Weber State University Biennial Report on Assessment of Student Learning

Cover Page

Department/Program: Bachelor of Science in Nutrition Education

Academic Year of Report: 2018/19 (covering Summer 2017 through Spring 2019)

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A. Brief Introductory Statement:

Please review the Introductory Statement and contact information for your department or academic program displayed on the assessment site: http://www.weber.edu/portfolio/departments.html - if this information is current, please place an 'X' below. No further information is needed.

____ Information is current; no changes required.

Update if not current:

The Department of Exercise and Nutrition Sciences (ENS) in the Jerry & Vickie Moyes College of Education offers programs that teach skills and knowledge needed to maintain and enhance human performance and well-being through exercise, fitness, sport, and optimal nutrition. We offer undergraduate students exceptional educational experiences in a variety of teaching environments supported by faculty with diverse expertise. Our state-of-the-art facilities — including fully equipped laboratories (biomechanics, human performance, nutritional biochemistry, and foods), a networked computer lab, and ample indoor and outdoor fitness and activity arenas — provide outstanding areas for student instruction and research. With a curriculum designed to develop professional knowledge and skills, our graduates enter the workforce as fitness and nutrition professionals in a variety of educational, health and fitness settings, and are prepared to pursue graduate studies in their respective career fields.

Through instruction, scholarship and service, our department offers Bachelor of Science degrees in Exercise and Sport Science (Fitness Professional and Exercise Science tracks) and Nutrition Education (Integrative Nutrition and Sports Nutrition tracks) and a Nutrition Education minor. We also support the efforts of undergraduates seeking Departmental Honors and/or the Bachelor of Integrated Studies degree, offering Exercise Science and Nutrition Education and as emphases for the BIS Program.

https://www.weber.edu/ens/nutrition.html

Nutrition Education majors study nutrition for food values, diet design, health, cultural sensitivity, lifespan, fitness, sustainability and current issues. Studies will also be tailored to the area of concentration.

Integrative Nutrition: This concentration can be completed fully online. It is design to cover several nutrition topics related to diet analysis and design, multicultural nutrition, sustainable cooking, the lifespan, fitness, and current issues, as well as, integrate your knowledge and expertise by completing elective courses in selected related disciplines like botany, child and family studies, communications, exercise and sport science, health, microbiology, physical education, psychology and/or professional sales. You will obtain field experience and complete a senior seminar.

Sports Nutrition: In this concentration, you will study fitness and sports nutrition, diet therapy, advanced human nutrition, anatomy, physiology, chemistry and other related subjects in athletic training, exercise and sport science, physical education and/or psychology. You may obtain field and/or research experience and will complete a senior seminar.

B. Mission Statement

Please review the Mission Statement for your department or academic program displayed on the assessment site:

http://www.weber.edu/portfolio/departments.html - if the mission statement is current, please place an 'X' below.; If the information is not current, please provide an update:

Information is current; no changes required.

Update if not current:

The ENS department mission statement found online (https://weber.edu/ens/about.html): The Department of Exercise and Nutrition Sciences (ENS) supports and enhances the mission of the University through learning, access, and community partnerships in exercise and nutrition sciences. We provide effective instruction, exploratory research, and engaged service to prepare exercise, fitness, and nutrition professionals for the workforce and graduate studies and to promote optimal health, human performance, and overall well-being.

The Nutrition Education program mission statement: The Nutrition Education program has the dual purposes of preparing students for graduate study in nutrition or a related field and/or for employment through collaborative program efforts (integrated academic programs and institutional entities with varied course delivery methods and high impact practices) to ensure timely degree completion. The Sport's Nutrition Educator graduate will be prepared to enter a coordinated masters program to become a Registered Dietitian Nutritionist (RDN) and will have demonstrated competence and knowledge in chemistry, anatomy, physiology, diet analysis and design, sports and fitness nutrition, diet therapy, nutrition assessment, life cycle nutrition, advanced nutrition and human metabolism, research, and related exercise science topics with cultural application and sensitivity for individuals and athletes. The Integrative Nutrition Educator graduate will support the health and wellbeing of individuals and groups and have demonstrated competence and knowledge in diet analysis and design, life cycle nutrition, fitness nutrition, sustainable cooking, and related exercise science, health, child and family studies, botany, microbiology, physical education, recreation, and/or psychology topics with cultural application and sensitivity. Students will achieve the programs well-defined learning outcomes (based largely off the Society of Nutrition Education and Behavior's competencies) and through community service and/or directed research will promote wellbeing and add to the nutrition science knowledge base.

C. Student Learning Outcomes

Please review the <u>Student Learning Outcomes</u> for your academic program displayed on the assessment site: http://www.weber.edu/portfolio/departments.html. In particular, review in light of recent strategic reporting and indicate any needed updates. If the outcomes are current, mark below.

Information is current; no changes required.

Update if not current:

Nutrition Education Program (Integrative Nutrition and Sports Nutrition¹) Measurable Learning Outcomes: Concepts and Competencies²

Concepts: Students completing the Nutrition Education program will have:

- A. Knowledge & Skills to solve nutrition and health related problems.
- B. **Integrated & Applied Expertise** to educate and communicate for optimal health promotion and human performance.
- C. **Personal and Community Responsibility** to optimize healthful behaviors of individuals, families, and/or communities through the life cycle with networking, resources, and support.
- D. **High Impact Experiences** from assimilating or engaging in research, group projects, senior capstone work, and/or community-based fieldwork.

Competencies: Students completing the Nutrition Education programs will master nutrition concepts in:

- 1. **Diet Analysis & Design** by performing accurate diet analysis and design according to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.
- 2. **Nutrient Needs & Functions** by gender and activity level for various age groups and health conditions using healthy and sustainable food preparation methods.
- 3. **Nutrition Issues & Assessment** across cultures and the lifespan, for fitness and sport performance, in culinary science, and for the prevention and treatment of various medical conditions.
- 4. **Human Structure and Function** by understanding how nutrition intersects with living and nonliving hierarchies within the human body.

¹Sports nutrition graduates will have more emphasis in learning outcomes 3 and 4.

²The Nutrition Education program concepts and competencies are based largely off of the Society for Nutrition Education and Behavior (SNEB) Competencies for Promoting Healthy Individuals, Communities, and Food Systems (Available online at: https://www.sneb.org/clientuploads/directory/Documents/SNEB-nutrition-educator-competencies.pdf)

D-1. Curriculum

						Lea	rning Outcomes			
					oncepts				etencies	
Course Number	Course Title	Credit Hours	1 Knowledg e & Skills	2 Integrate d & Applied	3 Respons- ibility	4 High Impact	1 Diet Analysis & Design	2 Nutrient Needs & Functions	3 Nutr. Issues & Assessment	4 Structure & Function
Nutrition Educ	ation (NE) Required Cour	ses								
NUTR LS1020	Science and Application of Human Nutrition	3	3	2	2	1	2	3	1	1
NUTR 2320	Food Values, Diet Design, and Health	3	3	3	3	0	3	3	2	2
NUTR 2020	Nutrition in the Life Cycle	3	3	2	3	1	1	3	1	1
NUTR 3420	Multicultural Health and Nutrition	3	3	3	2	1	2	2	1	1
NUTR 4320	Current Issues in Nutrition	2	3	3	3	2	0	1	3	3
NUTR 4420	Nutrition and Fitness	3	3	3	3	1	2	3	3	3
NUTR 4990	Senior Seminar		3	3	3	3	0	1	3	1
	rition (IN) Emphasis Req	uired Cou	rses							
NUTR 1240 (SN elective)	Nutrition and Sustainable Cooking	3	1	3	3	3	1	2	0	1
NUTR 4860 (SN elective)	Field Experience	2 (1-2 SN)	2	3	3	3	0	1	1	1
	n (SN) Emphasis Require	d Courses								
NUTR 3020 (IN elective)	Sports Nutrition	3	3	3	2	1	3	3	3	3
NUTR 3040 (IN elective)	Nutrition Assessment	3	3	2	2	0	2	2	3	1
NUTR 3220 (IN elective)	Foundations in Diet Therapy	2	3	2	1	0	0	3	3	2
NUTR 4440 (IN elective)	Advanced Human Nutrition	3	3	1	1	1	0	3	3	3
Elective Nutriti	on Courses									
NUTR 1120 (SN)	Nutrition for the Athlete	2	3	3	2	2	1	1	1	1
NUTR 3320	Health and Nutrition of the Older Adult	3	3	2	3	0	1	3	2	1
NUTR 4830 NUTR 4520 (IN & SN)	Directed Readings Directed Undergraduate Research	1-2 1-4	3	3	2 3	3	0 1	3 1	3 3	2 3

Additional Information (details about graduating student assessment): Senior Seminar (NUTR 4990) serves as a capstone course for Nutrition Education majors and is typically taken in the last year of study. As a way to assess graduating majors, students enrolled in Senior Seminar will be required to take the Collegiate Learning Assessment. Nutrition Education program, concept and competency learning outcome questions will be included in the WSU exit survey administered to all WSU graduates in which approximately 60% of graduating seniors complete.

D-2. <u>High Impact Educational Experiences</u> in the Curriculum

In response to the recent USHE requirement that all students have at least 1 HIEE in the first 30 credit hours and 1 HIEE in the major or minor we are asking programs to map HIEEs to curriculum using a traditional curriculum grid. This helps demonstrate how and where these goals are accomplished..

Courses	Department/Program use of High Impact Educational Experiences								
	HIEE								
NUTR 1020	Evidence-based teaching practices	Students complete a two day diet record, analyze nutrition adequacy and utilize the scientific method to test a hypothesis based on the data reported.							
NUTR 1240	Project-Based	Students complete and record a cooking demo covering sustainability, food science, nutrition adequacy and food safety.							
NUTR 2320	Evidence-based teaching practices	Students design a diet to be compliant with all essential nutrients of interest and to meet caloric needs based on their own total energy requirement measurements.							
NUTR 3020	Project-Based	Students design, analyze, and evaluate the diet of a student athlete in course projects.							
NUTR 4520	Research	Students complete 1-4 credit hours of NUTR 4520 (Directed undergraduate research) and present at a national conference.							
NUTR 4860	Internship	Students complete a minimum of 120 hours in a instructor approved field experience/internship of their choice.							

HIEEs include capstone courses or experiences, community-engaged learning, evidence-based teaching practices, internships, project-based learning, study abroad/away, supplemental instruction, team-based learning, undergraduate research, pre-professional/career development experiences.

Additional information (HIEE planning, assessment, or other information):

HIEE are part of the Nutrition Education Program (Integrative Nutrition and Sports Nutrition) Measurable Learning Outcomes: Concepts and Competencies. Two measurable learning outcomes are presented in table F. In addition, the table below shows the plan to measure multiple HIEE in our program.

Evidence of Learning: High Impact Service Learnin	ng	
Program Learning Goal	Measurable Learning Outcome	Method of Measurement
	Students will	Direct and Indirect Measures*
Goal 1: Integrative Nutrition (IN) students will complete a field experience to prepare them for employment or graduate school.	Learning Outcome Each graduating IN student will complete a minimum of 120 hours in a field experience of their choice in NUTR 4860.	Measure 1: NUTR 4860 - Student internship hour logs document the number of hours completed by each student. 120 hours is equivalent to 2 credit hours. Measure 2: NUTR 4860 - Evaluation of student by Clinical Supervisor at field experience site.
Goal 2: Integrative Nutrition (IN) students will engage in nutrition and sustainable cooking.	Learning Outcome Each graduating IN student will be competent in nutrition and sustainable cooking by completing NUTR 1240.	Measure 1: NUTR 1240 – cooking demo. Measure 2: NUTR 1240 recipe modification.
Goal 3: Nutrition Education (NE), Integrative Nutrition (IN) and/or Sports Nutrition (SN)	Learning Outcome Many graduating students will complete a 1-4 credit hours of NUTR	Measure 1: NUTR 4520 - Evaluation of student synthesis of the literature and collected data.
students may complete directed undergraduate research to prepare them for employment or graduate school.	4520: Directed undergraduate research.	Measure 2: NUTR 4520 - Evaluation of student research project summary, abstract, poster, and/or conference presentation.
Goal 4: Sports Nutrition (SN) Students will analyze and design diets to meet the nutritional	Learning Outcome Each graduating SN student will complete NUTR 3020 and be	Measure 1: NUTR 3020 - Evaluation of student athlete diet analysis and design projects.
needs and optimized performance in multiple athletic populations.	proficient in diet analysis and design for the athlete.	Measure 2: NUTR 3020 overall course grade.

E. Assessment Plan

Please update the Assessment Plan for your department displayed on the assessment site: http://www.weber.edu/portfolio/departments.html. Keep in mind that reporting will be done biennially instead of annually; that should be reflected in your assessment plan. Please ensure that Gen Ed courses are assessed/reported at least twice during a standard program review cycle.

A complete plan will include a list of courses from which data will be gathered and the schedule, as well as an overview of the assessment strategy the department is using (for example, portfolios, or a combination of Chi assessment data and student survey information, or industry certification exams, etc.), and plans for continuous improvement.

Assessment plan:

<u>Collection and Analysis of Data:</u> Nutrition Program full-time faculty will be required to provide assessment data from courses taught and participate in the oversight and implementation of the program's assessment plan. Adjunct faculty are required to provide data for courses taught. Data for all program courses will be analyzed and reported by the faculty member in conjunction with the program director.

General Education Life Science (LS) courses: The Nutrition LS1020 Gen Ed course will be assessed each semester using categorized multiple choice questions delivered using Chi-Tester that address either the Natural Science or Life Science Gen Ed Learning Outcomes through course specific questions (direct measure 1) or the life science area committee learning outcome specific question options (direct measure 2).

<u>Required Courses:</u> Required Nutrition Education courses (see program grid in section D. curriculum) will be assessed using categorized multiple choice questions delivered using Chi-Tester and/or a course-specific assessment instrument, rubric, or assignment that directly measures program level learning outcomes for nutrition education majors.

<u>Elective Courses:</u> Elective Nutrition Education courses (see program grid in section D. curriculum) will be assessed using a course-specific assessment instrument, rubric, or assignment that directly measures targeted program level learning outcomes for nutrition education majors.

Assessment of Graduating Majors: Senior Seminar (NUTR 4990) serves as a capstone course for Nutrition Education majors and is typically taken in the last year of study. As a way to assess graduating majors, students enrolled in Senior Seminar will be required to take the Collegiate Learning Assessment. Nutrition Education program, concept and competency learning outcome questions will be included in the WSU exit survey administered to all WSU graduates in which approximately 60% of graduating seniors complete.

Concepts: Students completing the Nutrition Education program will have:

A. **Knowledge & Skills** to solve nutrition and health related problems.

Method 1: 80% of students will score 70% or better on NUTR 2320 exams.

Method 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.

Additional assessment methods considered for future reports:

Method 3: 65% of students will score 70% or better on NUTR 1020 exams tied to this outcome.

Method 4: 80% of students will score 70% or better on the NUTR 2020 comprehensive final exam.

B. **Integrated & Applied Expertise** to educate and communicate for optimal health promotion and human performance.

Method 1: 80% of students will score 70% or better on the NUTR 3020 supplement facts sheet research presentation.

Method 2: 80% of students will score 70% or better on NUTR 4320 presentations.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on the Nutrition LS1020 exam 4 Diet and Exercise Analysis assimilation and communication of results.

Method 4: 80% of students will score 70% or better on NUTR 4420 Laboratory exercises.

C. **Personal and Community Responsibility** to optimize healthful behaviors of individuals, families, and/or communities through the life cycle with networking, resources, and support.

Method 1: 80% of students will score 70% or better on the Nutrition LS1020 Signature Assignment essay.

Method 2: 80% of students will score 70% or better on the NUTR 3420 major project research paper.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on NUTR 2320 exam questions tied to this outcome.

Method 4: 80% of students will score 70% or better on the NUTR 2220, 2420, and/or 2020 community observation assignments.

D. **High Impact Experiences** from assimilating or engaging in research, group projects, senior capstone work, and/or community-based fieldwork. Method 1: 90% of NUTR 1240 students will engage in hands on nutrition and sustainable cooking and earn a 70& or better score in their cooking demonstration assignment.

Method 2: 90% of NUTR 4520 directed research students will earn a course grade of 70% or better.

Additional assessment methods considered for future reports:

Method 3: 90% of NUTR 4830 directed readings students will earn a course grade of 70% or better.

Method 4: 80% of students will score 70% or better on the NUTR 2020 lifecycle community observation project.

Competencies: Students completing the Nutrition Education programs will master nutrition concepts in:

1. **Diet Analysis & Design** by performing accurate diet analysis and design according to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.

Method 1: 80% of students will score 70% or better on the NUTR 2320 diet design assignments 4 and 5.

Method 2: 80% of students wills core 70% or better on the NUTR 3020 evaluation of student athlete diet analysis and design projects.

Additional assessment methods considered for future reports:

Method 3: 65% of students will score 70% or better on the Nutrition LS1020 exam 2 diet analysis reports.

Method 4: 80% of students will score 70% or better on the NUTR 4420 self-fitness oriented diet project.

2. **Nutrient Needs & Functions** by gender and activity level for various age groups and health conditions using healthy and sustainable food preparation methods.

Method 1: 65% of students will score 70% or better on NUTR 1020 exam questions tied to this outcome.

Method 2: 80% of students will score 70% or better on NUTR 4420 exam 2.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on NUTR 2020 case studies tied to this outcome.

Method 4: 80% of students will score 70% or better on NUTR 3040 exams 4, 5 and 6.

3. **Nutrition Issues & Assessment** across cultures and the lifespan, for fitness and sport performance, in culinary science, and for the prevention and treatment of various medical conditions.

Method 1: 80% of students will score 70% or better on the NUTR 1240 cooking demonstration project

Method 2: 80% of students will score 70% or better on NUTR 3420 exams.

Additional assessment methods considered for future reports:

Method 3: 80% of students will score 70% or better on NUTR 2020 case studies tied to this outcome.

Method 4: 80% of students will score 70% or better on NUTR 3040 case studies tied to this outcome.

Method 5: 80% of students will score 70% or better on NUTR 4420 exams 3 and 5.

Method 6: 80% of students will score 70% or better on NUTR 3220 case studies tied to this outcome

4. **Human Structure and Function** by understanding how nutrition intersects with living and nonliving hierarchies within the human body.

Method 1: 80% of students will score 70% or better on NUTR 2320 exams tied to this outcome.

Method 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.

Additional assessment methods considered for future reports:

Method 2: 80% of students will score 70% or better on NUTR 4420 exams 1 and 4.

F. Report of assessment results for the most previous academic years (Fall 2017/Spring 2018/Summer 2018/Fall 2018/Spring 2019/Summer 2019):

A. Evidence of Learning: Courses within the Major

Concepts T	able
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Measurable Learning	Method of	Threshold for Evidence	Findings Linked to Learning	Interpretation of	Action Plan/Use of Results
Outcome: Students will	Measurement*	of Student Learning	Outcomes	Findings	
Learning Outcome CONCEPT A: Knowledge & Skills to solve nutrition and health related problems.	Measure 1: Correct exam responses	Measure 1: 80% of students will score 70% or better on NUTR 2320 exams.	Measure 1: This student % 66.7/71.4/56.1/57.9/77.8/67.2 scored 70% or more across all combined course exams from all sections.	Measure 1: Four out of six semesters, the threshold was met	Measure 1: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.
	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.	Measure 2: This student % na/100.0/na/na/na/100% scored 70% or more in the final exam across all sections.	Measure 2: Students successfully demonstrated Knowledge and skills to solve nutrition and health problems	Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome CONCEPT B: Integrated & Applied Expertise to educate and communicate for optimal health promotion and human performance.	Measure 1: Research presentation and discussion	Measure 1: 80% of students will score 70% or better on the NUTR 3020 supplement facts sheet research presentation.	Measure 1: This student % na/75.0/75.0/na/83.3/85.7 scored 70% or more on this assignment across all sections.	Measure 1: Two of four semesters, the threshold was met.	Measure 1: The instructions for the assignment will be evaluated and rewritten for clarity if needed. Sample work will be provided. Students will be asked to peerevaluate their work prior to submission. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.
	Measure 2: Secondary research presentation and discussion	Measure 2: 80% of students will score 70% or better on NUTR 4320 presentations.	Measure 1: This student % na/90.0/100.0/na/93.3/100.0 scored 80% or more on their presentation across all sections.	Measure 2: Students successfully applied and integrated their expertise to educate and communicate optimal health promotion	Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome CONCEPT C: Personal and Community Responsibility to optimize healthful behaviors of	Measure 1: Interpretation and discussion of results from self-food intake study	Measure 1: 80% of students will score 70% or better on the Nutrition LS1020 Signature Assignment essay	Measure 1: This student % 82.3/87.5./85.5.0/85.5/93.5/91.0 scored 70% or more on this assignment across all combined course sections.	Measure 1: Students successfully demonstrated personal and community responsibility to improve society.	Measure 1: No changes needed. Continue to collect data and monitor student performance
individuals, families, and/or communities through the life cycle with networking, resources, and support.	Measure 2: Completion of assignment tied to global nutrition issues, health and food practices	Measure 2: 80% of students will score 70% or better on the NUTR 3420 major project research paper	Measure 2: This student % 96.9/na/100.0/97.1/na/100.0 scored 70% or more on this assignment across all combined course sections	Measure 2: Students successfully demonstrated personal and community responsibility to improve society.	Measure 2: No changes needed. Continue to collect data and monitor student performance

Concepts Table

Measurable Learning Outcome: Students will	Method of Measurement*	Threshold for Evidence of Student Learning	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results
Learning Outcome CONCEPT D: High Impact Experiences from assimilating or engaging in research, group projects,	Measure 1: complete and record a cooking demo (sustainability, food science, nutrition adequacy and food safety).	Measure 1: 90% of NUTR 1240 students will engage in hands on nutrition and sus cooking and earn a 70% or better score in their cooking demonstration assignment.	Measure 1: This student % na/100.0/100.0/85.7/100.0/100.0 scored 70% or more on this cooking demonstration across all combined course sections.	Measure 1: Students successfully engaged in high impact experiences	Measure 1: No changes needed. Continue to collect data and monitor student performance
senior capstone work, and/or community-based fieldwork.	Measure 2: completion of 1-4 credit hours of primary research	Measure 2: 90% of NUTR 4520 directed research students will earn a course grade of 70% or better.	Measure 2: This student % na/100.0/100.0/100.0/87.5/100.0% earned a course grade 70% or better	Measure 2: Students successfully engaged in high impact experiences	Measure 2: No changes needed. Continue to collect data and monitor student performance

Can be a mix of <u>direct</u> and <u>indirect</u> measures, but at least one measure must be direct

B.- Evidence of Learning: Courses within the Major

Competencies Table

Measurable Learning Outcome: Students will	Method of Measurement*	Threshold for Evidence of Student Learning	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results
Learning Outcome COMPENTECY 1: Diet Analysis & Design by performing accurate diet	Measure 1: Successful Completion of diet design assignment	Measure 1: 80% of students will score 70% or better on the NUTR 2320 diet design assignments 4 and 5.	Measure 1: This student % 96.7/85.4/91.1/80.0/91.1/89.5 scored 70% or more on this diet design assignment across all combined course sections	Measure 1: Students successfully demonstrated ability to analyze and design diets	Measure 1: No changes needed. Continue to collect data and monitor student performance
analysis and design according to dietary guidelines for Americans, for health, fitness, and/or sport performance and with comprehensive evaluation, interpretation, and application.	Measure 2: Successful completion of athlete diet design	Measure 2: 80% of students will score 70% or better on the NUTR 3020 evaluation of student athlete diet analysis and design projects.	Measure 2: This student % na/75.0/75.0/na/83.3/92.9% scored 70% or more on this diet design assignment across all combined course sections.	Measure 2: Two of four semesters, the threshold was met.	Measure 2: The instructions for the project will be evaluated and rewritten for clarity if needed. Sample work will be provided. Students will be asked to peerevaluate their work prior to submission. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.
Learning Outcome	Measure 1:	Measure 1: 65% of students will	Measure 1: This student %	Measure 1: Students	Measure 1: No changes
COMPENTECY 2:	Correct responses of exam questions tied	score 70% or better on NUTR 1020 exam questions tied to this outcome	77.5/77.9/79.0/78.9/79.5/79.0% scored 70% or more on exam questions aligned to this	successfully demonstrated understanding of human	needed. Continue to collect data and monitor
Nutrient Needs &	to LO	exam questions tied to this outcome	learning outcome across all combined course	nutrient needs and	student performance
Functions by gender and			sections.	functions	station perior manee

activity level for various age groups and health conditions using healthy and sustainable food preparation methods.	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on NUTR 4420 exam 2.	Measure 2: This student % na/77.8/83.3/na/85.7/73.3 scored 70% or more in exam 2 across all sections.	Measure 2: Two of four semesters, the threshold was met.	Measure 2: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary.
Learning Outcome COMPENTECY 3: Nutrition Issues & Assessment across cultures and the lifespan, for fitness	Measure 1: Complete and record a cooking demo	Measure 1: 80% of students will score 70% or better on the NUTR 1240 cooking demonstration project	Measure 1: This student % na/100.0/100.0/85.7/100.0/100.0 scored 70% or more on this project.	Measure 1: Students successfully demonstrated understanding of nutrition issues and assessment across multiple populations	Measure 1: No changes needed. Continue to collect data and monitor student performance
and the mespan, for incress and sport performance, in culinary science, and for the prevention and treatment of various medical conditions	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on NUTR 3420 exams.	Measure 2: This student % 97.0/na/100.0/100.0/na/90.9 scored 70% or more across all combined course exams from all sections.	Measure 2: Students successfully demonstrated understanding of nutrition issues and assessment across multiple populations	Measure 2: No changes needed. Continue to collect data and monitor student performance
Learning Outcome COMPENTECY 4: Human Structure and Function by understanding how nutrition intersects with living and nonliving hierarchies within the human body.	Measure 1: Correct responses of exam questions tied to LO	Measure 1: 80% of students will score 70% or better on NUTR 2320 exams tied to this outcome.	Measure 1: This student % na/78.0/68.0/63.9/87.5/87.5% scored 70% or more on exam questions aligned to this learning outcome.	Measure 1: Two of five semesters, the threshold was met.	Measure 1: Exam questions will be evaluated and those with more than 50% of students answering incorrectly will be revised. Teaching methods and course content tied to this learning outcome will be evaluated and edited if necessary. Faculty teaching separate sections will discuss and compare exams and question alignment to learning outcomes for consistentcy.
	Measure 2: Correct exam responses	Measure 2: 80% of students will score 70% or better on the comprehensive NUTR 4440 final exam.	Measure 2: This student % na/100.0/na/na/na/100% scored 70% or more in the comprehensive final exam across all sections.	Measure 2: Students successfully demonstrated understanding of Human Structure and Function.	Measure 2: No changes needed. Continue to collect data and monitor student performance

^{*}At least one measure per objective must be a direct measure; indirect measures may be used to supplement direct measure(s).

(Area-specific EOL grids can be found at http://weber.edu/oie/Complete Rubrics.html; they can replace this page.)

c. Evidence of Learning: General Education Courses

NUTR LS1020 is a general education course taught in the Athletic Training and Nutrition (ATN) department and Nutrition Education program.

Method of Measuring the Outcomes: There are two direct measures of assessment used in NUTR LS1020 to generate direct evidence of meeting the Life Science General Education learning outcomes. Chi Tester was used to administer all of the NUTR LS1020 exams and has provided a tool for the program to consistently collect and analyze the data. Because each section of the course taught is assessed each semester, hundreds to thousands of data points were generated per learning outcome.

- Direct Measure #1 (DM 1): The first direct measure of assessment includes aligning the eight Life Science General Education course learning outcomes to each Nutrition exam question. There were four 50-question exams and one 16 question exam analyzed for all sections of NUTR LS1020 each semester. Online, hybrid, and face-to-face classes were assessed for all of the learning outcomes. Additionally, there was one project-based exam where students collect, analyze, interpret, and report their own data. All exams were administered using Chi Tester. Every question is tied to the appropriate learning outcome(s). Each of the trimesters has a different set of the exam questions and exams are consistently used for assessment.
- **Direct Measure #2 (DM 2):** The second direct measure of assessment includes administering a closed-book exam consisting of 40 questions that include five competency-based questions from each of the eight Life Science General Education course learning outcomes that were developed and approved by the Life Science General Education Area Committee in the Spring of 2013.

Threshold: The Life Science General Education Area Committee set the threshold of 65% for life science courses. This threshold of 65% is used for NUTR LS1020 for both the first and second direct measures of assessment. The 65% threshold is above what is needed to receive credit for the course.

Findings: Students being capable of answering exam and competency-based questions correctly demonstrated that learning outcomes were met. All eight Life Science General Education course learning outcomes were met for DM 1 and DM 2 with the threshold of 65%. The Nutrition program evaluates the consistency of student performance over time due to the consistent process used to assess learning outcomes.

Action Plan: Continue to collect the evidence to ensure that learning outcomes continue to be met as determined by student performance. No changes are needed at this time.

NUTR LS1020 (Science and Application of Human Nutrition) Data reported from Summer 2017/Fall 2017/Spring 2018/Summer 2018/Fall 2018/Spring 2019

Nature of science learning outcomes tables

Gen Ed Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings Linked to Learning Outcomes	Interpretation of Findings	Action Plan/Use of Results
Students will demonstrate understanding of the Nature of Science: Scientific knowledge is based on evidence	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 77.08/69.87/88.31/78.17/71.8/89.5 % of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of the Nature of Science. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
that is repeatedly examined, and can change with new information. Scientific explanations differ fundamentally from those that are not scientific.	reflecting the <i>Nature</i> of <i>Science</i> .	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 84.57/85.39/86.32/86.50/86.2/86.9 % of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of the Nature of Science. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of the Integration of Science: All natural phenomena are interrelated and	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting the	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 75.6/76.4/75.1/73.5/75.6/73.4% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of the Integration of Science. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
share basic organizational principles. Scientific explanations obtained from different disciplines should be cohesive and integrated.	Integration of Science.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 86.4/87.8/88.2/87.5/88.8/89.5% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of the Integration of Science. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of Science and Society: The study of science provides explanations that have significant impact on society,	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting Science and Society.	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 77.4/76.8/78.3/80.3/79.3/79.0% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Science and Society. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
including technological advancements, improvement of human life, and better understanding of human and other influences on the Earth's environment.		Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 91.5/91.6/92.7/93.1/91.6/92.7% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Science and Society. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable	Method of	Threshold	Findings	Interpretation	Action Plan/Use of
	Learning Outcome	Measurement				Results
	(LO)					
Students will demonstrate understanding of Problem Solving & Data Analysis: Science relies on	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting <i>Problem</i>	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 78.4/79.0/81.2/84.7/84.4/84.0 % of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of <i>Problem Solving and Data Analysis</i> . The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
empirical data, and such data must be	Solving and Data Analysis.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 88.1/86.0/87.4/88.3/86.6/86.5 % of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Problem Solving and Data Analysis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

Life science learning outcomes tables

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of the Levels of Organization: All life shares an organization that is based on molecules	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting the Levels	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 74.4/78.8/80.0/72.4/77.1/78.9% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Levels of Organization. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
and cells and extends to organisms and ecosystems.	of Organization.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 88.6/90.5/91.4/89.2/92.2/91.4% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Levels of Organization. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance

GE Learning Goal	Measurable Learning Outcome (LO)	Method of Measurement	Threshold	Findings	Interpretation	Action Plan/Use of Results
Students will demonstrate understanding of Metabolism and Homeostasis: Living things obtain and use energy, and maintain homeostasis via	NUTR LS1020 Students will demonstrate their understanding by applying and evaluating principles reflecting Metabolism and Homeostasis.	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly across all combined course sections.	DM 1: Students answered 77.5/77.9/79.0/78.9/79.5/79.0% of the aligned exam questions correctly across all combined course sections.	Students demonstrated an understanding of Metabolism and Homeostasis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.
organized chemical reactions known as metabolism.	unu Homeostasis.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 86.9/86.5/88.5/88.6/89.4/89.9% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Metabolism and Homeostasis. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable	Method of	Threshold	Findings	Interpretation	Action Plan/Use of
	Learning Outcome	Measurement				Results
Students will demonstrate understanding of Genetics and	NUTR LS1020 Students will demonstrate their understanding by	Direct Measure (DM) 1: Correct responses of exam questions tied to LOs.	DM 1: Students will answer 65% of the aligned exam questions correctly	DM 1: Students answered 78.4/75.9/76.3/78.4/77.1/75.7% of the aligned exam questions correctly across all combined	Students demonstrated an understanding of Genetics and Evolution.	No changes needed. Continue to collect data and monitor student
Evolution: Shared genetic processes and evolution by natural	applying and evaluating principles reflecting <i>Genetics</i>		across all combined course sections.	course sections.	The learning outcome was met.	performance.
selection are universal features of all life.	and Evolution.	Direct Measure (DM) 2: Correct responses to WSU LS Gen Ed standard Competency-based questions tied to LOs.	DM 2: Students will answer 65% of the standardized exam questions correctly across all combined course sections.	DM 2: Students answered 67.8/70.1/70.5/70.9/72.0/73.0% of the standardized exam questions correctly across all combined course sections.	Students demonstrated an understanding of Genetics and Evolution. The learning outcome was met.	No changes needed. Continue to collect data and monitor student performance.

GE Learning Goal	Measurable	Method of	Threshold	Findings	Interpretation	Action Plan/Use of
	Learning Outcome	Measurement				Results
	(LO)					
Students will	NUTR LS1020	Direct Measure (DM)	DM 1: Students will	DM 1:	Students	No changes needed.
demonstrate	Students will	1: Correct responses	answer 65% of the	Students answered	demonstrated an	Continue to collect
understanding of	demonstrate their	of exam questions tied	aligned exam	73.4/71.5/76.8/75.1/76.4/78.1%	understanding of	data and monitor
Ecological	understanding by	to LOs.	questions correctly	of the aligned exam questions	Ecological Interactions.	student
interactions:	applying and		across all combined	correctly across all combined	The learning outcome	performance.
All organisms,	evaluating principles		course sections.	course sections.	was met.	
including humans,	reflecting <i>Ecological</i>					
interact with their	Interactions.	Direct Measure (DM)	DM 2: Students will	DM 2: Students answered	Students	No changes needed.
environment and		2: Correct responses	answer 65% of the	89.4/90.5/91.3/90.9/92.2/91.7%	demonstrated an	Continue to collect
other living		to WSU LS Gen Ed	standardized exam	of the standardized exam questions	understanding of	data and monitor
organisms.		standard Competency-	questions correctly	correctly across all combined	Ecological Interactions.	student
		based questions tied	across all combined	course sections.	The learning outcome	performance.
		to LOs.	course sections.		was met.	
		to LUs.	course sections.		was met.	

Appendix A

Most departments or programs receive a number of recommendations from their Five/Seven-Year Program Review processes. This page provides a means of updating progress towards the recommendations the department/program is acting upon.

Date of Program Review: ####	Recommendation	Progress Description
Recommendation 1	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
Recommendation 2	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
Recommendation 3	Text of recommendation	#### +1 progress
		#### +2 progress
		#### +3 progress
		#### +4 progress
(add as needed)		

Additional narrative:

The first catalog year of the nutrition education dual track major was 2017-2018. The nutrition program will complete its 3-year internal review 2020-2021 and first 5-year program review 2022-2023.

Appendix B

Please provide the following information about the full-time and adjunct faculty contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five Year Program Review document that is shared with the State Board of Regents.

Faculty Headcount (Exercise Science and Nutrition Program Faculty forming ENS department 2019-2020)	2018-19
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	7
Full-time Tenured	2
Full-time Non-Tenured (includes tenure-track)	4
Part-time and adjunct	1
With Master's Degrees	5
Full-time Tenured	0
Full-time Non-Tenured	0
Part-time and adjunct	5
With Bachelor's Degrees	3
Full-time Tenured	0
Full-time Non-tenured	0
Part-time and adjunct typically only teach NUTR 1240	3
Other	0
Full-time Tenured	0
Full-time Non-tenured	0
Part-time	0
Total Headcount Faculty	15
Full-time Tenured	2
Full-time Non-tenured	4
Part-time	9

Faculty Headcount (Nutrition Program Faculty only)	2018-19
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	5
Full-time Tenured	2
Full-time Non-Tenured (includes tenure-track)	2
Part-time and adjunct	1
With Master's Degrees	5
Full-time Tenured	0
Full-time Non-Tenured	0
Part-time and adjunct	5
With Bachelor's Degrees	3
Full-time Tenured	0
Full-time Non-tenured	0
Part-time and adjunct typically only teach NUTR 1240	3
Other	0
Full-time Tenured	0
Full-time Non-tenured	0
Part-time	0
Total Headcount Faculty	13
Full-time Tenured	2
Full-time Non-tenured	2
Part-time	9

Appendix C – alternative format for Evidence of Learning Reporting

Course:	
Program Outcome 1	
Aligned Course Outcome(s):	
Method(s) of measurement:	
Target Performance:	
Actual Performance:	
Interpretation/Reflection on findings:	
Action Plan/Use of Results:	
Intended evaluation of plan (closing the loop):	

SEE SECTION B IN REPORT BODY

Please respond to the following questions.

- 1) First year student success is critical to WSU's retention and graduation efforts. We are interested in finding out how departments support their first-year students. Do you have mechanisms and processes in place to identify, meet with, and support first-year students? Please provide a brief narrative focusing on your program's support of new students:
 - a. Here are some of the strategies implemented to support any first-year students taking courses in our program(s).
 - Refining orientation, focusing on getting students involved in college and department curriculum
 - Meetings with ENS advisor Matthew Smith.
 - Communication plan by Matthew Smith regardless if they are currently enrolled in program courses. Departmental news and events such as communicating deadlines and dates, student senate openings and other university, college and department service opportunities (applies for a & b).
 - Bounce back compliant. Students with GPA 2.0 or below are contacted to participate in this program which emphasize best student skill practices to succeed in our program (applies for a & b).
 - Our advisor participates in current conferences on best retention practices for first year and we focus on how to recruit and retain students using gateway courses like NUTR LS 1020.
 - Any other Ideas?
 - NUTR LS1020 employs supplemental instruction on the WSU and WSD campuses every semester taught.
 - NUTR LS1020 and NUTR 2320 are standardized across all sections and delivery modes to reduce confusion by students taking the course with different professors.
 - b. Here are some of the strategies implemented to support students declared in our program, whether or not they are taking courses in your program(s)
 - Engage them in Nutrition extracurricular activities such as supplemental instruction, mentoring, exercise and nutrition sciences club, undergraduate research, among others
 - Use of starfish (a and b)
 - ENS academic advisor available for scheduled meetings and drop in advisement. ENS faculty provide student advisement as well.
 - If students present interest in grad school our ENS advisor guides application process in conjunction with Shari Leder and college of health profession advisors

- Matthew Smith has taken ownership of the PT pre OT and pre PT advisor of the university. Our NUTR students have benefit from the close guidance and advice to go in to this field
- Matthew Smith serves in committees and task forces to streamline course offerings and student retention.
- Our department evaluates bottleneck courses and assess plans of action to prevent dropout.
- Course articulation and design of "must-have/relevant" nutrition courses to facilitate integration of students across the USHE system
- 2) A key component of sound assessment practice is the process of 'closing the loop' that is, following up on changes implemented as a response to your assessment findings, to determine the impact of those changes/innovations. It is also an aspect of assessment on which we need to improve, as suggested in our NWCCU mid-cycle report. Please describe the processes your program has in place to 'close the loop'.
 - This is the nutrition education program's first assessment report. We indent to respond to feedback from the office of institutional effectiveness and incorporate changes that are feasible in our next assessment report.
 - Increase our field experience options for students
 - Include more courses such as NUTR 2020 and NUTR 3040 to support competency 3 Nutrition Issues and Assessment and competency 4 Human Structure and Function
 - Create a "Master" exam that test our program competencies and concepts. Sections of this exam will be placed in each of the courses utilized to measure these learning outcomes.
 - Create "nutrition education program signature assignments" for each required course in the curriculum.
 - Align our learning objectives and curriculum in order to allow our graduates to obtain The Certified Nutrition Specialist ®(CNS®) Credential.
 - Align our curriculum to changing graduate program pre-requisites for RDN credentialing.
 - Construct surveys and feedback instruments to evaluate job placement after 6 month and longer graduation.
 - Address those learning outcomes that we did not consistently meet by evaluating an revising those questions with more than 50% of students answering incorrectly. Teaching methods and course content tied to these learning outcomes will be evaluated and edited if necessary. Assignment instructions tied to learning outcomes not met, will also be revised and rewritten for clarity if needed. Sample work will be provided. Students will be asked to peer-evaluate their work prior to submission.
 - Continue to evaluate our courses, learning outcomes, and course work to determine if there are additional or more effective measures for our learning outcomes.
 - When the time comes, respond to feasible program review suggestions by the program review committee after our first program review in 2022/2023.

Glossary

Student Learning Outcomes/Measurable Learning Outcomes

The terms 'learning outcome', 'learning objective', 'learning competency', and 'learning goal' are often used interchangeably. Broadly, these terms reference what we want students to be able to do AFTER they pass a course or graduate from a program. For this document, we will use the word 'outcomes'. Good learning outcomes are specific (but not too specific), are observable, and are clear. Good learning outcomes focus on skills: knowledge and understanding; transferrable skills; habits of mind; career skills; attitudes and values.

- Should be developed using action words (if you can see it, you can assess it).
- Use compound statements judiciously.
- Use complex statements judiciously.

Curriculum Grid

A chart identifying the key learning outcomes addressed in each of the curriculum's key elements or learning experiences (Suskie, 2019). A good curriculum:

- Gives students ample, diverse opportunities to achieve core learning outcomes.
- Has appropriate, progressive rigor.
- Concludes with an integrative, synthesizing capstone experience.
- Is focused and simple.
- Uses research-informed strategies to help students learn and succeed.
- Is consistent across venues and modalities.
- Is greater than the sum of its parts.

<u>Target Performance</u> (previously referred to as 'Threshold')

The level of performance at which students are doing well enough to succeed in later studies (e.g., next course in sequence or next level of course) or career.

Actual Performance

How students performed on the specific assessment. An average score is less meaningful than a distribution of scores (for example, 72% of students met or exceeded the target performance, 5% of students failed the assessment).

Closing the Loop

The process of following up on changes made to curriculum, pedagogy, materials, etc., to determine if the changes had the desired impact.

Continuous Improvement

An idea with roots in manufacturing, that promotes the ongoing effort to improve. Continuous improvement uses data and evidence to improve student learning and drive student success.

Direct evidence

Evidence based upon actual student work; performance on a test, a presentation, or a research paper, for example. Direct evidence is tangible, visible, and measurable.

Indirect evidence

Evidence that serves as a proxy for student learning. May include student opinion/perception of learning, course grades, measures of satisfaction, participation. Works well as a complement to direct evidence.

<u>HIEE – High Impact Educational Experiences</u>

Promote student learning through curricular and co-curricular activities that are intentionally designed to foster active and integrative student engagement by utilizing multiple impact strategies.