2020-2021
Academic Program Annual Summaries

Program/Degree Outcomes - Allied Health (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

Program Outcome 1. Upon completion of the program, the student will analyze the cardiovascular system.
Program Outcome 2. Upon completion of the program, the student will develop evidence-based dietary plans that include balanced nutritional intake.
Program Outcome 3. Upon completion of the program, the student will use appropriate medical terminology.

Which program outcome(s) with performance indicators did you assess this past year?

Program Outcome 2. Upon completion of the program, the student will develop evidence-based dietary plans that include balanced nutritional intake

A. Define common terminology used in nutrition
B. Identify the role of nutrition in the human body
C. Identify nutrients as they relate to food groups and their functions, toxicities, and deficiencies

In which course(s) were direct assessments conducted?

AHS 1203 Basic Nutrition

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

We assessed the outcome by having the student develop a vitamin, mineral, and dietary plan. The assignment was weighted differently and worth 40 points total. Other comparable assignments are usually worth 25-30 points. The students received 20 points for identifying the function, food source, deficiency/toxicity, and additional information on vitamins A, vitamin D, folate, calcium, and iron. Then the students created a 7 day well balanced dietary plan that has 3 meals per day and 2 snacks. The dietary plan was worth 20 points. The expected performance level/thresholds were 80% or more of students would be competent in the performance indicators listed above.

Program/Degree Outcomes - Allied Health (AS)

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

For the indirect measure, a 5 question survey was given to all students to be completed and turned in with their final exam. Students were asked to not put their names on the survey to maintain anonymity.
Cara Stewart- Online Basic Nutrition survey questions (online):

- What do you feel was the most valuable lesson learned from this course?
- Compared to traditional classroom courses, do you feel that you obtained adequate knowledge from having taken this online course?
- Compared to other online courses that you have taken, how do you feel about the layout/format of this course? For example, many instructors use ready-made online courses developed from book companies, this class is hand-built.
- Were you able to understand how to navigate this course easily using the instructions found on the course information page?
- Which of the two scenarios would you prefer?

Rebecca Sanders- Basic Nutrition survey questions (classroom):

- What have you identified as being the most important learnings from this course?
- Do you feel you have gained basic knowledge of proper nutrition from the course? Please explain your answer.
- Do you feel the instructor used a variety of teaching methods which included your personal learning style? Please explain your personal learning style and how it was met.
- What, in your opinion, worked well for you in this course? Please explain your answer.
- What changes or improvements would you like to see in this course? Please explain your answer.

Who analyzed the results?

AHS faculty members: Rebecca Sanders and Cara Stewart

Program/Degree Outcomes - Allied Health (AS)

Aggregated Results from the data field
Direct Measure

23 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	Expected Level of Performance: Accomplished/Mastery Thresholds
A. Define common terminology used in nutrition	Beginning: 4/23 students Approaches Competency: 0/23 Competent: 19/23 students	82.6% of 23 students
B. Identify the role of nutrition in the human body	Beginning: 4/23 students Approaches Competency: 0/23 Competent: 19/23 students	82.6% of 23 students
C. Identify nutrients as they relate to food groups and their functions, toxicities, and deficiencies	Beginning: 4/23 students Approaches Competency: 4/23 Competent: 15/23 students	65.21% of 23 students

Program/Degree Outcomes - Allied Health (AS)

Indirect Measure

While we felt the data that we collected via the survey was important, we recognize that it does not meet measures to assess the student's perception of mastery of the specific outcomes. We have developed the following survey/measurement tool that will be universal to all Basic Nutrition courses. The student will rate their knowledge according to the following criteria of:

- Not Confident or Level 1
- Gaining Confidence or Level 2
- Confident or Level 3

Student Perception	Not Confident (1)	Gaining Confidence (2)	Confident (3)
Understanding of common terminology used in nutrition	Student is unable to recognize common terminology used in nutrition.	Student can define half (50%) or more of the common terminology used in nutrition.	Student can define most (about 80%) or more of the common terminology used in nutrition.
Identification of the role of nutrition in the human body.	Student is unable to identify the roles of nutrition in the human body.	Student can identify half (50%) or more of the roles of nutrition in the human body.	Student can identify most (about 80%) or more of the roles of nutrition in the human body.
Identification of nutrients as they relate to food groups and their functions, toxicities, and deficiencies	Student is unable to identify nutrients as they relate to food groups and their functions, toxicities, and deficiencies.	Student can identify half (50%) or more of the nutrients as they relate to food groups and their functions, toxicities, and deficiencies.	Student can identify most (about 80%) or more of the nutrients as they relate to food groups and their functions, toxicities, and deficiencies.

Program/Degree Outcomes - Allied Health (AS)

Summarize the findings and analyses.

Only one course's data was aggregated in the table above. The data from the other 3 courses would have been helpful in obtaining an accurate picture of the student's competency levels. At this time with the data we have, it looks like performance indicator C. (Identify nutrients as they relate to food groups and their functions, toxicities, and deficiencies) needs to be addressed since these students are classified as beginning or approaching competency. Four of the 23 students received a zero for this assignment and these grades also skewed the data in all areas.

What are the biggest takeaways and plans of action?

The biggest takeaway from this is that the assignment needs to be revised again. Two of the instructors are using this assignment differently. One instructor had the students create a 7-day dietary plan and the other had the students create a 3-day dietary plan. The action plan is to revise the assignment and have it uniformly distributed throughout the courses along with a generic rubric that will easily allow the instructor(s) to gather data.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

The resources needed to support the action plan include budget allocation and personnel. Budget allocation is needed for one full time support staff and/or faculty member dedicated to the allied health program only. The allied health sciences program is composed of (1) the science division, (2) the health, physical education, and recreation (HPER) division, and (3) the nursing departments. Anyone in the divisions listed above is able to advise students in the AHS program. It has been difficult to schedule and gather faculty members from different divisions to allocate time to actively participate in the assessment of the AHS program. Currently, the nursing department is short staffed and nursing faculty members are serving both the nursing and allied health sciences program.

Program/Degree Outcomes - Biological and Pre-Professional Sciences (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PO 1 Upon completion of the program, the student will relate structure to function of cell membranes.
PO 2 Upon completion of the program, the student will apply problem solving strategies.
PO 3 Upon completion of the program, the student will perform safe and appropriate laboratory techniques.

Which program outcome(s) with performance indicators did you assess this past year?

PO #1: Upon completion of the program the student will relate structure to function of cell membranes.

a. Identify the structure and nature of the plasma membrane.
b. Define mechanisms of transport of materials across membranes.
c. Describe the role of membranes in various biological processes.

In which course(s) were direct assessments conducted?

ZOO 2114 Human Physiology

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

Test questions were used as direct measures to assess performance indicators for the outcome. A developmental rubric was used as a shared data collection tool. One instructor used a multiple choice and a true/false question for the first indicator, a fill-in-the-blank chart was used for the second indicator, and an essay question for the third indicator. The other instructor used a 12-item assessment which consisted of multiple choice, true/false, matching and fill-in-the-blank questions that reflected each performance indicator at different levels of understanding. The same developmental rubric was used for data collection to attempt to achieve consistent results. Because this was the pilot, expected performance levels were not set.

Program/Degree Outcomes - Biological and Pre-Professional Sciences (AS)

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

An anonymous survey in blackboard was used for indirect assessment to assess students' perceived confidence level in mastery of each performance indicator. Students used a scale of 1 (not at all confident) to 5 (very confident) to answer the following questions:

a. Overall, how confident are you that you could identify the structure and nature of the plasma membrane?

b. How would you rate your ability to: Identify how the fluid mosaic model describes the structure and nature of a cell membrane? Identify the major structural makeup and arrangement of molecules in cell membranes? Identify the additional molecules that contribute to the membrane structure?

c. How would you rate your ability to define mechanisms of membrane transport (diffusion, osmosis, active and passive transport, phagocytosis)? Check the statement(s) that apply(ies) to you:

- I could define all mechanisms of membrane transport.
- I could define most mechanisms of membrane transport.
- I could identify all mechanisms of membrane transport
- I could identify some mechanisms of membrane transport

d. How would you rate your overall ability to describe the role of membranes in various biological processes?

e. How confident are you in your ability to explain the action of sodium potassium pumps?

f. How confident are you in your ability to explain action potential propagation in the membranes of neurons?

Who analyzed the results?

Brook Wiersig and Beverly Afzali are the instructors for Physiology. Future data for summaries will be analyzed by all instructors that teach courses within the program.

Program/Degree Outcomes - Biological and Pre-Professional Sciences (AS)

Aggregated Results from the data field

42 Students/3 Sections

Performance Indicator	Percentage of Students at each Level
A. Identify the structure and nature of the plasma membrane	65% of students were at the “accomplished” (3) level and “developing” rubric. The average finding indicates an overall level of 2 (Developing)
B. Define mechanisms of transport of materials across membranes	91% of students were at the “developing” (2) level on the rubric The average finding indicates an overall level of 2 (Developing)
C. Describe the role of membranes in various biological processes	50% of students scored at the “mastering” (4) level. 23% scored at the “accomplished” (3) level 27% did not meet the requirement (0). The averaged rubric score is 2.7, which is at the “developing” level

Summarize the findings and analyses.

Based on the overall data, the majority of students are meeting the outcome at the “developing” and “accomplished” level. Students really seemed to excel towards the “mastering” level in their ability to describe the role of membrane function. An area of improvement would be in the second indicator with students being able to *define* mechanisms of transport rather than simply *identifying*, working towards the “accomplished” and “mastering” levels on the rubric.
In the process of analysis, we found that the measure(s) used were somewhat limiting. For example, on the first performance indicator, the “mastering” level was not assessed. Likewise, the second indicator was only assessed at the “developing” level. This indicated to us that the assessment process may not have adequately assessed the outcome.
One aspect that seemed to work really well was using an essay question to assess the third performance indicator, which really allowed the “mastering” level to be assessed well. However, this didn’t allow for assessment at the “beginning” and “developing” levels.
Because of the incongruencies in the data collection process, aggregating and analyzing the data was difficult. We believe this occurred because of misunderstanding of the process due to this being a pilot. Lessons learned will be applied moving forward.

Program/Degree Outcomes - Biological and Pre-Professional Sciences (AS)

What are the biggest takeaways and plans of action?

Our biggest takeaways are all the modifications (and there will be many) that can be made to streamline this process to be simpler and most importantly more effective. This initial “piloting” experience has been very revealing and we have learned much that will be applied to the process next year. We learned through this process that we need to be assessing at the “advanced” level on the curriculum map since the program is being assessed. This particular program mostly serves students that will be moving forward with their education and we were thinking outside the scope of the program. We also misunderstood how to collect data in a way that would allow us to aggregate collectively.

The plan of action is to start by changing the program outcome and rubric to help make evaluation more streamlined and consistent. We were not able to easily aggregate our data because of the inconsistencies in our evaluation and reporting methods. The new outcome will not only simplify the process, but will also help us move towards better assessment of the effectiveness of the program. These initial steps will be made in the Fall of 2021 and then assessed in the Spring of 2022.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

Resources will mainly involve time spent planning and continuing to improve this process by making necessary changes. Being able to pilot was very revealing with regards to what works and what doesn’t work. At this point, no budgetary resources have been requested but this will continue to be evaluated moving forward.

Program/Degree Outcomes - Business Administration (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1. Upon completion of the program, the student will identify inter-workings and functions of national and global economies.
2. Upon completion of the program, the student will illustrate pricing and product positioning choices made by businesses in a capitalistic economy.
3. Upon completion of the program, the student will compose the three main financial statements.
4. Upon completion of the program, the student will classify manufacturing costs and link physical flows of inputs as they develop into outputs.

Which program outcome(s) with performance indicators did you assess this past year?

3. Upon completion of the program, the student will compose the three main financial statements.
    A. Identify accounts and account classifications.
    B. Demonstrate the application of double-entry accounting system utilizing debits and credits.
    C. Analyze business transactions and identify their impact on organizational accounts.

In which course(s) were direct assessments conducted?

ACCT 2103 Financial Accounting

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The Business Division faculty members chose to assess the outcomes based on the students' performance on an essay problem, which is question #21 on the chapter 2 exam.

Program/Degree Outcomes - Business Administration (AA)

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

A survey was conducted in the classroom regarding the confidence level of students to perform specific tasks directly correlated to the direct measures.
The three questions contained in the opinion survey (indirect measure) are as follows:
1. How confident do you feel you are able to correctly identify accounts and their classifications?
2. How confident do you feel to debit and credit accounts appropriately?
3. How confident to you feel about analyzing a given set of business transactions and their impact on the organizational accounts?

Students were asked to respond using the scale below:

- 1 - I got this! (expert)
- 2 - I feel good about doing this. (proficient)
- 3 - I think I can handle this. (competent)
- 4 - I feel nervous about doing this on my own. (novice)

Who analyzed the results?

Hali Repass, Daniel Smith, Jack Armstrong

Aggregated Results from the data field

35 Students/2 Sections (Aggregated)

Performance Indicator	Percentage of Students at each Level	**Expected Level of Performance:** Accomplished/Exemplary Thresholds
A. Identify accounts and account classifications.	Beginning: 3% Developing: 6% Accomplished: 77% Mastery: 14%	100% of 35 students (Threshold %)
B. Illustrate the application of double entry accounting systems utilizing debits and credits.	Beginning: 3% Developing: 9% Accomplished: 77% Mastery: 11%	97% of 35 students (Threshold %)
C. Analyze business transactions and impact on organizational accounts.	Beginning: 3% Developing: 11% Accomplished: 80% Mastery: 6%	89% of 35 students (Threshold %)

Program/Degree Outcomes - Business Administration (AA)

What are the biggest takeaways and plans of action?

The biggest takeaways were as follows:
1. The confidence levels of the students appear to accurately match the performance of the students on assessment measures.
2. The repetition of material throughout the semester, while seemingly mundane to some, continues to reinforce the importance of fundamental concepts throughout the semester, aiding in the retention rather than memorization.

The plan of action is to include additional direct measurements throughout the course and to emphasize participation in the student survey (indirect measure) with a time for open discussion. The student survey will also be added to other courses where it was previously not being utilized. Instructors believe they will be better able to understand the link between students' perceived understanding and content being presented in the classroom.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

The findings present that no additional funding or materials are required at this time.

Program/Degree Outcomes - Child Development (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PO 1: Upon completion of the program, the student will integrate cultural diversity in an inclusive learning environment.
PO 2: Upon completion of the program, the student will determine the developmental level of each child.
PO 3. Upon completion of the program, the student will create an age appropriate curriculum.

Which program outcome(s) with performance indicators did you assess this past year?

PO 2: Upon the completion of the program, the student will determine the developmental level of each child.

A. Apply individual family service plan based on external forces.
B. Apply the developmental characteristic profile to child's development.

In which course(s) were direct assessments conducted?

CD 2253 Infant/Toddler Program

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

A multiple choice assessment was given consisting of eight questions pertaining to the performance indicators. Test question analysis was utilized. CD 2253 had 10 of 10 responding.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

The indirect measure consisted of a class discussion over the assessment and the students' perception of mastery of the outcome.

Who analyzed the results?

R. Lewis

Program/Degree Outcomes - Child Development (AA)

Aggregated Results from the data field

Direct Measure

10 Students/1 Section (Aggregated)

Performance Indicators	Performance Level
A. Apply individual family service plan based on external forces.	90% of students answered correctly
B. Apply developmental characteristics profile to child's development	90% students answered correctly

Indirect Measure

Feedback from the class discussion:

- Many students know the material, but have test anxiety as evident by student comments.
- Students have ineffective study habits

Summarize the findings and analyses.

Students are performing over the 80% threshold. However, as evident from the class discussion, students are stuggling with test anxiety and exhibit poor study skills.

What are the biggest takeaways and plans of action?

A big takeaway is the need to offer more information related to assessment materials so that students can study each day and not just cram for the assessment.
Action plans include:

a. Schedule a group study time for students at least once a week.
b. Offer more summative assessments.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

There are no resource requests at this time.

Program/Degree Outcomes - Child Development (AAS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PO 1: Upon completion of the program, the student will integrate cultural diversity in an inclusive learning environment.
PO 2: Upon completion of the program, the student will determine the developmental level of each child.
PO 3. Upon completion of the program, the student will create an age appropriate curriculum.
PO 4. Upon completion of the program, the student will exhibit expected professional skills in workplace settings.

Which program outcome(s) with performance indicators did you assess this past year?

PO 1: Upon completion of the program, the student will integrate cultural diversity in an inclusive learning environment.

- PI 1: Apply appropriate cultural community resources.
- PI 2: Engage parental participation based upon family demographics.

In which course(s) were direct assessments conducted?

CD 2253 Infant/Toddler Program

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

A 25 question multiple choice assessment over cultural diversity in an inclusive learning environment with 8 questions pertaining to the performance indicators. There were 10 students who took the assessment for CD 2253 with an 80% threshold. The questions relating to the program outcome and performance indicators A and B that were chosen were 2, 5, 12, 16, 18, 20, 22, and 25.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

A class discussion over the assessment results and the students' perception of mastery of the outcome was implemented. All students participated.

Program/Degree Outcomes - Child Development (AAS)

Who analyzed the results?

R. Lewis

Aggregated Results from the data field

10 Students/1 Section (Aggregated)

Performance Indicator	Performance Level
A. Apply appropriate cultural community resources.	80% of students answered correctly
B. Engage parental participation based upon family demographics.	80% of students answered correctly

Summarize the findings and analyses.

Concerning the direct measure, a marked improvement was noted in areas of analysis of information and mixture of concepts. Students are able to clearly articulate these concepts, which is demonstrated across the curriculum.
Concerning the indirect measure, the following was noted:

- During student discussion of the assessment it was suggested that some of the questions over developmental levels be combined. The sequence of questions needs work.
- Students suggested more time for note taking before assessments.

What are the biggest takeaways and plans of action?

Instead of just one single assessment for learning outcomes 1 and 2, specific questions will be incorporated into each of the three assessments over integration of cultural diversity in an inclusive learning environment and engaging parental participation based upon family demographics.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

There are no resource requests at this time.

Program/Degree Outcomes - Computer Information Systems (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1. Upon completion of the program, the student will build a program in an industry-standard programming language.
2. Upon completion of the program, the student will demonstrate the design of fundamental networks.
3. Upon completion of the program, the student will identify security practices that apply to computing and demonstrate graphic processing.

Which program outcome(s) with performance indicators did you assess this past year?

Upon completion of the program, the student will build a program in an industry-standard programming language.
Performance Indicators:

- Identify common programming nomenclature
- Demonstrate efficient programming structure
- Troubleshoot syntax errors

In which course(s) were direct assessments conducted?

The technology faculty chose CS1333 Programming from the curriculum map to evaluate based on the assessment rubric. The course was chosen based on the students' level of knowledge and its relevance to the outcomes being assessed.

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The Technology faculty members chose to base assessment on the students' performance on the course capstone project. The project consist of students creating a word processor using the c# programming language. This project will require students to meet all of the performance indicators

for this outcome. The following are the courses and number of students completing the direct measure:

Number of participants per course:

CS 1333 - (Online) Programming II – 5 responding

The Technology faculty members developed the evaluation rubric that was utilized by the faculty of the courses assessed. The evaluation rubric has multiple areas to evaluate the program indicators. The faculty chose a 70% threshold for student performance demonstrating the “Accomplished” level competency. Since this was the first time using an item analysis of questions pertaining to a learning outcome, 70% was chosen to gather baseline data. This threshold may go up or down in the future once a baseline is established.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

Indirect measure will be added in future courses

Who analyzed the results?

The technology faculty division members that teach the course CS 1333 were chosen to analyze the data. Tommy Smith, instructor for CS 1333 online analyzed the findings.

Program/Degree Outcomes - Computer Information Systems (AA)

Aggregated Results from the data field

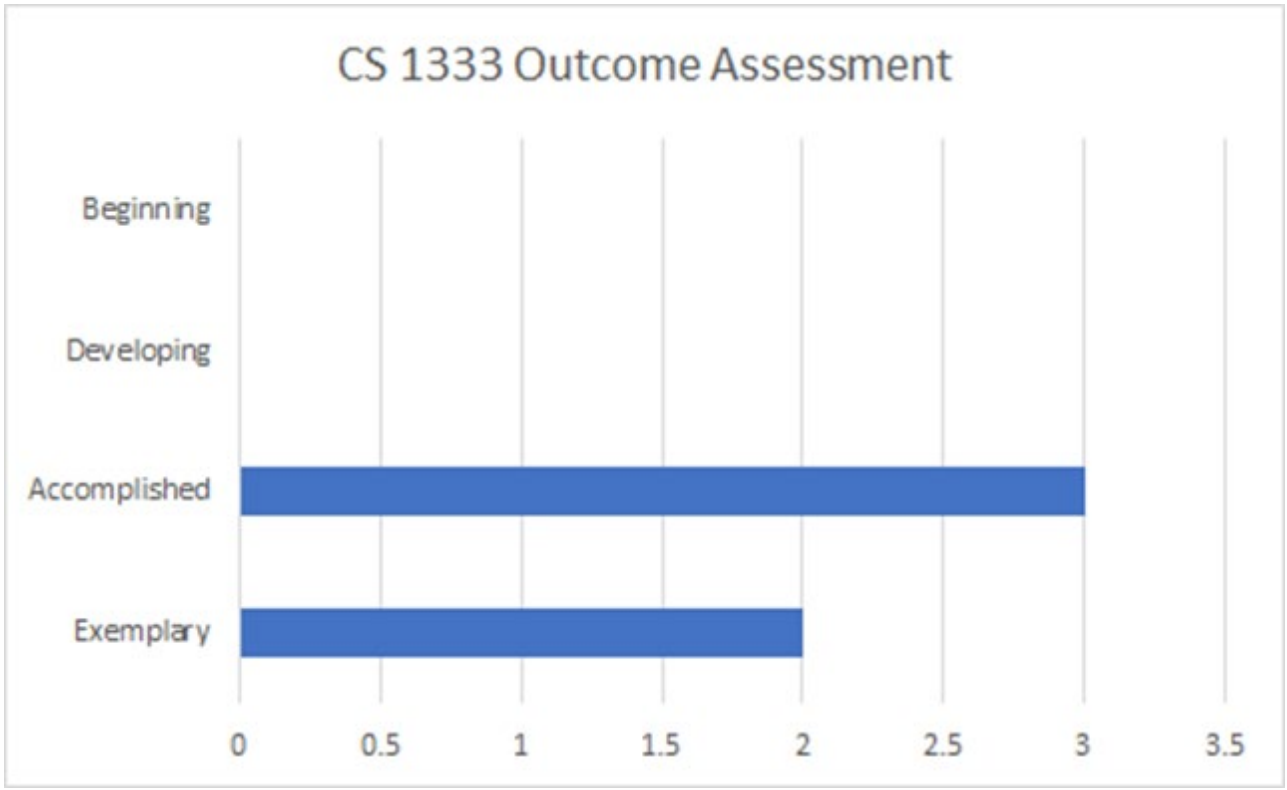
CARL ALBERT STATE COLLEGE ASSESSMENT RUBRIC

Program Name: Computer Information Systems (cis) **Date** 5/12/21

Outcome: Upon completion of the program, the student will build a program in an industry-standard programming language

Artifact Semester project in *course number, course name*

Performance Indicator	Exemplary	Accomplished	Developing	Beginning
Identify common programming nomenclature	Describe the concepts of object-oriented programming terminology (Classes objects encapsulation)	Describe the concepts of procedural programming terminology (Loops, variables, arrays, collections)	recognize programming languages, resources, and file extensions	Understand basic computer terminology
Demonstrate efficient programming structure	In addition to (1,2,3) Students will utilize arrays and collections to abridged programs	In addition to (1,2)Students will utilize iterations techniques to abridged programs	In addition to (1) Students will use Methods to organize and abridged programs	Students will demonstrate an understanding of top-down flow for program execution and use place holders to display variable content.
Troubleshoot syntax errors	Utilize " try, catch, finally" with exception within a program	Utilize " try, catch" within a program	Demonstrate the ability to find common program errors	Describe common program errors
Tally Mark	II	III		
Total	2	3		



Program/Degree Outcomes - Computer Information Systems (AA)

Summarize the findings and analyses.

The assignment used for this assessment is taken during the last course in the CIS degree. Unfortunately this assessment fell during a pandemic and I only had 5 students attempt the project. Of the students that attempted the assessment all met the threshold set by the faculty and two even exceeded the expectations.

What are the biggest takeaways and plans of action?

Conclusion:

1. After reviewing the direct measure a consensus was reached that students were at the Accomplished level with the current curriculum and additional material could be added.
2. The deployment of the indirect measure was needed within the course and would be added during the next course offering.

Action:
Based on the previous assessment results the implementation of additional curriculum could be added to the course. The Faculty determined that a greater emphasis would be placed on advanced programming techniques such as classes and databases objects. In future semesters the advanced techniques would be added to the curriculum in CS 1313 and would be reinforced in CS1333. This earlier introduction would allow students to better grasp the implementation of objects within a program structure.

Additionally the student indirect measure survey will be added to all assessed courses. This indirect survey will provide a better understanding between students' perceived understanding and the actual content presented in the course.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

As a result of the assessment findings, the current level of funding and materials should be continued for the foreseeable future.

Program/Degree Outcomes - Computer Technology (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PLO 1. Upon completion of the program, the student will recognize appropriate workplace conduct.
PLO 2. Upon completion of the program, the student will build a program in an industry standard programming language.
PLO 3. Upon completion of the program, the student will demonstrate the design of fundamental networks.
PLO 4. Upon completion of the program, the student will identify security practices that apply to computing and demonstrate graphic processing.

Which program outcome(s) with performance indicators did you assess this past year?

Program learning outcome (PLO) 3 was measured in cycle 2020-2021 using the following PI: Define IP Address structure.

In which course(s) were direct assessments conducted?

Direct assessment was conducted in the course CS 2203 Networking 1.

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

Using IPv4 and IPv6 worksheets, students are given practical network addressing problems. They are required to calculate hosts, which addresses are usable, required to use private IP address schemes (Local Area Network Problem) and subnet when required. Students were required to understand dotted decimal notation of IPv4 and how to calculate hosts on a given network. Students were also required to have a working knowledge of binary and hexadecimal numbers and how to read the shorthand of IPv6 address on a given network. A working knowledge of private vs public IP addresses was required.

A program outcome rubric (shared collection tool) was used for this measure. Students were expected to perform in the accomplished to exemplary levels based on the rubric.

Program/Degree Outcomes - Computer Technology (AS)

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

No indirect measures were used for this course. Using an indirect measure to assess students perceptions of mastery is being considered and will be added to instructor evaluations on the next cycle. Questions will include how the student would describe their knowledge of IP Address Structure on a scale of 0-5.

Who analyzed the results?

CS 2203 course instructor analyzed the results.

Aggregated Results from the data field

17 Students/1 Section

Performance Indicator	Percentage of Students at each Level	**Expected Level of Performance:** Accomplished/Exemplary Thresholds
A. Define IP Address Structure	Beginning: 0% Developing: 0% Accomplished: 38% Exemplary: 62%	100% Accomplished/Exemplary 75% Threshold

Summarize the findings and analyses.

Students were successful in developing a working knowledge of address structures on networks for both IPv4 and IPv6. They were successful in areas of calculating hosts and differentiating between private and public IP addresses.
Students found difficulty in understanding the number system understructures relationship to IP addressing schemes. They understood number systems standalone. They understood IP addressing schemes standalone. The difficulty was in understanding the relationship between the two although they can stand separately.

What are the biggest takeaways and plans of action?

- Students were successful in developing a working knowledge of address structures on networks for both IPv4 and IPv6. They were successful in areas of calculating hosts and differentiating between private and public IP addresses.

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- Students found difficulty in understanding the number system understructures relationship to IP addressing schemes. They understood number systems standalone. They understood IP addressing schemes standalone. The difficulty was in understanding the relationship between the two although they can stand separately.
- A detailed explanation and numerous worksheets were effective to illustrate and calculate numbers of hosts.
- Less successful students were unable to make a solid connection between these two relatable areas. It is faculty's experience that this working knowledge leads to better understanding and enhances the knowledge base of computer science. Plus this is foundational information and will come up in practical use constantly. With tools like the internet and programs that calculate number systems, students are missing the point that these need to be items that can be addressed instantly and then related just as quickly when solving network issues.

Consideration is being given to combine internet tools to reinforce manual calculation methods. A plan of action to facilitate learning should not be held over to a next cycle. In this particular case it is part of the instructor's job/duty to realize these shortcomings and adjust in real time to ensure students don't leave with important concepts on the table.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

No budgetary action is required. CASC has recently installed smartboards in each of the computer labs and this coupled with videos on the subject provide different opportunities for understanding.

Program/Degree Outcomes - Criminal Justice (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PLO 1. Upon completion of the Criminal Justice program, the student will apply the 4th Amendment in law enforcement settings.
PLO 2. Upon completion of the program, the student will demonstrate ethical standards of police conduct.
PLO 3. Upon completion of the program, the student will demonstrate crime scene management.

Which program outcome(s) with performance indicators did you assess this past year?

Program learning outcome (PLO) 1 was measured in cycle 2020-2021 using the following PI: Appropriately conduct a crime scene search and seizure of evidence.

In which course(s) were direct assessments conducted?

Direct assessment was conducted in courses CJ2133 Patrol Operations and CJ2224 Criminal Investigations.

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

Using an observation method of a mock crime scene scenario, students are subjected to answer a call for service and properly conduct a search. Students are required to employ proper 4th amendment protocols by understanding types of searches can be conducted upon arrival, determine if a search warrant is required, secure the crime scene, how to apply for a search warrant and how to properly recover evidence.

A program outcomes rubric (shared collection tool) was used for this measure. Students were required to perform in the accomplished to exemplary side the assessment rubric.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

No indirect measures were used for this course. Using an indirect measure to assess students' perception of mastery is being considered and will be added to instructor evaluations on the next cycle. Questions will include how the student would describe their knowledge of the 4th amendment on a scale of 0-5.

Program/Degree Outcomes - Criminal Justice (AA)

Who analyzed the results?

The direct measures were evaluated by the course instructor.

Aggregated Results from the data field

10 Students/ 2 Sections

Performance indicator:	Percentage of Students	Expected Level of Accomplished/Mastery
Apply the 4th Amendment in law enforcement settings.	Beginning: 0% Developing: 10% Accomplished: 30% Mastery: 70%	80% Mastery/Accomplished

Summarize the findings and analyses:

Overall students were successful in applying 4th amendment protocols. One student failed to follow search and seizure laws by immediately started collecting evidence which lead 3 other students to follow in collecting evidence. With a verbal correction, those students recited the 4th amendment and understood the mistake. The other 6 students followed protocols as stated by legal boundaries of the constitution. Consideration is being made to reinforce more time to the understanding of the 4th amendment warrantless search versus warrant search protocols under legal boundaries.

What are the biggest takeaways and plans of action?

During the 2020-2021 assessment cycle, a review of the performance indicators led us to change the indicators. The next assessment cycle could yield a different outcome due to a better understanding of the new indicators being employed. Also during the next assessment cycle, there will be two new performance indicators added to support the program learning outcome.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

No budgetary action is required. CASC has recently installed smartboards in each of the computer labs, and this coupled with videos on the subject provide different mediums.

Program/Degree Outcomes - Health, Physical Education and Recreation (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PO 1 – Upon completion of the program, the student will identify the different aspects of physical education and related fields. PO 2 – Upon completion of the program, the student will identify healthy lifestyle choices. PO 3 – Upon completion of the program, the student will demonstrate basic treatments of common injuries/illness.

Which program outcome(s) with performance indicators did you assess this past year?

Upon completion of the program, the student will demonstrate basic treatments of common injuries/illness. (Comprehension)

Performance Indicators
A. Identify common injuries and illness
B. List the steps of common illness/injury assessment
C. Choose basic treatments of common injury/illness

In which course(s) were direct assessments conducted?

HPER faculty members chose HPER 2213 Standard First Aid & Personal Safety from the curriculum map (2 sections; one classroom, one online). The course was chosen because it has been mapped at the “Advanced” level of learning for learning outcome 3. Because this was a pilot assessment, only the 2 HPER members who teach the course were chosen to analyze the data.

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The HPER faculty members chose to do an item analysis from a M/C Exam titled: CPR/AED Exam from two 1st Aid sections. One online and one in-class. The following are the courses and number of students completing the direct measure:
HPER 2213 6363 CPR-AED Exam Questions – 54 of 59 responding
HPER 2213 3171 CPR-AED Exam Questions – 21 of 22 responding

The CPR/AED exam consisted of 60 questions. The same exam was given in both sections. Fourteen (14) questions for the measure were chosen for the specificity of answering the three performance indicators. Question #s relating to Program Outcome 3, Performance Indicator A, B, and C that were chosen were: 3, 5, 8, 21, 23, 29, 31, 32, 33, 36, 39, 56, 58, 60.

Program/Degree Outcomes - Health, Physical Education and Recreation (AA)

Because an item analysis for the direct measure was chosen, a shared rubric was deemed by the faculty as not necessary. The faculty chose to set a simple threshold of 80% correct for each question that students answer correctly to demonstrate the “Advanced” level of learning. Since this was the first time using an item analysis of questions pertaining to a learning outcome, 80% was chosen to gather baseline data. This threshold may go up or down in the future once a baseline is established

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

A Blackboard Survey consisting of 3 statements regarding the confidence level of the student to perform specific tasks was given. The number of respondents for the survey by section were:

HPER 2213 6363 HA/CPR/AED Survey – 30 of 59 responding
HPER 2213 3171 HA/CPR/AED Survey – 21 of 22 responding

Three questions were asked in the opinion survey (Indirect Measure) via a Blackboard Survey:

1. Performance Indicator A: “I feel confident recognizing the signs and symptoms of a heart attack."

2. Performance Indicator B: “I feel confident performing 'hands-only' CPR.”

3. Performance Indicator C: “I feel confident in how to use an AED (automatic external defibrillator)."

The faculty discussed and decided that the following statements would match the rubric levels of learning (Advanced, Competent, Developing, Beginning).

Students were asked to respond to one of the following items to the above statements 1-3:

1. Strongly Agree = Advanced (75% or higher)
2. Agree = Reinforced (50-74%)
3. Neither Agree nor Disagree = Developing (25-49%)
4. Disagree = Beginning (0-24%)
5. Strongly Disagree = Beginning (0-24%)

A holistic rubric was used to score the students’ learning for the indirect measure. The rubric consists of four levels of learning for the measure being used (Beginning; Developing; Competent;

Advanced).

Since the curriculum map shows HPER 2213 Standard First Aid and Personal Safety at the Advanced learning level for the assessment of Program Outcome 3, a threshold score of

75% of students “Strongly Agree" (Advanced) should be attained. Since this was a pilot assessment, 75% was chosen as the threshold to establish a baseline for reference. This threshold may need modification in the future

Who analyzed the results?

Seventy-five percent of students “Strongly Agree" (Advanced) should be attained. Since this was a pilot assessment, 75% was chosen as the threshold to establish a baseline for reference. This threshold may need modification in the future.

Aggregated Results from the data field

Direct Measure (Item Analysis of M/C exam) - 80% Threshold

75 Students/2 Sections

Performance Indicator	Test Items Addressing Outcome	Expected Level of Performance/Thresholds	Students Answering Correctly
A. Identify common injuries/illness	HPER 2213 6365 Q # 21 = 96.296% Q # 29 = 90.740% HPER 2213 3171 Q # 21 = 85.714% Q # 29 = 95.238%	Students Answering Correctly 80%	HPER2213 6365 94% HPER2213 3171 91%
B. List the steps of common injury/illness assessment	HPER 2213 6365 Q # 3 = 75.925% Q # 5 = 59.259% Q # 31 = 92.592% Q # 56 = 98.148% HPER 2213 3171 Q # 3 = 95.238% Q # 5 = 52.380% Q # 31 = 95.238% Q # 56 = 100.00%	Students Answering Correctly 80%	HPER 2213 6365 82% HPER 2213 3171 86%
C. Choose basic treatments to common injuries/illness	HPER 2213 6365 Q # 8 = 88.888% Q # 23 = 94.444% Q # 32 = 96.296% Q # 33 = 92.592% Q # 36 = 96.296% Q# 39 = 81.481%	Students Answering Correctly 80%	HPER 2213 6365 91% HPER 2213 3171 92%

Program/Degree Outcomes - Health, Physical Education and Recreation (AA)

	Q # 58 = 87.037% Q # 60 = 92.592% HPER 2213 3171 Q # 8 = 95.238% Q # 23 = 95.238% Q # 32 = 90.476% Q # 33 = 90.476% Q # 36 = 100. 00 % Q # 39 = 80.95 2%		

Indirect Measure (Blackboard Survey) – 75% Threshold

Performance Indicator A: Identify common injuries and illness	Statement: "I feel confident recognizing the signs and symptoms of a heart attack.	HPER 2213 6363 Strongly Agree = 46.67% Agree = 53.33% Neither Agree/disagree = 0.00% Disagree = 0.00% Strongly Disagree = 0.00% Unanswered = 0.00% HPER 2213 3171 Strongly Agree = 27.57% Agree = 61.90% Neither Agree/disagree = 4.76% Disagree = 0.00% Strongly Disagree = 4.76% Unanswered = 0.00%
Performance Indicator B: List the steps of common illness/injury assessment	Statement: "I feel confident performing 'hands-only' CPR."	HPER 2213 6363 Strongly Agree = 53.33% Agree = 36.67% Neither Agree/disagree = 10.00% Disagree = 0.00% Strongly Disagree = 0.00% Unanswered = 0.00% HPER 2213 3171 Strongly Agree = 33.33% Agree = 61.90% Neither Agree/disagree = 4.76% Disagree = 0.00% Strongly Disagree = 0.00% Unanswered = 0.00%
Performance Indicator C: Choose basic treatments for common injury/illness	Statement: "I feel confident in how to use an AED."	HPER 2213 6363 Strongly Agree = 46.67% Agree = 40.00% Neither Agree/disagree = 10.00% Disagree = 3.33% Strongly Disagree = 0.00% Unanswered = 0.00%

Program/Degree Outcomes - Health, Physical Education and Recreation (AA)

HPER 2213 3171
Strongly Agree = 33.33%
Agree = 47.62%
Neither Agree/disagree = 19.05%
Disagree = 0.00%
Strongly Disagree = 0.00%
Unanswered = 0.00

Summarize the findings and analyses:

Analysis of results

Direct Measure:
According to the rubric scoring, all students in both the online section and classroom section met the “Advanced" level learning with each student being able to identify, list, and choose basic treatments of heart attack, CPR, and AED and can do so with infrequent verbal cueing with the exception of question #5.

While each performance indicator was represented by questions in the exam chosen for item analysis, it was done somewhat unequally. Of all of the questions that were identified as specific enough to address each performance indicator, there was an uneven distribution of questions per performance indicator. Performance indicator A had only two questions tied to it, performance indicator B had four questions tied to it, and performance indicator C had eight questions tied to it. Judging by the uneven distribution of the questions to the performance indicators, performance indicator A having only two questions calls into question the reliability of student learning for that indicator. Performance indicator B had four questions and better reliability that true student learning took place. The most reliable performance indicator C with eight questions shows that definite student learning processes took place.

A review of the examination is needed and more questions pertaining to Performance Indicator A need to be added. Also, the sequencing of the course is somewhat illogical with CPR/AED, and how to perform each of them is being taught at the beginning of the semester with recognition of a heart attack coming later in the semester. The exam questions from the recognizing a heart attack learning module are not represented in the assessed exam, and if they were added into the CPR/AED exam, it may reveal that student learning is taking place at a higher or lower level than this assessment shows.

Program/Degree Outcomes - Health, Physical Education and Recreation (AA)

Indirect Measure:

According to the item analysis of the questions on the survey, it appears that the all of the survey respondents' confidence level was below the agreed threshold of 75% of Strongly Agree, which would indicate an "Advanced" level off perceived learning according to the rubric and as it is mapped in the HPER Curriculum Map. According to the rubric scoring the students perceived that they did not master the measures at the Advanced (Advanced) level, but felt they were at least Competent (Reinforced) with the material.
Although an "Advanced" level of learning was not achieved for all respondents according to this data set, this did not mean that learning did not take place. A review of the responses indicates that greater than 75% of the responses were split between Strongly Agree (Advanced) and Agree

(Reinforced) indicating that the majority of the respondents indicated that they are grasping the concepts of recognizing heart attacks, performing CPR, and applying an AED.
This survey was used as an indirect measure of learning, essentially asking about the student's "confidence" to perform lifesaving tasks. The survey was not designed to ask them "do you know how?" questions, which was what the Direct Measure: CPR/AED Exam does.

Performance Indicator A: "I feel confident recognizing the signs and symptoms of a heart attack" shows that in the online class that 100% of the respondents reported Strongly Agree/Agree. In the traditional class, 89.26% of respondents reported Strongly Agree/Agree. Although in both classes the majority of respondents reported Agree at the Reinforced level of learning.
Performance Indicator B: "I feel confident performing 'hands-only' CPR" shows that in the online class 90% of the respondents reported Strongly Agree/Agree. In the traditional class, 95.23% of respondents reported Strongly Agree/Agree. Although in both classes, the majority of respondents reported Agree at the Reinforced level of learning.

Performance Indicator C: "I feel confident in how to use an AED" shows that in the online class 86.67% of the respondents reported Strongly Agree/Agree. In the traditional class, 80.95% of respondents reported Strongly Agree/Agree. Although in both classes, the majority of respondents reported Agree at the Reinforced level of learning.

By matching the data collected about the student's perception of learning or their confidence to perform a lifesaving task to the rubric descriptions, the majority of the scores (52%) fell in the Competent (Reinforced) category of the rubric for Performance Indicator A. This indicates that the student can identify the most common aspects of heart attack recognition, most of the ability to

perform CPR, and most of the application and use an AED. The student is able to perform the listed tasks with minimal verbal cueing while displaying effective learning with minimal errors.

According to the survey results, the student's confidence level for the Strongly Agree (Advanced level of learning) was lacking significantly from the 75% threshold. It is noted that the traditional section of the course scored generally lower than the online section in almost every category at the Strongly Agree response. This is a surprise to the evaluators.

Informal follow-up questions to the traditional class indicated that the majority of the respondents felt comfortable with the current instruction techniques for the use of an AED, but lacked confidence in employing one on a person if needed. When asked how we could better instruct that portion of the course, the class responded that having a practice AED to work with would be very beneficial. Another suggestion offered by some in the class was to place all of the CPR, AED, and heart attack recognition in the same learning module. Currently, CPR and AED are placed in a learning module at the beginning of the semester, and recognition of heart attacks is placed toward the end of the semester.

It is interesting to see the difference between the students' perception of learning as indicated by the indirect measure and level of learning as indicated by the direct measure. The indirect measure was a survey asking their confidence level performing a lifesaving task (recognize a heart attack, perform CPR, and use an AED) and was self-rated mostly at the "Competent" level of learning. The direct measure in the form of a standard multiple-choice exam asked them to identify, list, and choose the same things that would be required to perform the same lifesaving task.

Overwhelmingly the rubric scored at the "Advanced" level of learning for the direct measure. This shows a disconnect between "book learning" and a student's confidence level to apply that learning. An additional question to the indirect measure (survey) could ask the students if they have ever performed CPR and/or used an AED in an attempt to save someone's life.

Overall the faculty is satisfied with the results. Admittedly, some changes need to be made to the measures used to bring the picture of student learning into better focus. The assessment process has proven useful to identify these areas.

What are the biggest takeaways and plans of action?

Takeaways

a. A review of the direct measure examination is needed.

b. Distribute questions more equally across Performance Indicators. There needs to be more questions pertaining to “Performance Indicator A” added.
c. Thresholds were determined through the expertise of the instructors only.
d. There is a disconnect between “book learning” and students’ perception of learning regarding the performance indicator.
e. Question #5 from the direct measure needs to be evaluated.
f. Practice AED(s) need to be purchased for classroom demonstration.

Action Plan

Direct Measure
a. Move heart attack instruction and testing from the “Sudden Illness” module and add content to CPR/AED module testing and information.
b. Perform a detailed analysis of each question used in the item analysis for academic consistency.

c. Distribute questions equally across performance indicators. Additional questions may need to be written.
d. Determine baseline accuracy for thresholds based on data.
e. Evaluate question #5 of the direct measure.
Indirect Measure
f. Review statements for accuracy and understanding by the student.
g. Attempt to purchase practice AED.
h. Emphasize the importance of the material.
i. Allow more time for the in-class section to practice CPR.
j. Attempt to find a way for the online class to be able to practice/demonstrate CPR/AED.
k. Determine baseline accuracy for thresholds based on data.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

Increasing the HPER budget to allow for the purchase of a practice AED or asking to borrow Student Affairs' practice AED.
Discuss with faculty and Sports medicine director the possibility of seeing if the local EMS service would volunteer their time for instruction in CPR and the use of an AED.

Program/Degree Outcomes - Mathematics, Physical Science, & Pre-Engineering

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

PO1 Upon completion of the program, the student will apply the Pythagorean Theorem.
PO2 Upon completion of the program, the student will apply problem solving strategies.
PO3 Upon completion of the program, the student will perform safe and appropriate laboratory techniques.

Which program outcome(s) with performance indicators did you assess this past year?

We assessed Program Outcome 3 in the 2020/2021 cycle. The Performance Indicators are as follows:

PO3 PI1 Apply Appropriate Personal Protective Equipment (PPE) (PPE includes goggles, gloves, aprons)
PO3 PI2 Demonstrate Proper Laboratory Hygiene (Lab hygiene includes cleanup of lab tables and washing of hands at conclusion of lab)
PO3 PI3 Demonstrate Proper Laboratory Safety (Lab safety includes doing only assigned lab procedures and doing them in a safe manner)

In which course(s) were direct assessments conducted?

The Math Physical Science and Pre-Engineering faculty chose to assess PO3 in CHEM 1215 & PHYS 1214. These courses were chosen because they were the most advanced courses where this program outcome could be assessed.

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

This outcome was assessed during the 6th lab of the semester, using an observational rubric devised by the department using the three performance indicators. The observation was made by the instructor for the entire lab, (approximately 1.5 to 2 hours in length). The students did not know they were being assessed until after the lab ended. This way the faculty felt we would be getting very accurate data. The performance indicators ranked from beginning to exemplary in our rubric. Because this performance outcome measures an area of safety concern we set our performance level threshold as exemplary.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

The only indirect measure used during this cycle was an in class survey. This survey was only given to students in CHEM 1215.

The questions on the survey are as follows:

Program/Degree Outcomes - Mathematics, Physical Science, & Pre-Engineering

1. How much emphasis has been placed on safety in the laboratory setting? This includes PPE, laboratory hygiene and safe lab practices.

Scale:
4 points - The lab setting always included instruction and cautions for lab safety.
3 points - The lab setting typically had considerable emphasis on lab safety.
2 points - The lab setting typically had some emphasis on lab safety, but could have used more.
1 point - The lab setting typically had little to no emphasis on lab safety.

2. In the space below, write any suggestions you have for improvement in lab safety in the physical science course at CASC.

Who analyzed the results?

The direct observations were analyzed and compared by the two instructors, Steve Hughes & Rob Wylie, who teach these courses in the Math Physical Science and Pre- Engineering Department. In the future we plan to include all faculty teaching courses in our division in the analysis of our data.

Aggregated Results from the data field

Direct Measure: 20 Students/2 Sections (Aggregated)

Performance Indicator	Percentage of Students at each Level	Expected Level of Performance: Mastery
PI1 Apply Appropriate Personal Protective Equipment (PPE) (PPE includes Goggles, gloves, aprons)	Beginning: 0% Developing: 0% Accomplished: 10% Mastery: 90%	90% of 20 students met Mastery level
PI2 Demonstrate Proper Laboratory Hygiene (Lab Hygiene includes cleanup of lab tables and washing of hands at conclusion of lab)	Beginning: 0% Developing: 0% Accomplished: 0% Mastery: 100%	100% of 20 students met Mastery level
PI3 Demonstrate Proper Laboratory Safety (Lab safety includes doing only assigned lab procedures and doing them in a safe manner)	Beginning: 0% Developing: 0% Accomplished: 0% Mastery: 100%	100% of 20 students met Mastery level

Indirect Measure: 7 students from 1 section (CHEM 1215)
When asked on the survey, “How much emphasis has been placed on safety in the laboratory setting?”, 100% of the students chose the response stating “The lab setting always included instruction and cautions for lab safety.”
On the open ended question asking for suggestions for improvement of lab safety, only 1 student responded with, “maybe a little more emphasis on washing hands after the lab was completed.”

Program/Degree Outcomes - Mathematics, Physical Science, & Pre-Engineering

Summarize the findings and analyses:

We are well on our way of obtaining Mastery in Lab Safety. By the time students are half way through CHEM 1215 and PHYS 1214 & 2114, they have a very good understanding of lab safety protocols, and as the data suggests, 100% are at either an accomplished or mastery level. These protocols appear to be becoming second nature in our students, which is exactly what we want to happen. However, once Covid 19 precautions are removed and students are not as focused on safety concerns, faculty have considered the possibility that students might not continue to follow safety protocols to the degree they did during this cycle.

What are the biggest takeaways and plans of action?

The biggest takeaway for the department on PO3 is our safety protocols and training procedures seem to be working.

Other takeaways and plan of action include:

- Continue with our current protocols for a few more cycles to see if the data stays the same
- Gain a broader number of students by assessing not only CHEM 1215 & PHYS 1214 but also assessing PHYS 2114
- Modify the direct measure rubric by removing the point values and changing the exemplary to mastery to better describe what we are attempting to asses
- Change question 1 on the indirect measure from a rated scale to a check box format
- Utilize the indirect measure survey in not only CHEM 1215 but also in PHYS 1214 & 2114

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

Current resources are adequate to support the implementation of PO3 and all plans of action as listed above.

Program/Degree Outcomes - Nursing (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1. Upon program completion, the student will implement nursing care plans based on safe, evidence-based patient care guidelines,
2. Upon program completion, the student will communicate with patients in a therapeutic manner to achieve patient care goals,
3. Upon program completion, the student will perform nursing skills in compliance with relevant laws and policies.

Which program outcome(s) with performance indicators did you assess this past year?

Program Outcome 1 - Upon completion of the program, the student will implement nursing care plans based on safe, evidence-based patient care guidelines.

A. Assess pertinent and abnormal patient health data
B. Identify the top priority patient problem
C. Implement accepted nursing actions to address priority problems.

In which course(s) were direct assessments conducted?

NUR 2219 Health-Illness Nursing IV in the spring semester

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The Carl Albert State College (CASC) nursing faculty members chose to complete an analysis using the NUR 2219 Student Care Plan Rubric. Student care plans for critically ill patients were used as the direct measure. The rubric, EHR Care Plan Grading Tool for ICU, evaluates the students' ability to demonstrate critical thinking, utilize the CASC Human Needs framework, administer patient medications, analyze patient laboratory data, implement the nursing process, and communicate in a professional manner. Students must score 75% out of 100% to demonstrate minimal competency. The faculty chose the clinical care plan assignment for a critically ill patient because this will correctly demonstrate the “Advanced” level of learning required to be a competent registered nurse.

Program/Degree Outcomes - Nursing (AS)

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

The Students' Perception of Learning: Student Survey was given to 32 graduates, with 15 survey responses returned. The survey included the following questions:

1. "How well did the CASC Nursing Program prepare you to set priorities in patient care?"
2. “How well did the CASC Nursing Program prepare you to assess patient Health Issues?"
3. "How well did the CASC Nursing Program prepare you to implement patient care in common health care settings?"

Who analyzed the results?

Stephanie Mann: Faculty
Cara Stewart: Faculty
Marcia Cullum: Director of Nursing Education

Aggregated Results from the data field

Indirect Measure – 32 Students Surveyed

Students' Perception of Learning: Student Survey	Likert Scale: 1 to 5 1 = Poor 2 = Not well 3 = Moderate 4 = Moderately well 5 = Very-well prepared	**Expected Level of Performance:** Competent Thresholds
1. "How well did the CASC Nursing Program prepare you to set priorities in patient care?"	1 - 0 2 - 0 3 - 1 4 - 3 5 - 11	93.33% of 15 students
2. “How well did the CASC Nursing Program prepare you to assess patient Health Issues?"	1 - 0 2 - 0 3 - 1 4 - 4 5 - 10	100% of 15 students

Program/Degree Outcomes - Nursing (AS)

Direct Measure – 35 Students/4 Sections (14 Aggregated)

Performance Indicator	Number of Students by Level	**Expected Level of Performance:** Competent Thresholds
A. Assess pertinent and abnormal patient health data	Beginning: 0/14 Approaches Competency: 3/14 Competent: 11/14	78.57% of 14 students
B. Identify the top priority patient problem	Beginning: 0/14 Approaches Competency: 0/14 Competent: 14/14	100% of 14 students
C. Implement accepted nursing actions to address priority problems	Beginning: 0/14 Approaches Competency: 0/14 Competent: 14/14	100% of 14 students

Summarize the findings and analyses:

For indirect measure, an anonymous survey using Survey Monkey was sent to 32 of the 35 students, over the summer of 2021. Three students enrolled in the course did not graduate from the nursing program and were not included in the survey.
For the direct measure, the faculty used the clinical care plan assignment for critically ill patients and the performance indicators to assess the program outcome. The results for the direct measure are as follows: No students were identified at the beginning level, 3 of 14 students were identified as approaching competency, and 11 of 14 were identified as being competent in meeting the performance indicator A. Assessing pertinent and abnormal patient health data. Overall, a total of 78.57% of students met the competency threshold. The performance indicator B. Identifying the top priority patient problem, identified no students at the beginning and approaching competency levels, and 14 of 14 students identifying at the competent level. A total of 100% of students met the competency threshold. The last indicator C. Implement accepted nursing actions to address priority problems, identified no students at the beginning and approaching competency levels, but did identify 14 of 14 students at the competent level. 100% of students met the competency threshold.

In the spring of 2021, completed Student Care Plan Rubrics with grades were given to the students at the time of formative evaluation and only the percentage grade was kept as part of the permanent record. That resulted in 15 out of 35 the NUR 2219 Student Care Plan Rubrics being available to aggregate data of students at each level as illustrated in the direct measure data chart. Each student was given two opportunities to develop a plan of care for a critically ill patient and the higher score was given to the student.

After analyzing the indirect and direct measures, a total of 78.57% of students met the competency threshold regarding assessment of pertinent and abnormal patient health data. The nursing

faculty felt that strengthening assessment skills will help to address and increase performance indicator A. Results from the indirect data support this finding. 86.66% of students report feeling afraid or hesitant to implement nursing actions in the patient care area. This, too, coincides with the findings because confidence in taking action comes after mastering assessment skills.

What are the biggest takeaways and plans of action?

Some of the biggest takeaways from analyzing both direct and indirect data and writing this summary include the following: (1) more opportunities for assessment of pertinent and abnormal patient health data should be incorporated, (2) the future curriculum needs to include the completed critical care NUR 2219 Student Care Plan Rubric in the individual student's permanent record, and (3) the need to increase emphasis on assessment skills, setting priorities, and implementation.

The majority of students indicated that simulation was the most helpful method of improving assessment. The nursing faculty members also noted that about 15% of students were less than confident in their ability to implement patient care. In Fall 2021 nursing faculty added a simulation on the current content before each unit exam. This is viewed as an area that needs action; although, the nurse graduate is often uncertain in his or her new role and hesitant to take action due to being a novice nurse.

The CASC nursing faculty members have adjusted the current curriculum to include additional simulation time. For example, this year (2020-2021) a simulation has been performed before each of the 3rd semester unit exams. Prioritization guidelines are included in the ATI tool content, but they need to be emphasized in each course. We believe we are headed in the right direction, but since assessment, prioritization, and implementation skills need to be strengthened, increasing the quality of simulation by certification of faculty is the next logical step to address that need. This year's continuing education for faculty should focus on strengthening simulation presentation.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

The resources needed to support the action plan are a dedicated on-campus faculty member and budget allocation to support simulation endeavors. Additional funding will assist faculty members to become certified in simulation. The nursing faculty members feel that increased simulation would strengthen the students' assessment skills, which is supported by the students' survey responses.

Program/Degree Outcomes - Occupational Health Safety (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1. Upon completion of the program, the student will identify careers options associated with Occupational/Environmental Safety and Health.
    A. Identify one job that interest the student
    B. Recognize sources for job listings
    C. Define purpose of career identification
2. Upon completion of the program, the student will conduct a safety training required by OSHA.
    A. Examine the differences between safety training topics
    B. Identify personal and environmental factors that affect quality of training.
    C. Examine the connection between presenter and audience
3. Upon completion of the program, the student will illustrate compliance with all applicable regulations and laws.
    A. Identify key components of OSHA regulations and laws
    B. Perform safety checks to confirm compliance with regulations and laws
    C. Define purpose of OSHA regulations and laws

Which program outcome(s) with performance indicators did you assess this past year?

1. Upon completion of the program, the student will identify careers options associated with Occupational/Environmental Safety and Health.
    A. Identify one job that interest the student
    B. Recognize sources for job listings
    C. Define purpose of career identification

In which course(s) were direct assessments conducted?

OHS 1313 Intro to Health and Safety
OHS 2333 Safety Program Training/Presentation Techniques

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

Program/Degree Outcomes - Occupational Health Safety (AS)

In OHS 1313, students are introduced to safety job options, career exploration tools, and career identification and required to complete a written assignment over their career/job search.
OHS 2333 Safety Program Training/Presentation Techniques is an advance level learning for job search and career identification. Short essay questions required students to detail their career research and selected career path.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

The pilot focused mainly on direct measures. An indirect measure will be added next academic year.

Who analyzed the results?

Kristi Mcconnell, Jakeob Hembree and Robert Puhl

Aggregated Results from the data field

OHS 1313 – 11 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	Expected Level of Performance: Accomplished/Mastery
A. Identify one job that interest the student	Beginning: 0% Developing: 5% Accomplished: 85% Mastery: 10%	100% of 11 students
B. Recognize sources for job listings	Beginning: 10% Developing: 0% Accomplished: 75% Mastery: 0%	85% of 11 students
C. Define purpose of career identification	Beginning: 30% Developing: 10% Accomplished: 55% Mastery: 5%	100% of 11 students

Program/Degree Outcomes - Occupational Health Safety (AS)

OHS 2333 – 10 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	Expected Level of Performance: Accomplished/Mastery
A. Identify one job that interest the student	Beginning: 0% Developing: 0% Accomplished: 0% Mastery: 100%	100% of 10 students
B. Recognize sources for job listings	Beginning: 0% Developing: 10% Accomplished: 10% Mastery: 80%	100% of 10 students
C. Define purpose of career identification	Beginning: 0% Developing: 10% Accomplished: 75% Mastery: 15%	85% of 10 students

Summarize the findings and analyses.

Concerning OHS 1313, the instructors found that the assignment was a success. Many students found more than one job they were interested in. Fifty percent of students identified oil and gas, 20% construction, 10% undecided and 20% healthcare.
By completing the short essay questions, each student explained his/her own interests in the jobs found. Students learned to tailor their resume to find the selected job. According to the data found, 15% of the students mastered the purpose of career identification while 10% remained in the developing stage. The instructors believe the difference can be seen in students who plan to further their education vs students who plan to enter into the work environment.

What are the biggest takeaways and plans of action?

After analyzing the assessment experience and data, the following are recommended program improvements:

- Have students share their career exploration
- Incorporate guest speakers in the different fields of safety and health
- Improve the number of students developing the skill of research and move more into the “accomplished/mastery” level by adding a job shadow assignment

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

Program/Degree Outcomes - Occupational Health Safety (AS)

Budget allocation is a large part of student success for this program outcome. The instructors have found that through guest speakers and virtual/in person facility tours the students are more equipped to find jobs that interests them.

Program/Degree Outcomes - Physical Therapist Assistant (AS)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.
3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.

Which program outcome(s) with performance indicators did you assess this past year?

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.

A. *Identify legal practice standards*
B. Report to appropriate authorities
C. Communicate effectively with all stakeholders

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.

A. Explain the plan of care
B. Apply the plan of care at the level of the Physical Therapist Assistant
C. Modify Interventions to complete the plan of care

3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.

A. Explain critical safety elements
B. Apply critical safety elements during skill delivery
C. *Modify kills to meet critical safety elements*

In which course(s) were direct assessments conducted?

PHTA 2534 Clinical Experience III

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The first direct measure is the objective component of the Clinical Performance Instrument (CPI). Students are graded by clinical faculty and must obtain Entry Level.

Program/Degree Outcomes - Physical Therapist Assistant (AS)

The second direct measure is the Clinical site visit form. This document is completed during regular clinical visits from the program faculty.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

The first indirect measure is the subjective comments for the student's Clinical Performance Instrument. Students are provided feedback into components of their performance.
The second indirect measure is the Student Assessment of Clinical Education. This is a document the student provides at the conclusion of the clinical experience where clinical faculty, site, and experience are evaluated.

Who analyzed the results?

PTA Program Director and Academic Coordinator of Clinical Education

Aggregated Results from the data field

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.

17 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	**Expected Level of Performance:** Entry Level
A. Identify legal practice standards	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)
B. Report to appropriate authorities	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)
C. Communicate effectively with all stakeholders	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)

Program/Degree Outcomes - Physical Therapist Assistant (AS)

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.

17 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	**Expected Level of Performance:** Entry Level
A. Explain the plan of care	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)
B. Apply the plan of care at the level of the Physical Therapist Assistant	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)
C. Modify Interventions to complete the plan of care	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)

3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.

17 Students/1 Section (Aggregated)

Performance Indicator	Percentage of Students at each Level	**Expected Level of Performance:** Entry Level
A. explain critical safety elements	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	17 of 17 students (Threshold %)
B. apply critical safety elements during skill delivery	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	16 of 17 students (Threshold %)

C. modify skills to meet critical safety elements	Beginning: 0% Advanced Beginner to Intermediate: 0% Intermediate to Advanced Intermediate: 0% Advanced Intermediate to Entry Level: 100%	16 of 17 students (Threshold %)

Summarize the findings and analyses.

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.
100% of students showed progression from midterm to final grading in PHTA 2534 toward the practice of ethics as a Physical Therapist Assistant.

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.
100% of students showed progression from midterm to final grading in PHTA 2534 toward the practice of ethics as a Physical Therapist Assistant.

3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.
94% of students showed progression from midterm to final grading in PHTA 2534 toward the demonstration of competence in critical safety skills as a Physical Therapist Assistant.

What are the biggest takeaways and plans of action?

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.
The program believes that the introduction of the outcome and current clinical experiences and faculty are meeting program needs. The program will continue current practice.

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.
The program believes that the introduction of the outcome and current clinical experiences and faculty are meeting program needs. The program will continue current practice.

3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.
The program believes that the introduction of the outcome and current clinical experiences and faculty are meeting program needs. The program will continue current practice. The single student

not meeting threshold is currently completing extended time in clinical experience and did not progress to graduation.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

1: Upon completion of the program, the student will practice ethics of the physical therapist assistant.
The program faculty continue to offer CPI training at no cost for clinical faculty. At time of writing, the online version of the CPI is being more welcomed by clinical faculty but the program is responsible for an annual fee to maintain it. The program will continue to make budget requests for the fee and continue communication to current and potential clinical faculty to obtain training. The program faculty also attend periodic training with the Commission of Accreditation of Physical Therapy Education to identify updated strategies for implantation of the CPI. There is now a direct cost of the training and will require increase in program budget line for PTA travel.

2: Upon completion of the program, the student will perform within the plan of care in physical therapy.
The program faculty currently can provide students with didactic and practical opportunities to meet current clinical needs. The program faculty perform skills check assessments and require students to meet a standard prior to moving them to clinical education. There is a direct cost to the program for maintenance, repair and replacement of durable medical equipment. The budget request process is discussed each spring semester during the PTA Faculty meeting.

3: Upon completion of the program, the student will demonstrate competence in critical safety skills provided by the physical therapist assistant.
The program faculty continue to emphasize critical safety elements during program course skills. Current practices require faculty utilize significant class/lab time to meet the needs of the skills check assessment. This process is however deemed crucial to the development of the student. It is common for program faculty to need coverage from fellow faculty in labs and class. Challenges have also occurred when students are unable to meet in person due to weather, illness, quarantine, etc. for skills training and assessment. This leaves a strong burden on program faculty to modify the instruction but maintain the standard. The program is constantly looking for strategies to mitigate the risk of those situations.

Program/Degree Outcomes - Sociology/Psychology (AA)

2020 - 2021 Annual Program Summary

List all Program Learning Outcomes

1. Upon completion of the program, the student will identify empirical research designs.
2. Upon completion of the program, the student will apply theoretical perspectives to individual and social behavior.
3. Upon completion of the program, the student will apply the sociological imagination as it pertains to current social issues.

Which program outcome(s) with performance indicators did you assess this past year?

2. Upon completion of the program, the student will apply theoretical perspectives to individual and social behavior.

A. Define theoretical perspectives
B. Identify key components/attributes
C. Relate the concept to a specific aspect of behavior

In which course(s) were direct assessments conducted?

Introduction to Behavior and Adjustment PSY 2113

How did you assess the outcome(s)? Explain the direct measure(s) and the shared data collection tool with expected performance level/thresholds.

The direct measure comprised of a verbal capstone. Students were given the program outcome rubric at the beginning of the semester in each of the two classes, and the instructor discussed what the end of the year verbal capstone would measure and how they would present the information in a one on one interview setting. The instructor would assess the student individually using the rubric created for this verbal capstone assignment. Since this is an advanced level class students were expected to perform at competent or advanced.

Explain the indirect measure used to assess the outcome(s). What data collection tool and questions were used to assess the students' perception of mastery of the outcome(s)?

After the students had taken the Verbal Capstone Exit Interview, they were given a Likert scale to rate how the Psychology/ Sociology Program at CASC had prepared them to succeed on this assignment. The Student Evaluation scale is also attached to this paper. The question on the scale was: On a scale from 1-10, how do you feel the Carl Albert State College Sociology/Psychology

program has prepared you for the verbal capstone presentation on the 5 major theoretical perspectives in psychology?
1 (I strongly disagree that the program has prepared me for the verbal capstone.)
10 (I strongly agree that the program has prepared me for the verbal capstone.)

Who analyzed the results?

Kristin Snyder (Instructor) We will include more faculty during the next cycle.

Aggregated Results from the data field
(Intro to Behavior and Adjustment PSY 2113)

Direct Measure:
Number of Students Assessed:14
12 Students scored Advanced
2 Students scored Competent

Indirect Measure:
Number of Students Assessed: 12
11 students gave the Psy/Soc program a 9-10
1 student gave the Psy/Soc program an 8

Summarize the findings and analyses.

The students are introduced to the major theoretical perspectives in their introduction classes and are also covered in all of the other Psy classes that they take at CASC. The students had the chance to demonstrate the retained knowledge that they have accumulated over the two-year span at CASC. Students scored in Advanced or Competent. Students could define the main theoretical perspectives in psychology, list the founding fathers to these theories, and relate the theories to real life situations.

What are the biggest takeaways and plans of action?

A meeting is needed at the start of each semester with the instructors teaching any class that has PSY/SOC title so they can go over the curriculum map, SLOs, performance indicators, and rubrics. Even if an instructor is not teaching the Introduction to Behavior and Adjustment or the Social Problems Class, he/she can still cover the material in the program outcome.

Explain what resources will support the action (budget allocation, materials, personnel, donations, outside support).

No resources are needed at this time.