PRC Summary Report for AY23

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OVERVIEW

Nine certificate and degree programs were assigned Program Review in AY23. Six were completed. One was postponed and one was exempted in lieu of a more rigorous professional accreditation; one did not participate. Self-Study Teams summarized their reviews in presentations convened by the Program Review Committee (PRC) and offered next steps for program improvements. The PRC synthesized the data and, on that basis, devised recommendations for individual programs, the process of Program Review, the PRC, and the University as a whole. Next steps include action planning by the Self-Study Teams and consideration of suggested University-wide process improvements by academic administration.

RECOMMENDATIONS FROM PRIOR PROGRAM REVIEW CYCLES

In previous PR cycles, the PRC developed high priority recommendations based on analyses of individual academic programs and the PR process. The following recommendations remain to be addressed:

Address accountability issues on PR teams. In previous summary reports, the PRC discussed PR-related accountability challenges that confront the University. One whole team did not participate in the previous PR cycle in AY21, although they did participate the next year.

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Regardless, there were still full-time faculty members who should have participated in PR, but did not show up at all for orientation, SST deliberations, or the PR hearings in February. That is unacceptable.

Improve SST action planning. The need to clarify and assist with this assignment for each SST remains. In AY23, the PR Chairs met individually with program teams at their request to offer guidance with action planning. In future cycles, the PRC recommends providing written guidance to teams on how to formulate an action plan.

Improve Career Services academic support. The University continues to have an opportunity to strengthen the capacity to provide data to program teams about program graduates. This could involve Career Services and the use of data from the National Student Clearinghouse (NSC). With a new Career Services Coordinator, NTU should build the capacity to access and use data from the NSC.

Revise department chair job descriptions. New evaluation systems for faculty were designed and approved by the Board of Regents and adopted in AY23. However, job descriptions and remuneration systems for department chairs remain to be addressed. These advances represent important, strategic opportunities for improving the University as a whole.

Improve PR by connecting enrollment and retention data to cost data. Limited progress was made in AY22 and AY23 regarding this recommendation. Some budget information was made available to each SST, which was a significant improvement over previous Program Review cycles. The need to establish a program efficacy metric remains.

Improve academic budgeting processes. NTU's Business Office continues to work on these improvements. Communication between the PRC and Business Office has improved in recent years with the participation of Business Office personnel in the PRC. Still, recommendations regarding organizing academic costs centers, and using Appendix 2 of the Program Review Guide for identifying program-level cost centers remain.

PROGRAM REVIEW COMMITTEE

Continuing PRC members from AY22 include the following:

- Sheena Begay (Institutional Research)
- Henry Fowler (Faculty)
- Tilda Harrison-Woody (Faculty)
- Sharon Nelson (Faculty)
- Anita Roastingear (Faculty)
- Ragavanantham Shanmugam (Faculty)
- Chris Storer (Faculty)
- Cheryl Thompson (Business Office)
- Brenda Tom (Human Resources)
- Anusuya Vellingiri (Faculty)
- Shawna Begay (Career Services)

New members in AY22 are as follows:

- Dianna Dekelaita-Mullet (Committee co-chair)
- Jennifer Wheeler (Committee co-chair)

PRC ACCOMPLISHMENTS

The PRC updated the annual Program Review Guide. It establishes an updated five-year cycle of Program Reviews. The committee used the same Program Review template established in AY18 and revised and updated annually since then. Administrative data were prefilled as follows:

- Student Data: by Institutional Research
- Faculty: by Human Resources
- Costs: by Finance Office

The University's Career Services office has limited data on job placement for the programs under review. The previous Career Services coordinator resigned in October, 2021 and the position was not filled until February, 2022. For this reason, Career Services data are absent from the AY23 reports.

The committee posted Program Review templates on Google Drive to facilitate authorship by multiple interests, maintained a PRC website, and held an Orientation session for Self-Study Team (SST) members in October, 2022. Orientation was attended by instructors from seven of the nine teams that were assigned Program Reviews. One-on-one assistance took place in Fall 2022 and Spring 2023 for Program Reviewers who requested help.

In previous summary reports, the PRC recognized that it had opportunities to improve committee members' attendance and participation in team functions. Toward this end, the PRC co-chairs kept track of members' attendance at regular committee meetings and participation in high profile events, such as Orientation in fall semester and Presentations in spring semester. Those data, when completed for AY22, will establish baseline numbers for gauging progress in subsequent program review cycles. Preliminary data are available here.

In AY21 and AY22, the PRC awarded certificates and a small cash award to the top three program teams. The AY23 committee established a scoring rubric and will continue with the awards.

PROGRAM REVIEW RESULTS

- Nine Program Reviews were assigned in Spring 2023, following NTU's Program Review Cycle as spelled out in Appendix 2 of the Program Review Guide for 2022-23. Six were completed; one was exempted by a vote of the Program Review Committee, one was postponed, and one program did not participate (see the *Program Review Results* section for more information).
- Three of four types of administrative data were completed, as explained above.
- Six of the Program Review teams that authored reviews participated in Presentations and follow-up Q&A sessions via Zoom in February 2023. All faculty members associated with those six programs participated in the Presentations.
- A scorecard was collected for all nine reviews (see Table 1 below). Checkmarks represent aspects of the Program Review that were completed, and X represents missing data.

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Program Review Scorecard for 2022-2023
Navajo Technical University

PROGRAM	Hist	Curric	Student Data	Job Place	Prog Assess	Strength Chall	Faculty	Recog	Cost	Action Plan	Pres
	SST	SST	IR	CS	SST	SST	HR	SST	Bus	SST	SST
ADV. MANUFACTUR. Shanmugam	X	X	✓	X	X	X	✓	X	✓	X	X
ANIMAL SCI. Dr. Edith	Postponed	Postponed	✓	Postponed	Postponed	Postponed	✓	Postponed	✓	Postponed	Postponed
BUS. ADMIN. Reidhead	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
CULINARY ARTS Witte, Tatsukawa	Exempt	Exempt	✓	X	Exempt	Exempt	✓	Exempt	✓	Exempt	Exempt
GEO. INFO. TECH Nkongolo	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
HOTEL REST ADMIN Tatsukawa	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
ENVIRON. SCI. Chischilly, Roychowdry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LAW Natay, Yazzie, Larson	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓
MATH Paez-Paez, Han, Illafe	✓	✓	✓	X	✓	✓	✓	✓	✓	✓	✓

SST = Self Study Team
IR = Institutional Research
CS = Career Services
HR = Human Resources
BUS = Business Office

TABLE 1: *Aspects of Program Reviews Completed in AY23*

SELF-STUDY TEAM SELF-ASSESSMENTS

Self-Study Team	Self-Assessment*
Advanced Manufacturing (Ragavanatham Shanmugam)	None
Animal Science (no advisor for AY22-23)	N/A
Business Administration (Christine Reidhead)	**2.22**
Culinary Arts (Robert Witte)	N/A
Geographic Information Technology (Nsalami Nkongolo)	**2.44**
Hotel Restaurant Administration (Brian Tatsukawa)	**2.55**
Environmental Science (Dr. Roychowdry and Brian Chischilly)	**2.78**
Law (Lola Natay, Sidner Larson, and Robert Yazzie)	**3.00**
Mathematics (Shasha Han, Mohamed Illafe, Carlos Paez, A. Hussen, and Jose Vanguardia)	**2.67**
SELF-ASSESSMENT AVERAGE	**2.61**

* Scale: 1=emerging, 2=developing, 3=proficient

TABLE 2: *Program Review Self-Assessments*

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In addition to producing Program Review reports, each Self-Study Team was tasked with conducting a self-assessment which included a report rubric asking team members to rate their report in terms of 1) Curriculum, 2) Program Assessments and Improvements, 3) Strengths and Challenges, 4) and Action Plan. The final averages are posted in Table 2 above.

SELF-STUDY TEAM PRESENTATIONS AND PROGRAM-SPECIFIC FEEDBACK

The following notes come from PRC members' reflections on Self-Study Teams' presentations:

Advanced Manufacturing: Ragavanatham Shanmugam

The Advanced Manufacturing program did not participate in the Program Review process. The committee reached out to the program advisor throughout the Fall semester to offer help, included the advisor on all meeting invitations, and informed the advisor in advance of deadlines. The advisor, who is also a member of the PRC, stated that he teaches classes on Fridays and could not attend orientations, meetings, or the PR hearings. He also mentioned that his program is accredited by an external accreditor other than HLC; however, he did not formally request an exemption and when asked for documentation of the accreditation process, he did not provide documentation.

Animal Science: No Advisor for AY23

By committee vote, the Animal Science program review was postponed to AY23-24; the position for Program Advisor became vacant in Fall 2022 and has not yet been filled.

Business Administration: Christine Reidhead

Main Points
- The program began in 2018.
- The program's purpose is to prepare business leaders for the Navajo Nation.
- Some of the program's graduates are now employed as staff members at NTU.
- The vision of the program is to become the leading business preparatory program for Native Americans across the United States.

Presentation
- Delivered a Powerpoint presentation.

Strengths
- Program is 100% online.
- One of the top 3 programs at NTU in terms of enrollment, with 86 students enrolled in Fall of 2022.
- Enrollment has increased every year, including during the pandemic.

Challenges
- Shortage of faculty; there is a need for a second full-time instructor.
- Finding qualified adjuncts.
- Due to the shortage of faculty, course offerings are limited and students are often accommodated via independent study to maintain their graduation plans.

Q&A

- *Are there data to show that students are succeeding in online classes? There are many students who do need to be served face-to-face. We need to draw on Dine' philosophy and create balance and accommodate both. Data is needed.*

Culinary Arts: Robert Witte, Brian Tatsukawa, and Walter Cloud

The Culinary Arts program was exempted from NTU Program Review by unanimous committee vote. That decision was based on the program's rigorous accreditation from the American Culinary Federation. The Culinary Arts program provided the Program Review Committee with their complete accreditation documentation, and it is now archived and available for review.

Geographic Information Technology (GIT): Nsalambi Nkongolo

Main Points
- The program began in 2008.
- The program focuses on geographic information systems such as remote sensing, cartography, and database applications.
- Students in the Environmental Science program take the GIT courses as part of their curriculum.

Presentation
- Delivered a PowerPoint presentation.

Strengths
- NTU has the latest software and new equipment for GIT projects such as ARCGIS software, water quality sensors, soil sensors, and carbon chambers.
- The program is well-funded through grant awards.
- The program faculty and students publish papers and present posters each year.
- The program has a plan in place for increasing enrollment and funding.

Challenges
- Enrollment in the program is low.
- Insufficient administrative support.

Q&A
- *What kind of jobs do students find? Students may not understand what GIT is or what kinds of jobs are available.* (Answer) Students with degrees in related fields such as Environmental Science actually find employment in GIT.
- *Are internships included in the program*? (Answer) Currently no; there are plans to create a Center of Excellence at NTU.
- *What are some ways to draw students in to the program at NTU*? (Answer) There is a summit council for high school students that allows them to earn 3 credits in GIT by participating. Students need incentives such as that to draw them in.

Hotel and Restaurant Administration: Brian Tatsukawa

Main Points
- The program is young (began two years ago).
- The program's purpose is to provide students with the education needed to be effective leaders in local hotels and casinos.
- The only BAS in Hotel & Restaurant Administration in the Four Corners area.
- For the Capstone project, students create and implement a food truck concept.
- The program is working to become certified by the ACF.

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Presentation
- Delivered a PowerPoint.

Strengths
- Students graduate with more certifications than in comparable programs.
- Students are encouraged to develop a unique management style that aligns with their cultural heritage.
- Enrollment increases each year.

Challenges
- Retention.
- Marketing and promotion.
- Limited funding to support students.
- Limited faculty; need additional instructors to diversity teaching.
- Need additional working relationships with local hotels for on-site educational opportunities.
- Core classes are not offered in online format.

Q&A
- *Quotes*: "HLC loves our program. We are the only school in the ACF, nothing but success."

Environmental Science: Abhishek Roychowdhury and Steve Chischilly

Main Points
- Program began in 1996 with a grant from the Department of Energy (longest soft-money grant in the history of NTU).
- The program was created to address environmental problems on indigenous homelands.
- Degrees offered include Certificate, AAS, and BS.
- Students in Environmental Science take a broad selection of courses in the Natural Sciences with a heavy emphasis on GIT courses.
- The program plans to add a Master of Science in Environmental Science.

Presentation
- Delivered a PowerPoint.

Strengths
- The program is strong in research, with both faculty and undergraduate students directly involved in research.
- Student researchers receive stipends, which improves retention and graduation rates.
- $5M in external funding.
- Strong enrollment and graduation rates; 26 students currently enrolled and 11 graduates over the past two years.
- Research and outreach programs are interdisciplinary, collaborative, and directly relevant to community needs.
- The program incorporates Navajo teachings into each project; for instance, by beginning events with a Navajo prayer and by including Navajo speakers.
- The program provides community supports such as water filters and rainwater harvesting systems.
- Students and faculty are consistently recognized with awards, and some of the program's graduates are currently pursuing Ph.D. degrees.

Challenges
- The program is growing steadily and desperately needs more laboratory space to provide analytical training to students more efficiently.
- The program needs to buy high end analytical equipment to provide hands-on analytical training to the students.

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Q&A
- *Should the Certificate be eliminated?* (Answer) No. Some students are uncertain about their ability to succeed at college, and those students opt for the certificate program as a way to prepare for the Associates or Bachelor's degree. The Certificate is a good starting point and should not be eliminated.
- *How many of your students who earn a masters or PhD plan to come back and work on the Navajo Nation?* (Answer) Two students have already returned—one to NTUA and another works in pesticide regulation in Arizona. Many others have expressed the intention to return.
- *With regard to the Certificate–could it be condensed into a seminar? What does the data show about certificate students? E.g. pay level, job placement? Is there another way to ease students in without having a certificate program?*
- *Comments*: "Students in the Certificate Program need this buffer." "The Certificate Program is a self-esteem builder." "If there is no heart in a program it does not move." "Condense the Certificate Program into the AAS program; reinvest money into the higher-level degrees."

Law Advocate: Lola Natay, Sidner Larson, and Robert Yazzie

Main Points
- The AAS degree is the only non-JD path to practice law in the Navajo Nation. All licensed NNBA members have the same privileges and may undertake any type of legal work within the Navajo Nation.
- The program's mission and instruction align with the DPE; the program applies Navajo thinking and laws to contemporary problems in each course.
- Enrollment includes approximately 20 students across the Certificate and AAS degrees.

Presentation
- The program team presented a Powerpoint presentation at the hearings. The team's self-study report was provided via Google Drive and was comprehensive and complete.

Strengths
- The program advisors are reflective and take into consideration feedback from department chairs, weekly reports, and SLR data to refine the program curriculum.
- Program advisors engage in collaboration, communication, and technology to meet the needs of students across multiple NTU campuses.
- In terms of teaching and outreach efforts, the program created new Fundamental Law course to promote and honor Dine' culture and language.
- HLC recently approved the adoption of a 4-year BA program in Law.
- The program is revising the Certificate and AAS programs to ensure the checklists provide a smooth transition in to the BA program.

Challenges
- Shortage of faculty.
- Need to increase students' bar passage attempts and success rate.

Q&A
- *Does the Law program participate in assessment?* (Answer) Yes, the assessment results are included in the self-study report on Google drive.
- *What is the program doing in terms of outreach?* (Answer) The program faculty participate in fairs and recruitment events. The program has a good reputation and is growing.

Mathematics: Carlos Paez, Shasha Han, Mohamed Illafe, A. Hussen, and Jose Vanguardia

Main Points
- Program started with a Certificate before NTU became a University.

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- The program now includes both a Certificate and an Associate of Science degree.
- Students in science and engineering programs take many courses in the Math curriculum.

Presentation
- The team presented their Self Study report on the screen (no PowerPoint).

Strengths
- Highly qualified math instructors.
- Well-developed curriculum.
- Math offers a bridge to all other programs.

Challenges
- Although program enrollment is growing it remains low, with 8 students enrolled in the Fall of 2022.
- Lack of funding.
- NTU lacks a dedicated Math Lab for student tutoring.

Q&A
- *Quote*: "The learning process relating to the Navajo culture in the areas of Nitsahakees, Nahatah, Iina, and Sihasin will be covered in all the courses."
- *Quote*: "It seems like there are too many faculty members for the recorded enrollment in the AA Math program."

SST SURVEY RESULTS

After the AY23 hearings were held, self-study team members were surveyed about Program Review. They were asked questions such as, *What went well? What needs improvement?* Responses were limited; six of 14 self-study team members completed the survey. In the Additional Comments section, one respondent suggested that NTU create a university-wide alumni database; another requested NTU's full commitment to the Program Review process and more help with the Programs. Results of the survey are presented in Appendix A.

PROGRAM-SPECIFIC OPPORTUNITIES FOR IMPROVEMENT

Address laboratory space and equipment issues in the Environmental Science program. The biggest challenging facing the Environmental Science program is lack of laboratory space to accommodate the students. Additionally, the program lacks high quality analytical equipment that is needed for hands-on analytical training. Those issues must be resolved before starting the Graduate program in Environmental Science.

Hire an additional full-time instructor for Business Administration. Although Business Administration is one of the top three programs in terms of enrollment, the program has only one full-time faculty member. The PRC recommends hiring one additional full time faculty member to support the program.

Equip the Law program with advanced instructional technology. The Law classrooms are severely outdated and need new instructional equipment including smartboards, projectors, speakers, microphones, and other technology to facilitate online and hybrid teaching. Additional research tools are also essential to the study of Law at both campuses; these tools include full time librarian support, subscriptions to LexisNexis or Westlaw, and copies of the Navajo Reporter to supplement Navajo judicial website offerings that only cover 2013-present.

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Geographic Information Technology. The PRC recommends combining the GIT program with the Environmental Science program. The courses in the GIT program are already included in the Environmental Science degree curriculum.

Develop a Math Lab to support students. The Math program is in need of a Math Lab to support students who struggle in math courses. The program is urged to seek external funding to support the development and staffing of a Math Lab.

UNIVERSITY-WIDE OPPORTUNITIES FOR IMPROVEMENT

Support fully-online delivery of courses in programs approved by HLC for online instruction. Programs that have been approved for fully-online course deliver, for instance Business Administration, are expected to deliver courses in both online and face-to-face formats. That creates problems for both students and programs: for the programs, it creates a heavy teaching workload that is often solved by hiring adjuncts, and for online students who are required to attend a face-to-face class, it creates a burden of time and money spent travelling long distances to school. For programs that are fully-online, the PRC recommends offering hybrid courses via Zoom or Blackboard Collaborate in place of face-to-face courses.

Improve the hiring and evaluation processes for adjunct instructors. Hiring adjuncts is a challenge. Further, it is not always an appropriate solution. First, the adjunct hiring process is long and complicated and requires constant monitoring by a department chair to ensure the hiring request does not fall between the cracks. Second, there is little oversight of either hiring or performance of adjuncts; for instance, the hiring process does not require an interview. Third, adjuncts do not always solve staffing shortages; for example, some programs must offer Independent Study courses to individual students in order to meet the students' graduation plans, and IS courses are offered on a volunteer basis with no pay. The PRC suggests (1) simplifying and documenting the adjunct hiring process, (2) require that new adjuncts be interviewed by program staff and the department chair, and (3) document a procedure for communicating with and evaluating adjuncts.

Offer more program-specific funding for students. Scholarships are effective in recruiting students and maintaining enrollment. The PRC suggests that programs seek external funding for scholarships and also include scholarship funding in their annual budget requests.

Improve student advisement. Advisement issues continue from previous years. Jenzabar, the University's data management system, is not available to all faculty advisors. Additionally, coordination is poor across multiple department and campus locations as no single person oversees the entire advising picture. Challenges include the following: (1) recommended course sequences are not established for all programs, (2) some checklists are out of date, (3) faculty do not have access to all advisees, (4) and faculty do not follow a set schedule for meeting regularly with advisees. Opportunities include establishing a university-wide team across sites and programs to design process improvements, research best practices, and designing and implementing a comprehensive plan for moving forward.

Showcase improvements made in select programs. Improvements made in several programs--for instance, using rubrics for assessment, including assessment information in syllabi, and organizing co-curricular activities—represent best practices that should serve as models for exemplary practice. Faculty members who implement such improvements could be asked to share their work at Convocations and Faculty Development sessions.

Promote the reporting of academic assessment data. Although the programs reported their assessment data in their self-study reports, they failed to share that information in their presentations. In the next cycle, the PRC will provide a presentation template to guide the programs' presentations. Furthermore, the current self-study template offers little guidance for reporting assessment; the committee will work towards simplifying the template, perhaps by focusing more on program improvements that resulted from assessments.

Implement a process for applying program review findings. The purpose of Program Review is to promote the systematic review and evaluation of academic programs at NTU. The ultimate aim is to improve those programs, distribute resources as needed, modify or close under-performing programs, and balance resources when considering support for new or existing programs. The analyses are intended to strengthen student learning, faculty productivity, and enrollment and graduation rates in the service of the University's mission and strategic goals. The University has important opportunities to improve Program Review:

- Define a process for implementing Program Review recommendations
- Analyze program review findings
- Consider how those findings could shape strategic and annual planning
- Reallocate resources where they are most needed
- Address imbalances of high costs and low performance
- Address existing needs and opportunities before adding new programs
- Implement a transparent process for designing new programs.

APPENDIX A: Program Review Survey Results

Prior to the Program Review presentations, how much of the information that you needed did you get?
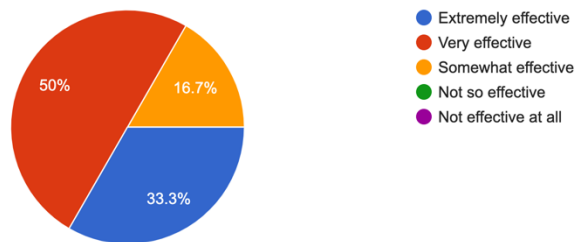6 responses

- ● All of the information
- ● Most of the information
- ● Some information
- ● A little of the information
- ● None of the information

83.3%
16.7%
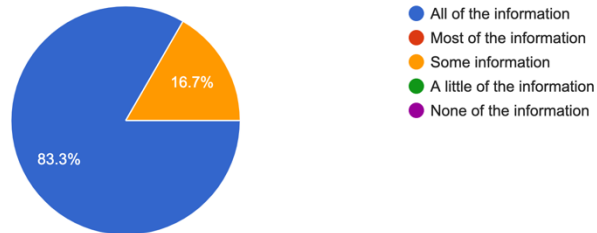
Was the presentation event too long, too short, or about right?
6 responses

- ● Much too long
- ● Too long
- ● About right
- ● Too short
- ● Much too short

100%

Did your Self-Study report reflect your program effectively?
6 responses

- ● Extremely effective
- ● Very effective
- ● Somewhat effective
- ● Not so effective
- ● Not effective at all

50%
16.7%
33.3%

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Which areas on the Self-Study report were the most and least helpful?