



Northland Pioneer College
EXPANDING MINDS • TRANSFORMING LIVESSM

Technology to Advance Learning Outcomes at Northland

Comprehensive Annual Report - NASNTI Title III Grant

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OVERVIEW

In fall 2015, Northland Pioneer College (NPC) serving a rural, remote region of over 21,000 square miles in Northeastern Arizona's First Congressional District, was awarded a NASNTI Title III grant for a project called Technology to Advance Learning Outcomes at Northland (TALON). This five-year project is expanding post-secondary educational opportunities to students across the service area, which includes the tribal lands of the Navajo, Hopi and White Mountain Apache people, through a robust network of audio-visual linked classrooms located on the campuses of partner high schools.

The implementation of the project started in spring 2016 with the first student cohort enrollment in fall 2016 and the first complete outcome data available at the end of spring 2017 semester. This report summarizes insights from the first outcome data and reflects on lessons from the early implementation phases.

The TALON project outcomes focus on:

- Increasing the number of schools with dual enrollment course offerings
- Enrollment of high school students, and specifically Native American students in MAT 152 and at least two additional general education college courses
- Increasing the number of College and Career Preparation (CCP) course sections taught via distance learning technology, students enrolled in those sections, and sites where CCP courses are accessible
- Reducing time to complete college-level MAT sequence
- Increasing the number of dual enrollment and CCP students participating in academic advising; counseling; college, career, and financial planning; and other ancillary support activities
- Reducing the cost of degree for dual enrollment and CCP students

KEY FINDINGS

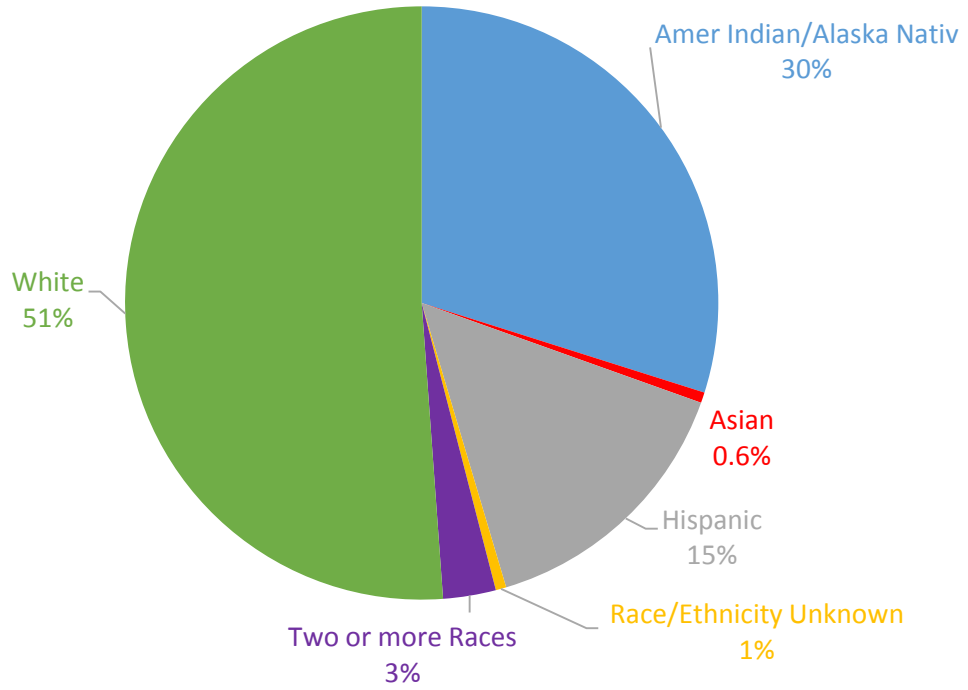
1. Dual Course Offerings and Enrollment

During the first project year of 2016-2017, ten high schools offered 10 different college level courses (ENL 101, ENL 102, MAT 152, MAT 189, MAT 221, MAT 231, POS 110, SPA 101, SPA 102, SPT 150) in 25 different course sections to 181 students (unduplicated count).

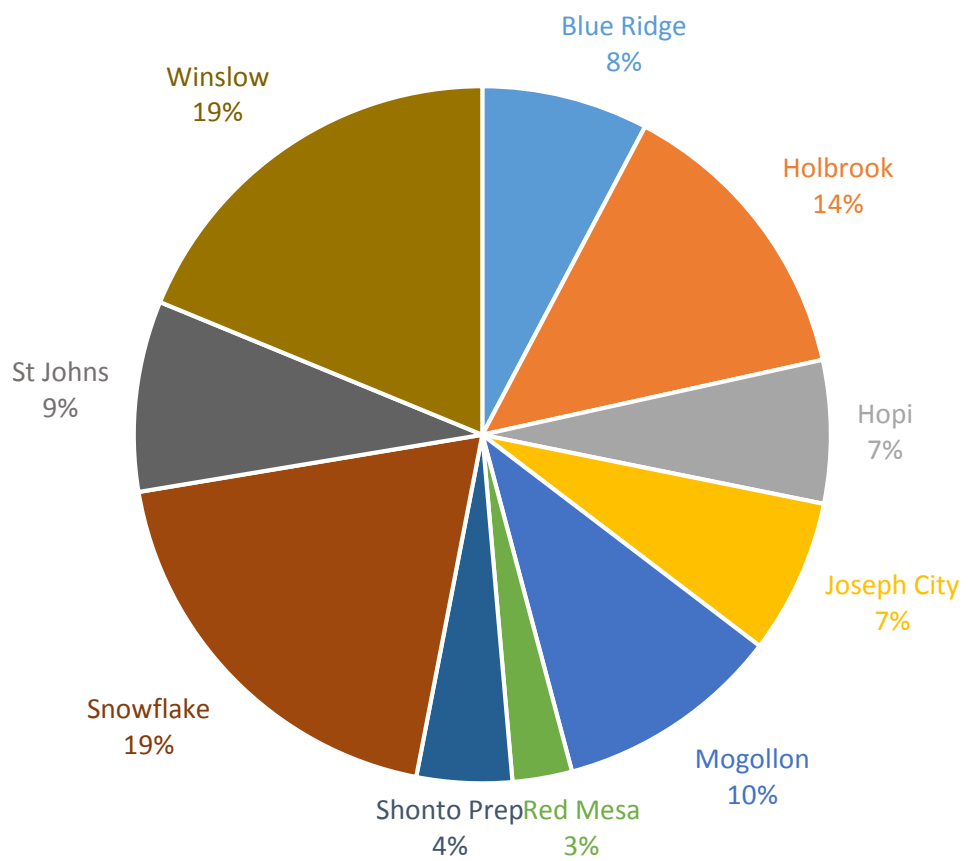
Just under 50 percent of all TALON students came from diverse ethnic backgrounds, with 30 percent being Native American.

Snowflake, Mogollon, and Winslow were the top three high schools by duplicated enrollment and also unduplicated student count.

TALON Students (Unduplicated) by Race



TALON Students by High School



In fall 2016, enrollment in TALON courses reached 192 and in spring 2017, 153 (duplicated count).

High School	Fall 2016					
	ENL 101	MAT 152	MAT 221	SPA 101	POS 110	TOTAL
Blue Ridge	7	6				13
Mogollon	12	7	9			28
Red Mesa	3	5				8
Shonto Prep	3	8				11
St Johns	6	4		11		21
Holbrook		8			15	23
Hopi		4			7	11
Joseph City		3		4	7	14
Snowflake		3		32		35
Winslow		6		9	13	28
TOTAL ENROLLMENT	31	54	9	56	42	192

High School	Spring 2017						
	ENL 102	MAT 189	MAT 231	POS 110	SPA 102	SPT 150	TOTAL
Blue Ridge	7	5				5	17
Mogollon	10	7	4				21
Red Mesa	3	5					8
Shonto Prep	2	6					8
St Johns	4	4			11		19
Holbrook		5		3		5	13
Hopi		1		2		1	4
Joseph City		1		3	4		8
Snowflake		2			28		30
Winslow		10		7	8		25
TOTAL ENROLLMENT	26	46	4	15	51	11	153

Students in TALON Courses (unduplicated count each semester ¹)	
Fall 2016	162
Spring 2017	126

¹ While the count is unduplicated within each semester, some students enrolled in fall 2016 TALON classes were also enrolled in spring 2017. The unduplicated enrollment total for the entire academic year 2016-2017 is 184 and includes those students who withdrew after the deadline and did not complete a single TALON course.

2. Successful Course Completion and Multiple Course Completion by High School Graduates

Successful completion rates vary by course and by ethnic background. Three classes offered in spring 2017 with relatively small enrollments but a high failure or withdrawal rate (SPT 150, POS 110, and MAT 231) should be monitored closely in the upcoming semesters. If the low success rates persist, a deeper examinations of causes is warranted.

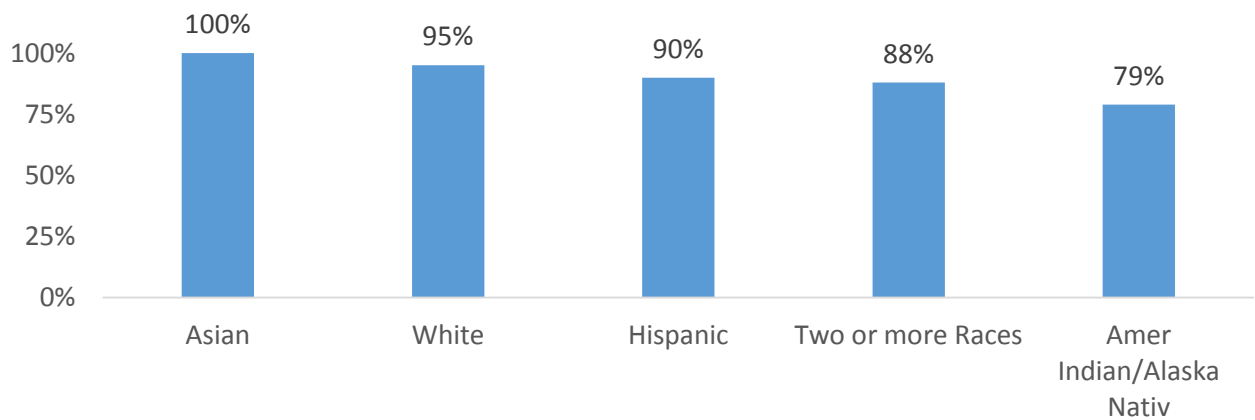
Native American were more than 20-percent less likely to complete a TALON class than their White peers. The completion gap between Hispanic and White students was 10 percent. These are important gaps that reflect broader discrepancies in academic readiness to succeed in college-level coursework of students from marginalized and underserved communities.

Successful Completion Rate (A, B, or C) By Class - Fall 2016		
	Percent	N
SPA 101	98%	56
MAT 152	89%	54
POS 110	88%	42
ENL 101	84%	31
MAT 221	78%	9

Successful Completion Rate (A, B, or C) By Class - Spring 2017		
	Percent	N
SPA 102	96%	51
ENL 102	92%	26
MAT 189	89%	46
SPT 150	73%	11
POS 110	67%	15
MAT 231	75%	4

	Percent	N
Completion Rate Overall - Fall 2016	91%	192
Completion Rate Overall - Spring 2017	88%	153
Overall TALON Completion Rate	89%	345

Successful Completion of TALON Courses by Race (A, B, or C)



From all TALON participants 117 graduated from high school in spring 2017. Thirty-two of the graduates took and successfully completed MAT 152. Thirteen of those also completed at least two other college-level TALON courses with grades A, B, or C. Of those 13, nine (or 70 percent) were Native American students. As the TALON program continues for the next 3 years, the percentage of students taking multiple college-level courses along with MAT 152 is projected to increase, but advisers should emphasize the cost- and time-saving benefits of dual enrollment.

LESSONS LEARNED

1. Personnel Changes

One of the TALON planned activities was to establish and implement a menu of College and Career Preparation courses to be taught by NPC instructors in the evening via DLT at each partner high school where CCP classes do not exist at NPC campuses or centers in the community. This activity has been delayed for reasons not anticipated in the original project plan:

- 1) Internally at NPC, the CCP program experienced leadership transition at a time when partnerships and logistics with hosting high schools were to be established to deliver CCP courses.
- 2) While attempts were still made to schedule CCP courses during this leadership transition, partner high schools were not able to staff CCP labs. The major challenge was finding adequate personnel for a few hours a week at a market pay rate.

With now renewed CCP leadership we expect these organizational challenges to be addressed in year two of the TALON project.

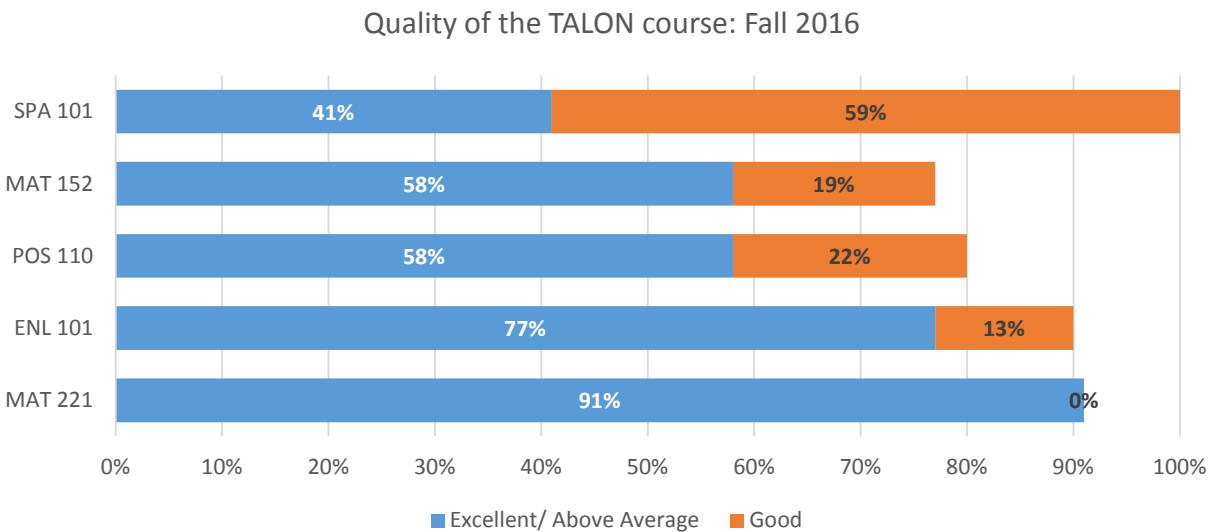
2. Daylight Saving Time

Coordinating course scheduling among 10 different high schools with different class starting times and differences in observing daylight saving time proved to be logistically challenging and took significant time to resolve.

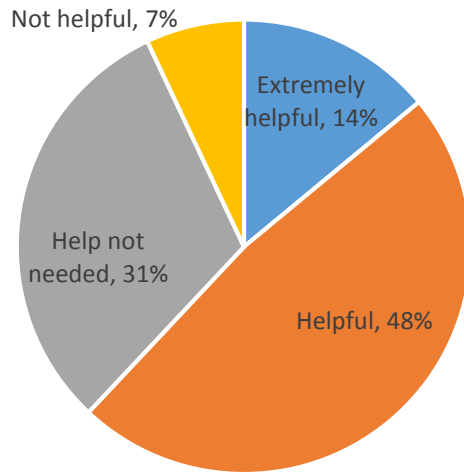
The change in time in November and March each year created a class schedule problem for the students at these schools, as their regular high school classes fell back one hour in November and returned to an hour earlier in March, whereas the TALON classes did not change at all. Some students at these schools had to change their entire schedules twice a year to accommodate for this. The observance of DST would not be as problematic if the TALON classes switched as well; therefore, one of the strategies moving forward is to consider creating cohorts of TALON classes specifically for schools that observe DST, and ask the NPC/TALON instructors to make the time switches in November and March along with the students at these DST schools. While this idea would help to mitigate the current scheduling problems for students at the DST schools, it creates other challenges: 1) NPC instructors would have to have a cushion of time built into their schedules to accommodate the switch to DST, decreasing their scheduling flexibility for their other NPC courses; 2) Schools that do not observe DST could not be included in the DST cohorts, creating less flexibility in an already rigid TALON schedule.

ADDITIONAL INSIGHTS

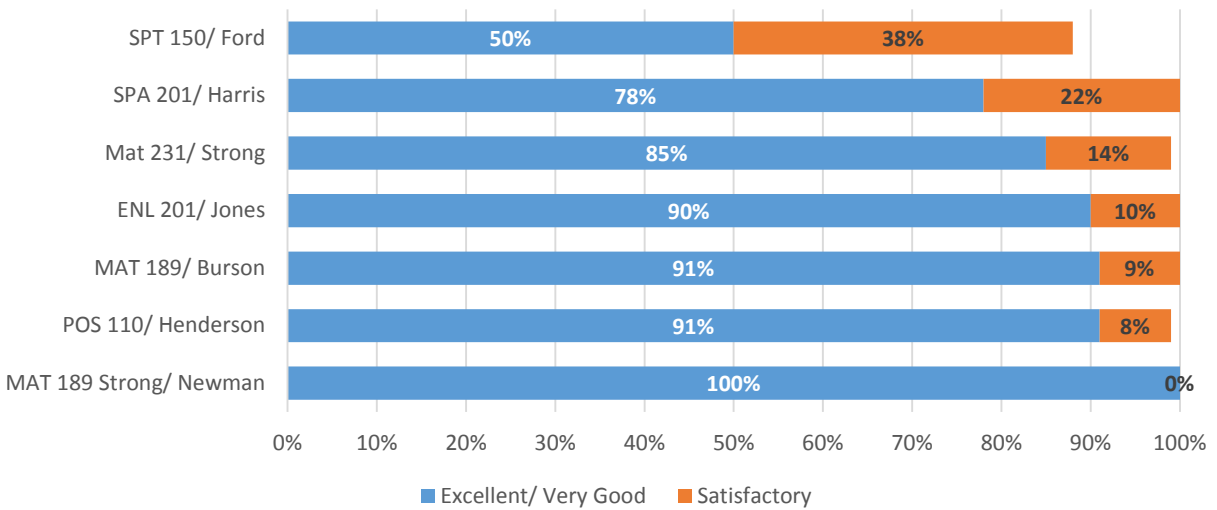
Students taking TALON courses were surveyed about their perceptions regarding the TALON program. Their perception of quality reflects their own academic performance: in general, those classes where student performed better were also rated as having a higher quality—not an objective assessment but something to track in the future. The following charts depict their answers.



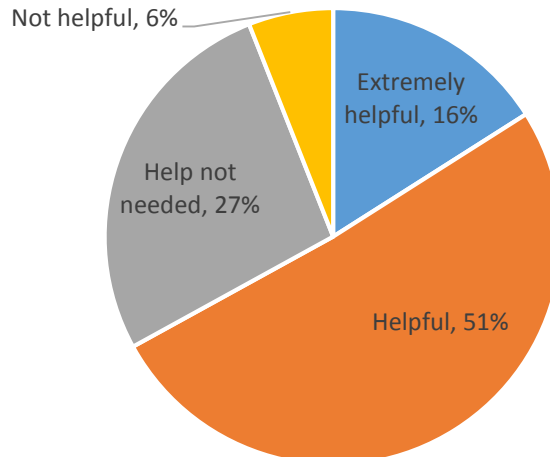
Helpfulness of MAT 152 Tutoring (N=37)



Quality of Your TALON Class: Spring 2017



Helpfulness of MAT 189 Tutoring (N=29)

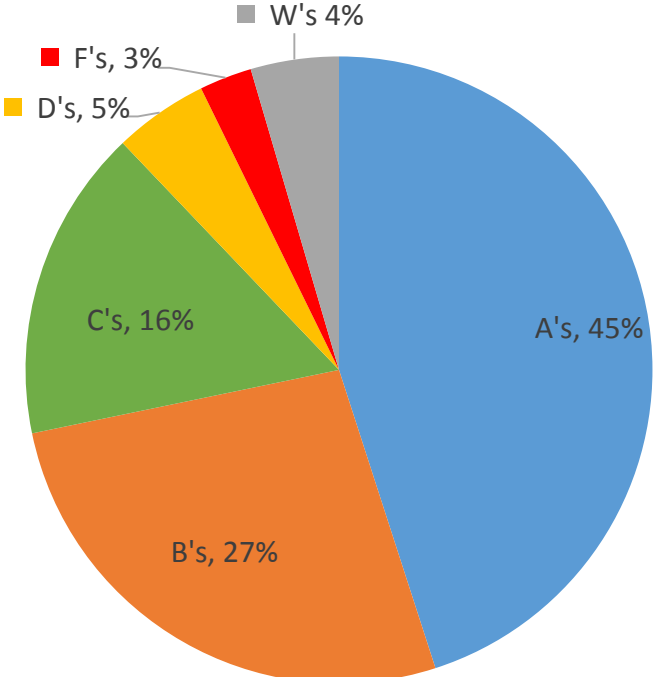




Technology to Advance Learning Outcomes at Northland-TALON
Data Summary Fall 2016, Spring 2017, Fall 2017, SP 2018

Fall 2016 – Enrollment & Completion Rate (A, B, or C) By Class			
Course Name	Number Enrolled	Number Earning A, B, C	% Successful Completion
ENL 101	31	26	84%
MAT 152	54	48	88%
MAT 221	9	7	78%
POS 110	42	38	90%
SPA 101	56	55	98%
TOTAL for Fall 2016	192	174	91%
Spring 2017 – Enrollment & Completion Rate (A, B, or C) By Class			
Course Name	Number Enrolled	Number Earning A, B, C	% Successful Completion
ENL 102	26	24	92%
MAT 189	46	41	89%
MAT 231	4	3	75%
POS 110	15	10	67%
SPA 102	51	49	96%
SPT 150	11	8	73%
TOTAL for Spring 2017	153	135	88%
Fall 2017- Enrollment & Completion Rate (A, B, or C) By Class			
Course Name	Number Enrolled	Number Earning A, B, C	% Successful Completion
ENL 101	66	49	74%
HIS 105	24	23	96%
MAT 152	101	80	79%
MAT 221	10	7	70%
POS 110	48	35	73%
SPA 101	73	72	99%
TOTAL for Fall 2017	322	266	83%
Spring 2018 - Enrollment & Completion Rate (A, B, or C) By Class			
Course Name	Number Enrolled	Number Earning A, B, C	% Successful Completion
ECN 211	37	36	97%
ENL 102	49	49	100%
HIS 106	23	22	96%
MAT 189	76	69	91%
MAT 231	6	4	66%
SPA 102	66	58	88%
TOTAL for Spring 2018	257	238	93%
Cumulative Enrollment & Completion	924	813	88%

**FA 2016-SP 2018 (4 semesters) Grade Distribution
924 Enrollments**



TALON Students by Race

