

Retention Study

OFFICE OF INSTITUTIONAL RESEARCH

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I. Accountability in Government Act

Retention has always been a high priority for Northern New Mexico College. Student retention is a measure that is reported to our Higher Education Department and our Legislators on a quarterly basis. We use the data internally to identify and develop programs to address student success and the college continues to explore opportunities to improve student persistence.

Retention is traditionally measured by tracking a cohort of First Time, Full Time, Degree Seeking Students and determining whether these students re-enroll the following Spring and again the following Fall Semester. Our published retention rates are the percent of First-Time, Full-Time NNMCM Freshmen Who Re-enroll the 2nd (spring) and 3rd (fall) Semesters.

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Class Size	147	173	174	186	220	220	202	149	112	116	138	136	158
# Retained to Spring	116	129	135	146	159	156	156	102	91	93	108	105	127
Spring Retention Target	75%	75%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%
Fall-to-Spring Retention %	79%	75%	78%	79%	72%	71%	77%	68%	81%	80%	78%	77%	80%
Fall Retention Target	58%	58%	58%	59%	68%	68%	68%	68%	68%	68%	68%	68%	68%
Fall-to-Fall Retention %	52%	51%	58%	57%	54%	61%	54%	40%	55%	64%	55%	58%	54%

Table 1: State Reported Retention Measure: Percent of First-Time, Full-Time NNMCM Freshmen Who Re-enroll the 2nd (spring) and 3rd (fall) Semesters

As a response to the analyses, Northern has developed and implemented an integrated, campus-wide approach to first-year student retention that includes mandatory advising, a revised new student orientation, and discussions started to plan some structural changes to potentially adopt Complete College America strategies.

This retention study takes a look at Student Retention for all students enrolled at NNMCM as well as the Program Retention for students enrolled in individual programs. The retention rates are summarized by academic units and are sorted by the two academic schools within the College: The School of STEM (Science, Technology, Engineering, & Math) and The School of Liberal Arts, Business and Education.

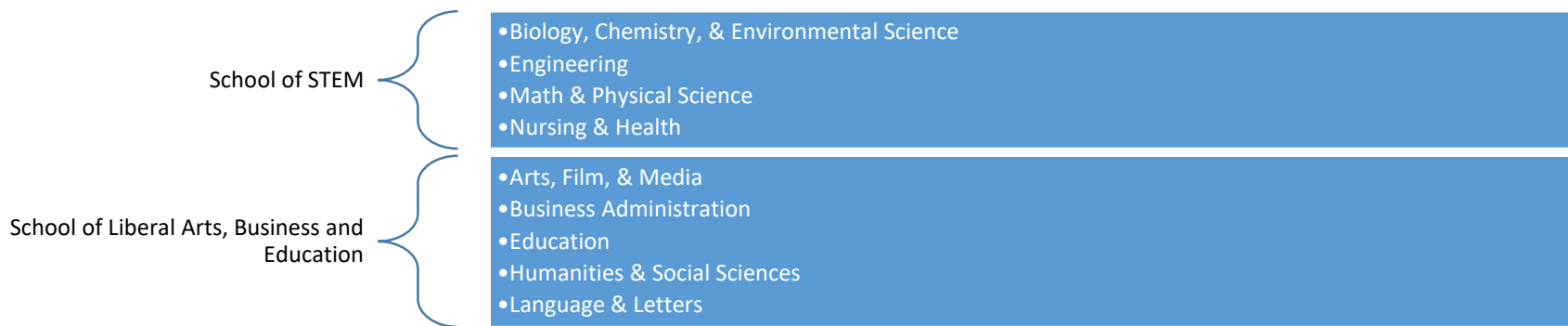


Figure 1: Academic Departments within the Schools

The cohort is the entire student body in Fall 2017 and Fall 2018. Students’ declared majors are identified for the cohort term and they are categorized into the nine academic departments. Students with undeclared majors and dual credit students are also included and grouped together.

II. Cohort Retention: Fall 2017 to Fall 2018 to Fall 2019

The cohort retention analysis tracks whether the student was reenrolled at the college during the consecutive semesters. The student’s declared major in the following semesters is not taken into consideration when determining persistence. That is, the tables in this section (tables 2-4) do not imply program retention. At the bottom row of each table is the overall total for all Academic Units.

This first table is an examination of the retention of the entire student body that was enrolled in Fall 2017. The retention rates account for students who graduated but it does not account for students who transferred out or students who left for the military.

Retention (%) is calculated as follows:

$$\frac{\text{\# re-enrolled}}{\text{\# in cohort} - \text{\# grads}}$$

Academic Unit	Fall Cohort 2017	Grads Fall 2017	Enrolled Spring 2018	Fall 17 to Spring 18 Retention	Grads Spring 18	Enrolled Fall 2018	Fall 17 to Fall 18 Retention	Grads Fall 2018	Enrolled Spring 2019	Fall 17 to Spring 19 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 17 to Fall 19 Retention
Arts, Film, & Media	27	1	24	92%	0	18	69%	1	15	60%	3	10	45%
Language & Letters	33	0	21	64%	0	16	48%	2	15	48%	2	13	45%
Education	79	7	49	68%	5	43	64%	2	34	52%	11	22	41%
Humanities & Social Sciences	129	11	100	85%	16	69	68%	5	47	48%	13	36	43%
Business Administration	192	29	146	90%	24	99	71%	4	72	53%	17	46	39%
Math & Physical Science	8	2	5	83%	0	5	83%	0	5	83%	3	3	100%
Nursing & Health	176	12	144	88%	34	98	75%	12	76	64%	29	51	57%
Engineering	107	9	85	87%	19	60	76%	2	46	60%	9	34	50%
Biology, Chemistry, & Environmental Science	106	11	82	86%	14	59	73%	4	41	53%	15	27	44%
Total (Degree Seeking)	857	82	656	85%	112	467	70%	32	351	56%	102	242	46%
Total (including Non-Degree Seeking and Dual Credit)	1115	84	773	75%	115	548	60%	32	422	48%	106	309	40%

Table 2: Fall Cohort Retention by College

This next table is a subset of Table 2. The students included in Table 3 are only those students who were First Time Any College (FTAC) students in Fall 2017. Note that a student can be an FTAC student and non-degree but a student cannot be both an FTAC and a Dual Credit student.

Academic Unit	Fall Cohort 2017 FTAC	Grads FTAC	Enrolled Spring 2018 FTAC	Fall 17 to Spring 18 Retention	Grads FTAC	Enrolled Fall 2018 FTAC	Fall 17 to Fall 18 Retention	Grads FTAC	Enrolled Spring 2019 FTAC	Fall 17 to Spring 19 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 17 to Fall 19 Retention
Arts, Film, & Media	11	0	9	82%	0	8	73%	0	8	73%	1	6	60%
Education	7	0	6	86%	0	5	71%	1	4	67%	0	3	50%
Business Administration	24	0	18	75%	0	16	67%	0	11	46%	1	11	48%

Academic Unit	Fall Cohort 2017 FTAC	Grads FTAC	Enrolled Spring 2018 FTAC	Fall 17 to Spring 18 Retention	Grads FTAC	Enrolled Fall 2018 FTAC	Fall 17 to Fall 18 Retention	Grads FTAC	Enrolled Spring 2019 FTAC	Fall 17 to Spring 19 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 17 to Fall 19 Retention
Humanities & Social Sciences	31	0	25	81%	0	20	65%	0	15	48%	0	12	39%
Language & Letters	21	0	12	57%	0	8	38%	0	9	43%	0	8	38%
Nursing & Health	25	0	20	80%	0	16	64%	0	14	56%	1	9	38%
Biology, Chemistry, & Environmental Science	18	0	13	72%	0	10	56%	0	8	44%	0	6	33%
Engineering	13	0	9	69%	0	4	31%	0	3	23%	0	4	31%
Math & Physical Science	0	0	0	-	0	0	-	0	0	-	0	0	-
Total (Degree Seeking)	150	0	112	75%	0	87	58%	1	72	48%	3	59	40%
Total (including Non-Degree Seeking and Dual Credit)	153	0	113	74%	0	88	58%	1	74	49%	3	61	41%

Table 3: Fall Cohort Retention by College – First Time Any College (FTAC)

Similarly, Table 4 is also a subset of Table 2. This table exhibits the retention of students who were not FTAC students at Northern during Fall 2017.

Academic Unit	Fall Cohort 2017 Other	Grads Other	Enrolled Spring 2018 Other	Fall 17 to Spring 18 Retention	Grads Other	Enrolled Fall 2018 Other	Fall 17 to Fall 18 Retention	Grads Other	Enrolled Spring 2019 Other	Fall 17 to Spring 19 Retention	Grads Other	Enrolled Fall 2019	Fall 17 to Fall 19 Retention
Language & Letters	12	0	9	75%	0	8	67%	2	6	60%	2	5	63%
Humanities & Social Sciences	98	11	75	86%	16	49	69%	5	32	48%	13	24	45%
Education	72	7	43	66%	5	38	63%	1	31	53%	11	19	40%
Business Administration	168	29	127	91%	24	83	72%	4	61	55%	16	35	37%
Arts, Film, & Media	16	1	15	100%	0	10	67%	1	7	50%	2	4	33%

Academic Unit	Fall Cohort 2017 Other	Grads Other	Enrolled Spring 2018 Other	Fall 17 to Spring 18 Retention	Grads Other	Enrolled Fall 2018 Other	Fall 17 to Fall 18 Retention	Grads Other	Enrolled Spring 2019 Other	Fall 17 to Spring 19 Retention	Grads Other	Enrolled Fall 2019	Fall 17 to Fall 19 Retention
Math & Physical Science	8	2	5	83%	0	5	83%	0	5	83%	3	3	100%
Nursing & Health	151	12	124	89%	34	82	78%	12	62	67%	28	42	65%
Engineering	94	9	76	89%	19	56	85%	2	43	67%	9	30	55%
Biology, Chemistry, & Environmental Science	88	11	69	90%	14	49	78%	4	33	56%	15	21	48%
Total (Degree Seeking)	707	83	543	87%	112	380	74%	31	280	58%	99	183	48%
Total (including Non-Degree Seeking and Dual Credit)	962	84	659	75%	115	460	60%	31	349	48%	103	248	39%

Table 4: Fall Cohort Retention by College – Non-FTAC

III. Cohort Retention: Fall 2018 and Fall 2019

The final three tables examine the retention of all students enrolled at Northern in the Fall of 2018 and those who returned Fall 2019. The retention rates account for students who graduated but it does not account for students who transferred out or students who left for the military.

Retention (%) is calculated as follows:

$$\frac{\text{(# re-enrolled)}}{\text{(# in cohort - # grads)}}$$

Academic Unit	Fall Cohort 2018	Grads Fall 2018	Enrolled Spring 2019	Fall 2018 to Spring 2019 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 18 to Fall 19 Retention
Arts, Film, & Media	31	1	25	83%	4	17	65%
Humanities & Social Sciences	134	12	100	82%	10	67	60%
Education	98	8	71	79%	8	48	59%

Retention Study - Updated November 2019 Final

Business Administration	197	14	136	74%	15	93	55%
Language & Letters	30	0	21	70%	1	11	38%
Math & Physical Science	6	0	6	100%	1	3	60%
Biology, Chemistry, & Environmental Science	114	9	86	82%	8	60	62%
Nursing and Health	172	16	134	86%	7	87	58%
Engineering	103	5	77	79%	5	56	60%
Total (Degree Seeking)	885	65	677	83%	59	442	58%
Total (including Non-Degree Seeking and Dual Credit)	1098	65	758	73%	59	530	54%

Table 5: Fall 2018 Cohort Retention by Academic Unit

Table 6 (a subset of table 5) displays the Fall 2018 cohort retention of students enrolled as first-time freshmen (FTAC).

Academic Unit	Fall Cohort 2018	Grads Fall 2018	Enrolled Spring 2019	Fall 2018 to Spring 2019 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 18 to Fall 19 Retention
Humanities & Social Sciences	20	0	15	75%	0	13	65%
Arts, Film, & Media	11	0	8	73%	0	6	55%
Education	14	0	12	86%	0	7	50%
Business Administration	30	0	20	67%	0	14	47%
Language & Letters	14	0	10	71%	0	5	36%
Math & Physical Science	0	0	0	-	0	0	-
Biology, Chemistry, & Environmental Science	25	0	20	80%	0	14	56%
Nursing and Health	39	0	30	77%	0	21	54%
Engineering	22	0	17	77%	0	9	41%
Total (Degree Seeking)	175	0	132	75%	0	89	51%
Total (including Non-Degree Seeking and Dual Credit)	178	0	133	75%	0	89	50%

Table 6: Fall 2018 Cohort Retention by Academic Unit – First Time Any College (FTAC)

Table 7 is also a subset of Table 8 and displays the Fall cohort retention of non-FTAC students from Fall 2018 to Fall 2019.

Academic Unit	Fall Cohort 2018	Grads Fall 2018	Enrolled Spring 2019	Fall 2018 to Spring 2019 Retention	Grads Spring 2019	Enrolled Fall 2019	Fall 18 to Fall 19 Retention
Arts, Film, & Media	20	1	17	89%	4	11	73%
Education	84	8	59	78%	8	41	60%
Humanities & Social Sciences	114	12	85	83%	10	54	59%
Business Administration	167	14	116	76%	15	79	57%
Language & Letters	16	0	11	69%	1	6	40%
Engineering	81	5	60	79%	5	47	66%
Biology, Chemistry, & Environmental Science	89	9	66	83%	8	46	64%
Math & Physical Science	6	0	6	100%	1	3	60%
Nursing and Health	133	16	104	89%	7	66	60%
Total (Degree Seeking)	710	65	524	81%	59	353	60%
Total (including Non-Degree Seeking and Dual Credit)	920	65	544	64%	59	441	55%

Table 7: Fall 2018 Cohort Retention by Academic Unit – Non-FTAC

IV. Program Retention (Fall 2018 to Fall 2019)

Tables 8 through 10 demonstrate the retention of students within a program. That is, the percentage of students who enter a program in Fall 2018 and reenroll in the same program Fall 2019. Graduates are included in the calculation. Students who are retained at Northern but who move between programs are not included in the number of students retained. Similar to earlier sections the first table in this section contains the analysis for all students in the cohort. Subsequent tables contain information for FTACS followed by Other (non FTACS).

Retention (%) is calculated as follows:

$$\frac{\text{\# re-enrolled}}{\text{\# in cohort} - \text{\# grads}}$$

Academic Unit	Fall Cohort 2018	Graduated Spring 19	Reenrolled Fall 2019 in same program	Fall 2018 to Fall 2019 Program Retention
Humanities & Social Sciences	134	14	60	50%
Business Administration	197	17	88	49%
Arts, Film, & Media	31	3	13	46%
Education	98	8	40	44%
Language & Letters	30	1	8	28%
Math & Physical Science	6	2	3	75%
Biology, Chemistry, & Environmental Science	114	12	53	52%
Engineering	103	6	48	49%
Nursing and Health	172	27	63	43%
Total (Degree Seeking)	885	90	376	47%
Total (including Non-Degree Seeking and Dual Credit)	1098	93	444	44%

Table 9 (a subset of table 8) displays the Fall 2018 program retention of first-time freshmen (FTAC).

Academic Unit	Fall Cohort 2018	Graduated Spring 19	Reenrolled Fall 2019 in same program	Fall 2018 to Fall 2019 Program Retention
Humanities & Social Sciences	20	0	11	55%
Arts, Film, & Media	11	0	5	45%
Business Administration	30	0	13	43%
Education	14	0	5	36%
Language & Letters	14	0	5	36%
Math & Physical Science	0	0	0	-
Biology, Chemistry, & Environmental Science	25	0	11	44%
Nursing and Health	39	0	16	41%
Engineering	22	0	7	32%
Total (Degree Seeking)	175	0	73	42%
Total (including Non-Degree Seeking and Dual Credit)	178	0	73	41%

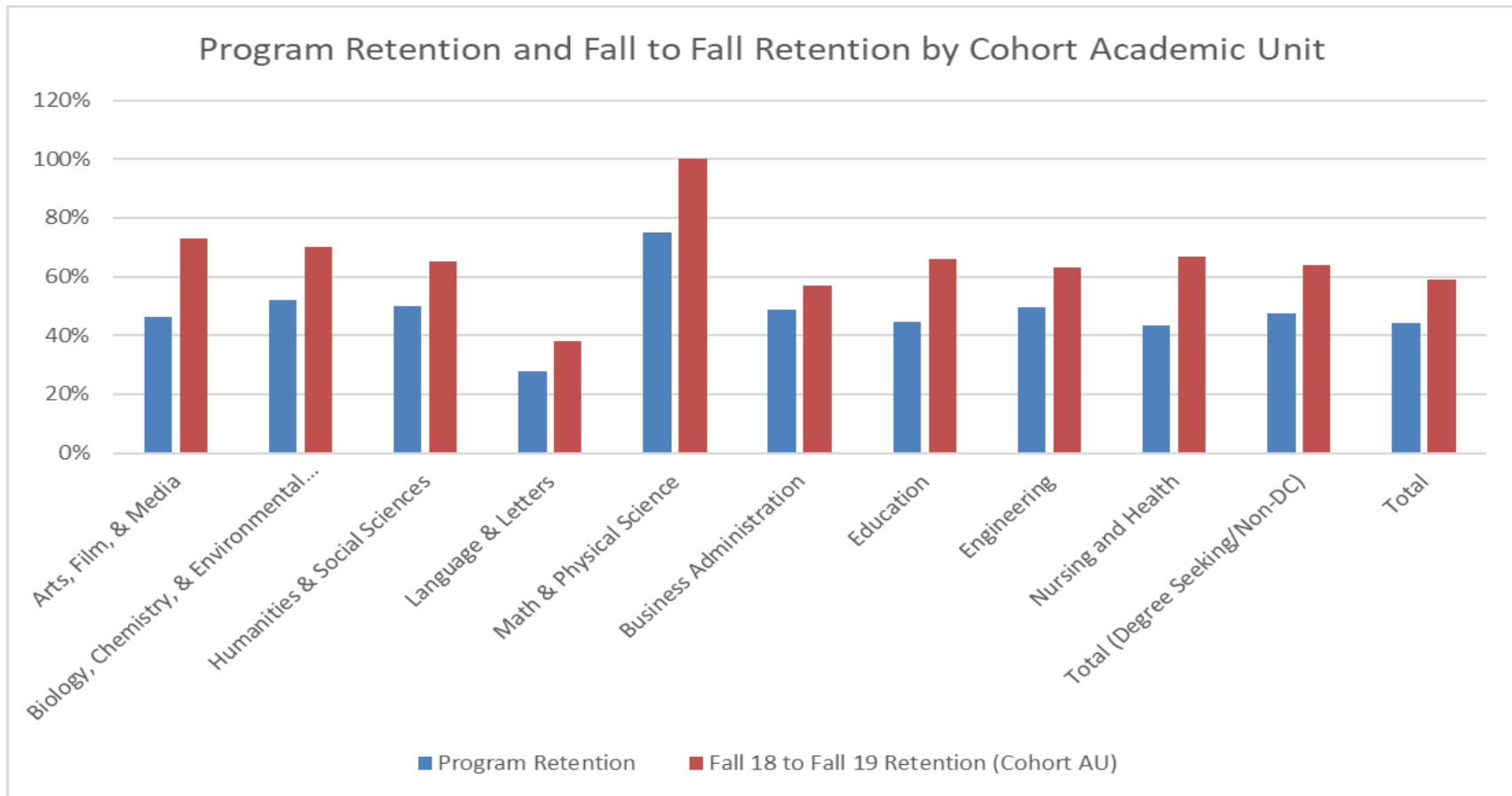
Table 9: Fall 2018 Program Retention for FTAC Students

Table 10 (a subset of table 8) displays the Fall 2018 program retention of students who were not enrolled as first-time freshmen (FTAC).

Academic Unit	Fall Cohort 2018	Graduated Spring 19	Reenrolled Fall 2019 in same program	Fall 2018 to Fall 2019 Program Retention
Business Administration	167	17	75	50%
Humanities & Social Sciences	114	14	49	49%
Arts, Film, & Media	20	3	8	47%
Education	84	8	35	46%
Language & Letters	16	1	3	20%
Math & Physical Science	6	2	3	75%
Biology, Chemistry, & Environmental Science	89	12	42	55%
Engineering	81	6	41	55%
Nursing and Health	133	27	47	44%
Total (Degree Seeking)	710	90	303	49%
Total (including Non-Degree Seeking and Dual Credit)	920	93	371	45%

Table 10: Fall 2018 Program Retention for Non FTAC Students

The final graph is a comparison of the Cohort Retention (Section III) vs Program Retention (Section IV) by academic unit.



Graph 1: Comparison of Cohort Retention vs. Program Retention Fall 18 to Fall 19

Conclusion

It is important to note that these percentages are based on small size n 's and so big percentage gaps should be examined with consideration to the n size.

Retention Study - Updated November 2019 Final

Northern continues to develop and pursue initiatives that will support and improve student retention. In recognition of the need for individualized student support and its contribution to higher retention rates of our students, the College has committed to the support and implementation of numerous, integrated student retention initiatives, including: (1) Campus-wide student advisement that involves professional staff and faculty in supporting students through their first-year; (2) a New Student Orientation program that based on best-practices in campus engagement and student development; and, (3) a strategic enrollment management plan. Through these efforts, Northern is engaged in ongoing analysis and continuous improvement of student satisfaction and engagement.

A majority of our non-traditional students continue to struggle with non-academic issues including, but not limited to, food insecurity, lack of transportation, and lack of internet access at home. Northern is planning to address these non-cognitive factors by establishing a food pantry and a clothing closet. Academically, Northern is planning to adopt the Complete College America strategies starting with changing the course schedule during Fall 2020 to an 8-week cycle so that academic progress can be accelerated. Northern is also starting to implement a degree audit tracker that will allow students and academic advisors to plan a better road map toward completion. Finally, Northern recently opened a peer tutoring initiative with course embedded tutors in high-attrition courses. The tutoring center will complement the math tutoring center and the writing center.