280	2		2		
		SOC 251	1		0		
				20		16	80%
Arts and Humanities	LO #1: Creates art	ART 182	1		1		
		PHOT 180	3		3		
		THEA 201	1		0		
		ENGL 211	1		0		
				6		4	67%

Table 5. Reporting Statistics by Course (cont'd)

Program/Discipline	Learning Objective	Prefix and Number	Number of Sections	Expected Courses for the LO	Courses Assessed	Total Submitted	Percent Reported
Agriculture	LO #1: Demonstrate problem-solving aptitude	AGEC 242	1		1		
		AGEC 244	1		1		
		AGEC 246	1		1		
		AGEC 250	1		1		
		UAS 102	1		1		
		UAS 210	1		1		
						6	
Horticulture	LO #2: Develop human relation skills	HORT 127	1		0		
		HORT 175	1		0		
		HORT 176	1		0		
		HORT 222	1		1		
		HORT 235	1		0		
		HORT 281	1		0		
				6		1	16.7%
Business	LO #1: Utilize industry specific technologies	ACCT 200	2		1		
		ACCT 201	2		2		
		ACCT 260	1		0		
		ACCT 297	3		0		
		BADM 210	3		1		
		BADM 297	2		2		
		BOTE 147	3		2		
		BOTE 152	2		0		
		BOTE 209	1		0		
		BOTE 217	2		0		
		BOTE 218	2		0		
		BOTE 247	1		1		
		BOTE 297	2		2		
		BUSN 170	3		2		
				29		13	45%

Table 5. Reporting Statistics by Course (cont'd)

Program/Discipline	Learning Objective	Prefix and Number	Number of Sections	Expected Courses for the LO	Courses Assessed	Total Submitted	Percent Reported
Computer Technology	LO #1: Complete course requirements using appropriate application software	CSCI 101*	12		5		
		CIS 180	1		0		
				13		5	38%
Paraprofessional	LO #3: Demonstrate effective oral and written communication	EDUC 220	2		1		
		EDUC 250	2		1		
		EDUC 260	2		1		
		EDUC 298	2		2		
		SPED 101	2		2		
				10		7	70.0%
Medical Assistant; Med Admn. Asst.;	LO #1: Identify skills basic to the practice of their disciplines	AH 134	2		0		
Med. Coding		AH 136	2		0		
		AH 137	2		0		
		AH 231	2		0		
		AH 266	1		0		
		AH 287	2		0		
				11		0	0%
Diagnostic Medical	Not Available	N/A			0	0	0%
Paramedic	Not Available	N/A			0	0	0%
Natural Resources	LO#1: Demonstrate program specific knowledge	FORS 250	1		0		
		FORS 255	1		0		
		FORS 260	1		0		
		FORS 273	1		0		
		FORS 280	2		0		
		RLS 110	1		0		
		RLS 210	1		0		
		RLS 215	2		0		
		RLS 271	1		0		
		RLS 280	1		0		
		RLS 285	1		0		
		RLS 286	2		0		
		RLS 288	2		0		
		RLS 290	1		0		

Table 5. Reporting Statistics by Course (cont'd)

Program/Discipline	Learning Objective	Prefix and Number	Number of Sections	Expected Courses for the LO	Courses Assessed	Total Submitted	Percent Reported
Practical Nursing	LO#1: Participate as a member of the interdisciplinary health care team through effective communication in the delivery and management of client care	NURS 120	4		4		
		NURS 121	4		4		
		NURS 122	1		1		
		NURS 124	1		1		
		NURS 126	2		2		
		NURS 127	2		2		
		NURS 129	1		1		
		NURS 145	2		2		
				17		17	100%
Nursing - Associate	LO#1: Collaborate with clients and members of the interdisciplinary health care team to optimize effective communication, caring behaviors, and management of client needs.	NURS 224	1		1		
		NURS 225	1		1		
		NURS 226	1		1		
		NURS 227	2		2		
		NURS 228	2		2		
		NURS 229	2		2		
		NURS 237	2		2		
		NURS 259	1		1		
				12		12	100%
Photography	LO #1: Students will demonstrate proficiency when using professional photography equipment including	PHOT 180*	3		3		
		PHOT 190	3		3		
				6		6	100%
Technical Studies	Not Available	N/A					
*indicates the course has been counted once already; duplicates are removed from the totals				278		152	54.7%

Reports by Discipline

The general education and CTE disciplines are going to be discussed in separate sections. Each discipline will have a separate table. The general education disciplines are ordered by the competency. The CTE disciplines all have the same competency so they are ordered by their department and then alphabetically.

General Education Reporting

Science

The Sciences used an appropriate pre- and post- test to use in their assessed courses. A total of eight sections of courses were reported on out of 11 (72.7%). Five of the eight sections reported on met their benchmark goal of having at least 70% of the students show improvement between the pre- and post-tests. The instructors of the two courses that did not meet, BIOL 111 and BIOL 124, have made plans for improvement by adding more reviews, handouts, and videos on the topics, as well as changing the timing for the post-test.

Table 6.1. General Education - Science

Competency	Learning Objective	Benchmark Goal
Goal 1: Identifies the interrelationships between humans and their environment	LO #1: Applies the scientific methods of inquiry	70% of students will improve scores between pre- and post-test

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
BIOL 111	64.9%	-5%	Yes
BIOL 124	66.0%	-4%	Yes
BIOL 150	-	N/A	Yes
BIOL 200	100.0%	30%	N/A
BIOL 230	75.0%	5%	N/A
CHEM 115	82.0%	12%	N/A
CHEM 121	-	N/A	N/A
FWLD 122	93.0%	23%	N/A
GEOL 105	80.7%	11%	N/A
PHYS 120	86.0%	16%	N/A
PHYS 211	-	N/A	N/A

Technology

Technology initially set out to use a pre- and post-test assessment for CSCI 101. However, only one class administered the post-test, so students were assessed using grades on their final project and final exam. The expectation was that, on average, scores should be 70% or higher. Scores from 110 students over the Fall 2019, Spring 2020, and Fall 2020 semesters were compiled. The average score across all semesters on the final project was a 68%. The average score across all semesters on the final exam was a 75%. The average final exam score met the 70% threshold. The average final project score was below the 70% threshold.

Actions have been planned to address the below benchmark average on the final project average scores. The instructors are planning, more classroom days dedicated to hand-on projects that build on the skills learned as a group. Due to the increase in project days, exams will now be taken outside of class.

Table 6.2. General Education - Technology

Competency	Learning Objective	Benchmark Goal
Goal 2: Demonstrates Technological Literacy	LO #1: Use appropriate application software to complete assignments	70% score on final project and final exam

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
CSCI 101 - Final Project	68	-2	Yes
CSCI 101 - Final Exam	75	5	Yes

Mathematics

All Mathematics courses assessed used selected test questions related to the specific topic assessed in each course. For students to show mastery, the questions selected needed to be answered with 100% accuracy. The expectation, was that at least 70% of the students would master the learning outcome. The benchmark of 70% mastery was met in MATH 104, MATH 105, MATH 107, and MATH 277. The mastery benchmark was not met in MATH 103, MATH 165, and MATH 210. Students that did not successfully answer the test question correctly in MATH 103 either 1) were frequently absent from class or 2) simply used the incorrect notation for the problem. If a specific notation had not been required, the mastery percentage would have been higher. MATH 165 was lower than the benchmark. Part of the reason for the low percentage was due to the spring 2020 semester. Derivatives were introduced prior to spring break and testing was done after the class went virtual due to COVID-19. Had this semester not been included, the benchmark would have been met. MATH 210 was also lower than the benchmark. The question used for this assessment was during the first testing on confidence intervals when they are learning notation and interpretations.

Overall improvement plans were made for MATH 103 and MATH 210. Reinforcement of the correct notation will be emphasized in MATH 103. In MATH 210, confidence intervals are used frequently in the second half of this course, so more time will be spent on the applications and understanding of them prior to the test.

Table 6.3. General Education - Mathematics

Competency	Learning Objective	Benchmark Goal
Goal 3: Demonstrates the ability to solve mathematical problems	LO #1: Utilizes mathematical skills to solve problems	70% of student will show mastery of selected questions

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
MATH 103	57.9%	-12.1%	Yes
MATH 104	100.0%	30.0%	N/A
MATH 105	75.0%	5.0%	N/A
MATH 107	80.0%	10.0%	N/A
MATH 165*	60.0%	-10.0%	N/A
MATH 210	60.6%	-9.4%	Yes
MATH 277	83.3%	13.3%	N/A

*Lower benchmarks likely due to transition of delivery in Spring 2020

Communications

For both courses assessed, ENGL 110 and ENGL 120, the final writing assignment was assessed using a rubric with criteria for thesis, evidence and support, structure, style appropriate to the writer’s purpose and audience, and editing. The rubric scored students into one of four categories: “exemplary”, “proficient”, “satisfactory”, or “less than satisfactory”. The benchmark goal was for 100% of students to demonstrate at least a satisfactory level of skill or higher.

Planned improvements from instructors include raising the bar for assignments and to keep students on task to a greater degree using starfish and advisor contacts.

Table 6.4. General Education - Communication

Competency	Learning Objective	Benchmark Goal
		100% of students demonstrate mastery of skills
Goal 4: Communicates Effectively	LO #1: Write Effectively	

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
ENGL 110	89.0%	-11%	Yes
ENGL 120	88.0%	-12%	Yes

Wellness

The benchmark goal for wellness is for 90% of the students to demonstrate physical wellness. The HPER 101 classes did not have any data due to Covid Restrictions. The Varsity athletics courses, HPER 150, HPER 151, HPER 250, and HPER 251 had 100% of student athletics demonstrating physical wellness. At this time, no plans for improvements were made to the curriculum.

Table 6.5. General Education - Wellness

Competency	Learning Objective	Benchmark Goal
Goal 5: Employs the principles of wellness	LO #1: Demonstrates physical wellness	90% of students demonstrate mastery of skills

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
HPER 101*	-	-	N/A
HPER 150	100.0%	10%	N/A
HPER 151	100.0%	10%	N/A
HPER 250	100.0%	10%	N/A
HPER 251	100.0%	10%	N/A

*No data due to transition of delivery in Spring 2020

Social Science

All courses assessing learning outcome #1 utilized a common rubric developed by the on-campus department leader. The rubric contained a 5-point Likert scale of examination of the experience of the individual. A score of five (5) signified thorough (90-100%) examination, whereas a score of one (1) signifies little (<59%) examination. The instructor used the common rubric to assess a discussion question or essay from the final three weeks of the semester. The topic for the discussion or essay was directly

related to learning outcome #1. The expectation was that 70% of students will meet the learning objective across all courses. In other words, this means scoring a 3 or higher on the developed rubric.

Overall, 84.82% of students demonstrated either thorough, considerable, or partial examination (i.e., a rubric score of three or above). When only the top two categories were considered, 66.55% of students met the criteria to score either a four or five. The course with the lowest scores was PSYC 280 Introduction to Health Psychology. This course is only offered in an online format and has lower enrollment than other courses. Although the students still met the desired average of a score of three or higher, 31% of students scored below this level. This could be a result of the question used for assessment, as the question did rely on self-reflection and students may have done better examining the experiences of others rather than themselves. Students in PSYC 270 Abnormal Psychology far exceeded the threshold with a mean of 4.7. This is most likely a result of the amount of practice that students in this class receive. Students are asked to write 12 papers analyzing and reflecting on the experiences of different individuals. The essay used for assessment purposes was the last of these papers in the course.

One improvement that is being made is that all assessments for PSYC courses will be done through Blackboard. Learning outcomes #1 and #2 will be assessed every semester and these will be shared (assessments and the rubric) with the other PSYC instructors. Additionally, the assessment used in PSYC 280 will be modified to reflect an examination of oneself, as well as the examination of someone other than the student.

Table 6.6. General Education - Social Science

Competency	Learning Objective	Benchmark Goal
Goal 6: Demonstrate knowledge of social structures	LO #1: Examine the experience of the individual	70% of students will meet LO #1; Scoring a 3 or higher on the rubric

Details

<i>Prefix and Number</i>	<i>Result</i>	<i>Difference from Benchmark</i>	<i>Plans Made for improvement</i>
PSYC 111	81.3%	11.3%	Yes
PSYC 250	86.2%	16.2%	Yes
PSYC 270	97.3%	27.3%	Yes
PSYC 280	68.8%	-1.2%	Yes

Arts and Humanities

Two courses were assessed for learning outcome #1 under arts and humanities, PHOT 180 and ART 182. The students were assessed using a rubric based on aesthetics, principles of design, visual communication, technical ability, and oral and written critiques. The expectation is that at least 70% or more students will demonstrate as least a basic level of competency. For ART 182, 88% of students showed a basic competency or higher and for PHOT 180, 87% of students showed a basic level of competency or higher. No plans for improvement have been made based on the results, however PHOT 180 is being re-written from an 8-week to a 16-week course using OER's.

Table 6.7. General Education - Arts and Humanities

Competency	Learning Objective	Benchmark Goal
Goal 7: Evaluates the principles of arts and humanities	LO #1: Creates art	70% of students will meet LO #1

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
ART 182	88.0%	18.0%	N/A
PHOT 180	87.0%	17.0%	N/A

Career and Technical Education Reporting

Agriculture Management and Technology

Five courses were evaluated under the Agriculture Management and Technology (AMT) program, AGEC 242, AGEC 244, AGEC 246, AGEC 250, and UAS 102. Specific assignments for each course are selected which relate to the course specific LO's above. The assignment score will be converted to the standardized Department rubric. For example, multiple choice test questions, portfolios, or essay responses may all be used, as long as they can be converted to the levels of mastery outlined on the rubric for learning outcome #1. The rubric scores range from having a low aptitude for problem solving (1) to an exceptional aptitude (4). The expectation is the 70% of students will score a 3 or higher on the rubric, which would indicate a high aptitude for problem-solving.

Overall, 75% of students scored a 3 or higher on the rubric. By course, two of the five courses had fewer than 70% of the students meeting the criteria for 3 or higher on the rubric. AGEC 250 and AGEC 244 had only 67% and 60% of students receiving a 3 or higher, respectively. Students in AGEC 242 that fell into the low and moderate aptitude were frequently absent from class and this likely affected their understanding of the materials. Students in AGEC 250, typically self-select into this course, because they want to get into sales. The course is currently a hybrid method where student watch lectures and then meet once per week to practice skills and concepts. It became clear about half way through the course that one student was not keeping up with lectures. The low sample size likely also skewed this data. Students performed well in AGEC 246 and UAS 102. AGEC 246 is a very assignment intensive course where students have many opportunities to practice problem solving. AGEC 244 focuses on futures markets and this is a very difficult topic for many people to grasp. So, there are challenges around how to effectively present the material. Most students did improve over the semester, but two students really struggled with futures markets, which is the reason that this course was closer to the 70% cut-off.

The courses in most need of improvements at this time are AGEC 242, AGEC 250 and AGEC 244. For AGEC 250, additional examples on SWOT analysis will be given prior to the assignment and final project. In addition, the final project will be split-up and worked on directly throughout the semester instead of all at once at the end of the course. Additional lecture time and more example worksheets will be created for AGEC 242, especially on the second section of the course. AGEC 244 is also on the lower end of meeting the benchmark. Additional activities and demonstrations around the concept of futures markets will be included.

Table 7.1. CTE - Agriculture Management and Technology

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Demonstrate problem-solving aptitude	70% of student will meet LO #1; score of 3 or higher on the rubric

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
AGEC 242	60.0%	-10%	Yes
AGEC 244	71.4%	1%	Yes
AGEC 246	80.0%	10%	N/A
AGEC 250	66.0%	-4%	Yes
UAS 102	100.0%	30%	N/A

Horticulture

Several classes were set to be evaluated for the horticulture program in this cycle, however, with the combination of an instructor leaving and some classes being cancelled due to low enrollment, only one course, HORT 222, was assessed. The assessment method for HORT 222 was for students to complete a pre- and post-checklist, which is a self-assessment tool. This tool related to their development of human relations skills. The expectation is that student would increase by two points on the 1 to 5 assessment scale. With only two students enrolled in the course, there was not enough data for this to be assessed. However, plans for improvements have been made around effective communication and conflict resolution skills.

Table 7.2. CTE - Horticulture

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #2: Develop human relations skills	2.0 increase in the checklist ratings from pre to post administration

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
HORT 222	Not Enough Data	N/A	Yes

Business

Due to the varied course offerings in Business, a variety of methods were used to assess student outcomes. Table 7.3 below shows the various courses and how they compared to the benchmark of 70% of students meeting learning outcome #1. The biggest issue turns out to be a lack of reporting due to a plethora or adjunct faculty non-reporting. At this time, it is not clear whether there is confusion around what adjuncts need to report for assessment, whether they feel assessment applies to them, or if they are even aware that anything needs to be done.

Of the five courses that were assessed, two met the benchmark goal, BADM 297 and BOTE 147. BOTE 247, ACCT 200 and ACCT 201 did not meet the benchmark goals. Plans for improvement have been made for ACCT 200, ACCT 201, BOTE 147, and BOTE 247.

Table 7.3. CTE - Business

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Utilize industry specific technologies	70% of students will meet LO #1.

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
ACCT 200	66.7%	-3.3%	Yes
ACCT 201	57.1%	-12.9%	Yes
ACCT 297		-70.0%	N/A
BADM 210		-70.0%	N/A
BADM 297	100.0%	30.0%	N/A
BOTE 147	71.0%	1.0%	Yes
BOTE 247*	66.0%	-4.0%	Yes
BOTE 297		-70.0%	N/A
BUSN 170		-70.0%	N/A

*Two students did not complete assessed assignment

Computer Technology

A pre- and post-test method of assessment was utilized for CSCI 101 and CIS 180. The benchmark goal was set for at least 70% of students to demonstrate a high level of competency in meeting learning outcome #1. For CSCI 101, 87% of students demonstrated a high level of competency for learning outcome #1. For CIS 180, 90% of students demonstrated a high level of competency for learning outcome #1. Based on these results, no plans for improvement have been made.

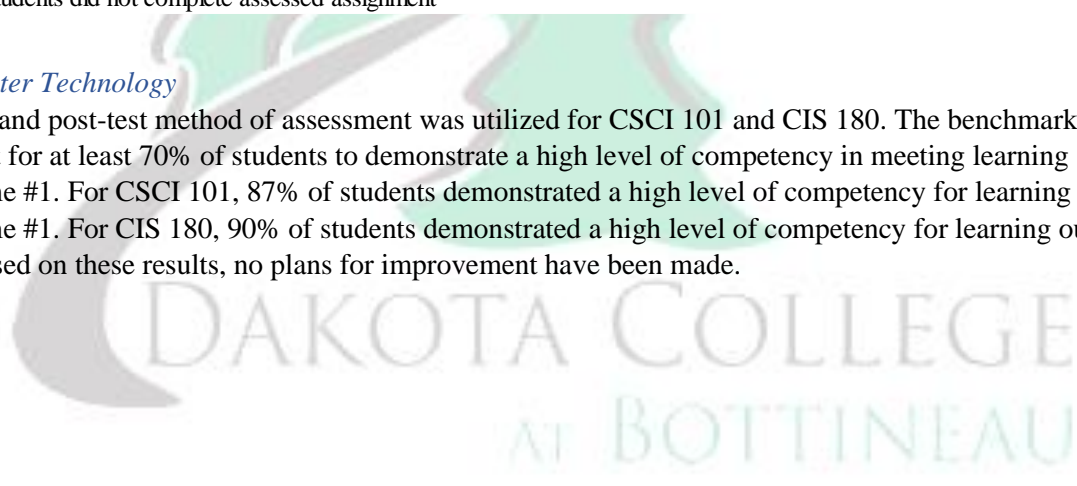


Table 7.4. CTE - Computer Technology

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Complete course requirements using appropriate software	70% of students will demonstrate a high level of competency.

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
CSCI 101	87.0%	17%	N/A
CIS 180	90.0%	20%	N/A

Education and Human Development

Selected assignments were used to assess the student’s level of competency for learning outcome #3. The overarching goal was to have at least 70% of students achieve 70% or higher on the selected assignment. All five classes that were assessed met and exceeded the benchmark goal. Based on these results, there were no plans for curriculum changes at this time.

Table 7.5. CTE - Education and Human Development

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #3: Demonstrate effective oral and written communication	70% of students receive 70% or higher on LO #3 assessment

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
EDUC 220	80.0%	10%	N/A
EDUC 250	91.0%	21%	N/A
EDUC 260	83.0%	13%	N/A
EDUC 298	100.0%	30%	N/A
SPED 101	89.0%	19%	N/A

Health Professions

Allied Health

Pre- and post-tests had been planned for Allied Health, however, the lead instructor left before reporting and nothing was submitted. Currently, there are plans for a new accreditation and so the current lead instructor is working on new learning outcomes and an assessment schedule.

Diagnostic Medical Sonography

This program was new to the college in 2020, so there is yet to be documentation on the program (mission, assessment planning, learning outcomes, etc.). This brings to light the process by which we onboard new programs should likely include assessment. A discussion on how when this happens is necessary to move forward.

Paramedic Technology

During the Fall 2019 planning cycle, Paramedic Technology was lumped in with Allied Health. However, no EMS courses were listed on their planning forms. As a result, no assessment was completed on EMS courses. Currently, the assessment committee is working with Paramedic Technology to develop its own set of forms (mission, assessment plan, learning outcomes, etc.), that will better align with work and also complement their existing accreditation.

Nursing

Both the associate degree nursing and practical nursing programs also receive accreditation by a third party. Many assessment activities revolve around this accreditation including, program assessment and course assessment. Some of the measures and benchmarks for the nursing courses are based on standardized testing and can be compared to a national average. These standardized tests can also be used as a predictor of whether a student will pass their nursing licensure exam. A wide variety of benchmarks were used for nursing courses, as some will focus on practical and hands-on skills, while other will focus on nursing exams.

All of the nursing courses in both programs effectively met the benchmarks. As part of their third-party accreditation, goals are constantly set to improve courses and the program, so plans for improvement are always made to strive for improvements against previous years. Each course has very specific plans to increase SLOs, exam scores, and student engagement.

Associate Degree Nursing

Table 7.6. CTE - Nursing - Associate Degree

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Collaborate with clients and members of the interdisciplinary health care team to optimize effective communication, caring behaviors, and management of client needs	70% students will meet the national benchmark or 70% for SLOs in the course.

Details

<i>Prefix and Number</i>	<i>Result</i>	<i>Difference from Benchmark</i>	<i>Plans Made for improvement</i>
NURS 224	94.4%	24.4%	Yes
NURS 225	87.3%	17.3%	Yes
NURS 226	71.0%	1.0%	Yes
NURS 227	94.4%	24.4%	Yes
NURS 228	72.7%	2.7%	Yes
NURS 229	90.5%	20.5%	Yes
NURS 237	97.5%	27.5%	Yes
NURS 259	75.3%	3.5%	Yes

Practical Nursing

Table 7.7. CTE - Nursing - Practical

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Participate as a member of the interdisciplinary health care team through effective communication in the delivery and management of client care.	70% students will meet the national benchmark or 70% for SLOs in the course.

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
NURS 120	82.6%	12.6%	Yes
NURS 121	73.2%	7.6%	Yes
NURS 122	90.8%	20.8%	Yes
NURS 124	94.0%	24.0%	Yes
NURS 126	77.9%	8.6%	Yes
NURS 127	93.5%	23.5%	Yes
NURS 129	83.5%	11.5%	Yes
NURS 145	97.7%	27.7%	Yes

Natural Resources

Nothing was reported for the assessment cycle. This was a lack of reporting likely due to the large number of adjunct faculty involved in this discipline. Again, it is not clear whether there is confusion around what adjuncts need to report for assessment, whether they feel assessment applies to them, or if they are even aware that anything needs to be done. Steps need to be taken to bring adjunct faculty into the fold when it comes to assessment work.

Photography

Two courses were assessed for learning outcome #1, PHOT 180 and PHOT 190. The students were assessed using a rubric based on aesthetics, principles of design, visual communication, technical ability, and oral and written critiques. The expectation is that at least 70% or more students will demonstrate at least a basic level of competency. For PHOT 190, 90% of students showed a basic competency or higher and for PHOT 180, 87% of students showed a basic level of competency or higher. No plans for improvement have been made based on the results, however both courses are being re-written from an 8-week to a 16-week course using OER's.

Table 7.8. CTE - Photography

Competency	Learning Objective	Benchmark Goal
Goal 1: Employs industry-specific skills in preparation for workplace readiness	LO #1: Students will demonstrate proficiency when using professional photography equipment including interchangeable lens cameras, lenses, on camera and studio lighting, and misc. studio equipment.	70% of students will meet LO #1

Details

Prefix and Number	Result	Difference from Benchmark	Plans Made for improvement
PHOT 180	87.0%	17.0%	Yes
PHOT 190	90.0%	20.0%	Yes

Technical Studies

Nothing was reported for the assessment cycle. The particular challenge with this program is the nature of it combining multiple disciplines into one program. Ultimately, there is not a unique prefix or set of courses tied to the program, so it's not clear what should be included in an assessment of this program. At the very least this program should have a mission and some clear goals for students working toward this degree.

Summary

The assessment results highlight some important challenges DCB faces. The biggest by far is getting adjuncts to report on assessment. It's highly likely that these instructors are doing some form of assessment, but it's just not coming back in a formal assessment for the committee to compile with the other results. Despite having a 54.7% rate of reporting on courses, 75% of departments had some assessment data to report, even if their entire department was not reporting.

During data collection and analysis, several issues with campus-wide assessment were brought to light. The three main issues that surfaced were (1) non-reporting by adjunct faculty; (2) the chain of command between the instructors and the assessment committee; (3) onboarding of new programs to assessment.

First, the chain of command for many departments is unclear. This results in a communication barrier within the departments. On-campus faculty are very aware they need to provide information for assessment purposes, however when they reach out to their adjunct teaching counterparts about assessment they rarely get a response. The on-campus faculty feel as though they hold no power to force the issue, because they too are "just an instructor". It seems as though adjuncts are either (1) overwhelmed and not reporting what they might have, (2) not receiving emails, or (3) not caring to report in the first place. This scenario creates a lot of frustration for on-campus faculty, because they believe the non-reports reflect poorly on their department/program, but they are powerless to change the situation. This reflects the need to find a way to increase adjunct reporting.

Second, the chain of command for many departments is unclear. If instructors have specific questions about the assessment process, they might ask the assessment committee or their department chairs. Often the department chairs, if asked will defer the question to the assessment committee. This being the first year of the new assessment cycle, the assessment committee determined it might be easiest for the chairs to collect all of the reports and look them over before sending them on to the committee. This didn't necessarily work as planned, because the chairs didn't always know what to look for in the reports or which individual reports needed to be submitted. There was also confusion around whether forms needed to be filled out by course or by department or by instructor. This led to reports coming in multiple formats

from multiple people in the same department. There seems to be a lot of mistrust that if documents aren't delivered "directly to the person that needs them, then the documents won't get there".

Ultimately, it might be easier in the future to cut out the middle man. Especially, if technology can be leveraged to have all reports saved in one place for the committee to retrieve them as needed. In addition, a more streamlined submission process could be created that will not require anyone to worry about where the forms go or who needs to see them "first". A fillable form could be created for faculty to fill out by course and submit electronically. This data could be collected and extracted into spreadsheet form. This would ultimately make the reporting process take less time for the assessment committee. In addition, a new process such as this will eliminate the worry of departments/disciplines about whether or not their adjunct counterparts are submitting their reports. The only need for meeting with all department faculty present will be to plan for the new cycle and to make sure all classes are included and which LOs they need to be under.

Third, the onboarding of new programs seems to be an issue when we look at how assessment occurs. Having an extremely informal process prior to 2019, has shown that some programs are not reporting, simply because no one ever told them they needed to report. In an ideal world, a new program should have a department mission, objectives and an assessment plan set up prior to its inaugural year. Clearly, that hasn't been happening and it's still not happening even with the newest programs on campus. The assessment committee should come up with an onboarding process to work with new programs in development of their learning objectives and this process should become part of the larger process of starting a new program on campus (if there is such a process).

In addition, we have some known minor issues that have arisen throughout the process that have yet to be addressed. One is the so-called orphan courses. These courses are offered, but they fall outside of any departments because they are either required by a majority of programs (e.g. UNIV 105) or they are required for one or two specific majors, but the prefix is not necessarily considered to be part of those departments (e.g. PHRM, NUTR). These orphan courses need to be looped into the assessment process and to have established learning objectives. Another is that, while some course prefixes have homes, they are still omitted because they are not general education courses (e.g. HPER 210).

Recommendations

Having completed the first assessment cycle, the committee has an idea of the data that is coming in and where improvements are needed. The assessment committee will plan to write some formal goals around assessment. Ideally these goals will be around (1) increasing the department reporting rate, (2) increasing the course reporting rate, and (3) streamlining the process for reporting. There may also be some ancillary goals around increasing awareness about different methods of assessment. Further, we want to ensure that the feedback received from course assessment is used and reflected upon to enhance student learning outcomes. Setting goals and initiatives around the results to the assessment needs to be encouraged. More iterations of the assessment process will help determine what needs to be done to drive that point home.

Given the amount of work and the limited time available for the committee, it would be ideal to rank these issues to determine the order in which they are addressed, keeping in mind that we want to see improvements in the three goals above. Coming up with a structure around the importance of the tasks at hand and how they will aid in the increase in reporting rates and the ease of assessment, will help give direction to the assessment committee and the assessment process. In addition, budgetary requests should be made to help incentivize participation in assessment by all faculty. The committee needs to decide how this should be handled.