Annual Student Learning Report 2019

Office of Assessment
Navajo Technical University
Navajo Nation

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Assessment Framework

❖ Assessment is the process of establishing learning goals, providing learning opportunities, assessing student learning, and using results to implement improvements.

❖ The process is ongoing. It follows the logic of the Life Principles of Diné Philosophy of Education: Nitsáhákees (critical thinking), Nahat'á (planning), Iiná (implementation), and Sih Hasin (reflection).

❖ Every degree and certificate program at the University should have an assessment plan that operationalizes the Life Principles of Diné Philosophy of Education. The plan's focus is program-level learning, as opposed to class-, course-, or institution-level learning.

❖ The plan describes the program's mission, student learning outcomes, measures for gathering data on student learning, and relationship of outcomes, courses, and measures. These program elements, along with assessment data and notes pertaining to analysis and program improvements, are archived by the faculty using online tools.

General Education

❖ NTU's GenEd program was revised in 2018-19. Faculty began aligning the program to new requirements of the New Mexico Higher Education Department that emphasize skills and utilize rubrics.

❖ Faculty revised fifteen of the program's seventy-five GenEd courses. All of the courses will be revised by the end of fall 2019 semester.

❖ Starting in 2019-20, the assessment of NTU's General Education Program will focus on the improvement of the program as a whole. Student learning data will be gathered from project assignments in each GenEd course. Data summaries from all sections of the course will be compiled on a semester-by-semester basis by the University's Offices of Assessment and Institutional Research.

❖ Departmental faculty will review the data and design course and GenEd program improvements during Assessment Days each semester.

❖ An annual summary that includes analyses of program improvement will be prepared by the Assessment Committee and included in the University's Annual Student Learning Report. Curriculum revisions as needed will be designed by the General Education Committee and reviewed and approved by the Faculty Congress.

Program Assessment

- ❖ Assessment Guide 2018-19 was approved by the Faculty Congress in Oct. It establishes "program" as the key unit of analysis for academic program planning and improvement.

- ❖ The Guide outlines roles and responsibilities for faculty, administrators, students, and academic support staff.

- ❖ Three sections of SL101 Academic Planning and Assessment were offered for faculty members in AY19. Two sections were at Crownpoint. Fourteen started SL101-01 in fall semester; 11 completed the course. Ten started SL101-02 in spring semester; 7 completed the course. Twelve started SL101-03 in spring semester at Chinle; 9 completed the course.

- ❖ Course evaluations for all three courses were generally positive. Most completers established assessment projects in Weave and began to complete the program assessment feedback loop for AY19.

ASSESSMENT SCORECARD
School of Applied Technology
Samuel Quashie, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Automotive Technology	Piechowski, Kollas*	VC & AAS	√	√	√	√	√	√	√
Carpentry	Bebo, Lee*	VC	√	√	√	√	√		
CDL	Woody	TC							
Construction Technology	Quashie	VC & AAS							
Culinary Arts	Witte, Tatsukawa	VC & AAS							
Electrical Trades	Crank, House	VC	√	√	√	√	√	√	√
Energy Systems	Griego	AAS	√	√	√	√	√	√	√
Industrial Main & Oper	Ehteshami, Whiting*	VC							
Professional Baking	TBD	VC & AAS							
Welding	Storer	VC	√	√	√				

* Submitted 2018-19 pre/post assessment report
Weave: √ indicates program assessment plan has been produced in Weave Online   √ indicates program element is in place
Mis=Mission   SLO=Student Learning Outcomes   Msr=Measures   Tar=Targets   Fnd=Findings   Imp=Improvements

ASSESSMENT SCORECARD
School of Arts and Humanities
Anita Roastingear, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Creative Writing/ New Media	Bunn, Roastingear, Wheeler, Moore*	BFA	√	√	√	√	√	√	√
Counseling	Mullet	AA	√	√	√	√	√	√	√
Ear Child/Multi Educ	Begay, Elliott, Hunter	AS & BS	√	√	√	√	√		
General Studies	Bales	AA							
Law Advocate	Hibbard, Yazzie	AAS	√	√	√	√	√		
Legal Assistant	Hibbard, Yazzie	VC							
Law Enforcement	Bradley-Arthur	VC	√	√	√	√	√		
Navajo Court Trans/Int	Hibbard, Yazzie	VC							

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ASSESSMENT SCORECARD
School of Business
Christine Reidhead, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Accounting	Woody, Reidhead, Sloan	AAS	√	√	√	√	√		
Admin Office Assistant	Chischilly, Quink, Reidhead	VC	√	√	√	√	√	√	√
Bookkeeping	Woody, Reidhead, Sloan	VC							
Public Administration	Reidhead, Sloan	AAS	√	√	√	√	√		

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ASSESSMENT SCORECARD
School of Diné Studies
Dr. Henry Fowler, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Diné Language, Culture, & Leadership	Thomas	MA							
Diné Language, Culture, & Leadership	Fowler, Chicag, James, Platero	BA	√	√	√	√	√	√	√
Textile & Weaving	Platero*	VC							

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ASSESSMENT SCORECARD
School of Math, Engineering, and Technology
Dr. Gholam Ehteshami, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Adv Manufac Tech	Vohnout	BAS							
Applied Computer Tech	Trebian	VC							
Building Info Modeling		AAS							
Chemical Engineering	Ehteshami	AAS	√	√	√	√	√	√	√
Computer Science	Stomp	AAS	√	√	√	√	√	√	√
Electrical Engineering	Romine, Katrepalli	BS							
Industrial Engineering	Monsuru, Whitin*	BS							
Information Technology	Darwich, Trebian, Thomas	AAS & BS	√	√	√	√			
Info Tech/New Media	Louis	BAS							
Mathematics	Han, Illafe, Lewis, Paez-Paez, Vanguardia, Thompson, Thompson*	AS	√	√	√	√	√	√	√
Pre-Engineering	Vohnout.Whiting*	AS							

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ASSESSMENT SCORECARD
School of Science

Dr. Thiago Soundappan, chair

Program	Instructors responsible	Degree	Weave	Mis	SLO	Msr	Tar	Fnd	Imp
Biology	Anyangewe, Britt, Ifere	BS	√	√	√	√	√	√	√
Environmental Science & Natural Resources	Chischilly, Mader	AAS & BS	√	√	√	√	√	√	√
Pre-Nursing	Pacheco, John	VC							
Veterinary Technology	Daye, Packebush	AAS							

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Program Assessment Summaries

Administrative Office Assistant (Certificate)

Outcomes
- ❖ Operate office technology.
- ❖ Produce office documents.
- ❖ Design information management systems.
- ❖ Demonstrate customer service skills.

Findings
- ❖ Met target for course assignments for designing information management systems.

Improvements
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Automotive Technology (Certificate and A.A.S.)

Outcomes
- ❖ Demonstrate skills in suspension and steering repair.
- ❖ Demonstrate skills in brake repair.
- ❖ Demonstrate skills in electrical/electronics systems repair.
- ❖ Demonstrate skills in engine performance.
- ❖ Demonstrate skills in engine repair.
- ❖ Demonstrate skills in heating and air conditioning systems repair.
- ❖ Demonstrate skills in automatics transmission/transaxle repair.
- ❖ Demonstrate skills in transmission repair.

Findings
- ❖ Met target for chapter exams covering suspension and steering repair.

Improvements
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Biology (B.S.)

Outcomes
- ❖ Write a lab report.
- ❖ Conduct a research project.
- ❖ Produce a conference/workshop presentation.
- ❖ Develop and maintain safety protocols and procedures.
- ❖ Develop a strong work ethic and professionalism.

Findings
- ❖ Met targets for lab reports and observations.

Improvements
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Computer Science (A.S.)

Outcomes
- ❖ Write sequential programs.
- ❖ Design solutions to computer-related problems.
- ❖ Develop technical presentations.

Findings
- ❖ Partially met target for programming checklist.

Improvements
- ❖ Modify curriculum to include mandatory labs for programming classes.
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Chemical Engineering (A.A.S.)

Outcomes
- ❖ Demonstrate basic understandings of chemical processes and systems.
- ❖ Solve basic chemical engineering problems.
- ❖ Demonstrate life-long learning based on Diné cultural principles.

Findings
- ❖ Met targets for final exams and team presentations.

Improvements
- ❖ Consider use of group presentations rubric in next assessment cycle.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Counseling (A.A.)

Outcomes
- ❖ Analyze frameworks.
- ❖ Assess clients.
- ❖ Develop intervention plans.
- ❖ Role-play crisis situations.
- ❖ Demonstrate Diné Philosophy of Education values.

Findings
- ❖ Met targets for project assignments with rubrics.

Improvements
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Creative Writing and New Media (B.F.A.)

Outcomes
- ❖ Write compelling works of literature.
- ❖ Demonstrate ability to critique one's own and others' work.
- ❖ Analyze Navajo, Native American, and multicultural literature.
- ❖ Produce online creative media products.
- ❖ Produce a professional portfolio.
- ❖ Demonstrate professionalism and collegiality.

Findings
- ❖ Met targets for writing literature and critiquing others' work.

Improvements
- ❖ Organize program-wide conversations about student learning (involving all program faculty).
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Diné Studies (B.A.)

Outcomes
- ❖ Participate in fluent conversations in Navajo.
- ❖ Read Navajo materials.
- ❖ Demonstrate ability to write in Navajo.
- ❖ Demonstrate basic understandings of Navajo culture, history, and government.
- ❖ Analyze the grammatical structure of Navajo verbs.
- ❖ Organize family- and community-based events for revitalizing Navajo culture.
- ❖ Analyze leadership skills that promote Diné Philosophy of Education.
- ❖ Produce narratives that promote Diné Philosophy of Education.
- ❖ Produce a professional portfolio that demonstrates workforce readiness.

Findings
- ❖ Met target for story-telling checklist.

Improvements
- ❖ Consolidate outcomes so that program assessment is more manageable.
- ❖ Complete design of measures for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Electrical Trades (Certificate)

Outcomes
- ❖ Retain understanding of trade terms and symbols.
- ❖ Complete unit-based performance tasks.
- ❖ Apply knowledge of math and electrical theory.
- ❖ Complete a commercial wiring capstone project
- ❖ Demonstrate professionalism.
- ❖ Demonstrate safety.

Findings
- ❖ Met targets for performance checklists, observations, and resumes.
- ❖ Partially met targets for quizzes and exams.

Improvements
- ❖ Develop terminology quizzes.
- ❖ Research use of breadboards, resistors, and power sources for supplementing hands-on instruction.
- ❖ Lobby for purchase of job trailer for on-site capstone projects ($5,000.00).

Program Assessment Summaries, continued

Energy Systems (A.A.S.)

Outcomes
- ❖ Demonstrate technical skills.
- ❖ Write a product analysis.
- ❖ Develop a presentation.
- ❖ Design a solution.

Findings
- ❖ Met target for project checklist.
- ❖ Partially met target for presentations.

Improvements
- ❖ Agitate for lab space for new assigned classroom.
- ❖ Complete design of measures and targets for all outcomes.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Environmental Science (A.A.S. and B.S.)

Outcomes
- ❖ Write research papers.
- ❖ Conduct oral presentations.
- ❖ Write field-based lab reports.
- ❖ Demonstrate professional accountability.

Findings
- ❖ Met targets for research papers and oral presentations.

Improvements
- ❖ Complete design of measures and targets for all outcomes.
- ❖ Coordinate A.A.S. and B.S. program design and assessment.
- ❖ Assess all program-level outcomes.

Program Assessment Summaries, continued

Mathematics (A.S.)

Outcomes
- ❖ Perform computations.
- ❖ Solve real-life problems.
- ❖ Analyze proofs.
- ❖ Use technology to address mathematical ideas.

Findings
- ❖ Met targets for exams and oral presentations.

Improvements
- ❖ Stress attendance.
- ❖ Complete design of measures and targets for all outcomes.
- ❖ Assess all program-level outcomes (solving problems and using technology were not addressed).

Assessment Plans for
New Degree Programs in Weave Online

❖ Animal Science (B.S.)

❖ Associate Degree in Nursing (A.D.N.)

❖ Hotel and Restaurant Management (B.A.S.)

❖ Law Enforcement (A.A.S.)

Partially Designed
Assessment Programs in Weave Online

- ❖ Accounting (A.A.S.)
- ❖ Construction Technology (Certificate and A.A.S.)
- ❖ Early Childhood and Multicultural Education (B.S.)
- ❖ G.E.D.
- ❖ Information Technology (A.A.S. and B.S.)
- ❖ Law Advocate (A.A.S.)
- ❖ Pre-Nursing (certificate)
- ❖ Public Administration (A.A.S.)

Opportunities for Improvement

Academic Improvements

❖ Implement Department Chairs Academy (starting week before Fall Convocation).

❖ Improve committee assignment process: involve all faculty members from all University campuses.

❖ Identify one faculty/assessment coordinator in each academic department (with workload release time; they will become Assessment Committee members who oversee Program Assessment, GenEd Assessment, and Co-Curricular Assessment).

❖ Improve process for gathering and analyzing students' evaluations of instruction.

Opportunities for Improvement, continued

Program Assessment Process Improvements

❖ Have newly organized Assessment Committee oversee all aspects of Program Assessment (with reps from all University campuses).

❖ Revise university's academic calendar so that designated work dates provide opportunities for department- and program-level work on academic planning and program improvements:
- Fall Convocation at Crownpoint Campus: at least one full day.
- Fall Assessment Day at Crownpoint Campus: one full day.
- Spring Convocation at Chinle Campus: at least one full day.
- Spring Assessment Day at Chinle Campus: one full day.

❖ Assessment Week at faculty members' home campuses: at least two full days after graduation; faculty post program-level Annual Assessment Reports (peer-reviewed by the Assessment Committee).

❖ Establish an annual award for Academic Program Excellence (based on Assessment Committee peer review) to be awarded at subsequent Fall Convocation.

Opportunities for Improvement, continued

GenEd Process Improvements

❖ Have newly organized Assessment Committee oversee all aspects of GenEd Assessment (with reps from all University campuses).

❖ Finalize submission of remaining GenEd course certification forms to the NMHED by January 2020.

❖ Coordinate gathering of GenEd student learning data with the Office of Institutional Research.

Opportunities for Improvement, continued

Co-Curricular Process Improvements

❖ Have newly organized Assessment Committee oversee all aspects of Co-Curricular Assessment (with reps from all University campuses).

❖ Coordinate gathering of Co-Curricular student learning data with the Office of Institutional Research.

Appendix 1:
Detailed Assessment Reports in Weave Online

Appendix 2:
Pre/Post Course Reports