



**University of New Mexico Main Campus**  
**STEM Benchmarking Data**  
**(*Narrow STEM Definition*)**  
**January 2017**

## INTRODUCTION

***The following data has been collected by the UNM Office of Institutional Analytics in cooperation with the UNM STEM collaborative Center. This report is designed to assist UNM faculty and administrators track UNM undergraduate STEM student achievement outcomes over time.***

The UNM STEM Collaborative Center is a five-year initiative funded by the US Department of Education Title V Program. The STEM Collaborative Center seeks to improve STEM education for all UNM undergraduate students, with a high priority placed on improving STEM education for Hispanic and low-income students. For more information on the STEM Collaborative, visit <http://stem.unm.edu>.

The term “STEM” refers to science, technology, engineering, and mathematics disciplines. The specific academic majors and disciplines included within STEM vary. For instance, the National Science Foundation sometimes uses a broad definition that includes health science, economics, and science education. The Department of Homeland Security uses a narrow definition that excludes these areas.

**The data included in this report uses the narrow STEM definition, and includes the majors listed in Appendix A.**

This report was funded by the UNM STEM Collaborative Center. The Collaborative’s charge includes improvement of STEM education for all undergraduate students, with a high priority placed on Hispanic and low-income students. Consequently, this report details achievement for three main cohorts:

- All undergraduate students
- Undergraduate students who are Hispanic and/or come from low-income backgrounds
- Undergraduate students who are NOT Hispanic and/or come from low-income backgrounds

These three cohorts do not provide UNM with a broad enough picture to fully benchmark STEM achievement. Over the next year, the STEM Collaborative and the Office of Institutional Analytics will create a customizable dashboard that will allow users to benchmark data for multiple ethnicities, income levels, and majors (among other variables).

## DEFINITIONS

**General Student Population:** Full-time and part-time undergraduate students who are enrolled in credit-bearing courses delivered from the UNM Main Campus.

**First-Year Students:** Students who are attending college for the first time, either as full-time or part-time students. Students who completed dual credit in high school but who have not yet attended college after high school are included as first-year students. Students who have completed any college credits after graduating from high school are not counted as first-year students.

**STEM Interested Student:** Students who have declared a STEM or pre-STEM major. See Appendix A for list of majors, pre-majors and concentrations.

**Low-Income Student:** Degree seeking students who completed the FAFSA for the specified academic year, and who have an estimated family contribution less than \$5199 for that year. This EFC threshold is an estimate of when students may receive a Pell Grant.

**Hispanic Student:** Student who has self-declared as Hispanic on their application for admission.

**Hispanic and/or Low-Income Students:** Student who fits within either category of Hispanic student or low-income student. For instance, a student who is Hispanic but not low-income fits within the category of Hispanic and/or low-income. A student who is neither Hispanic nor low-income does not fit within this category.

**First-generation Student:** Degree seeking students who completed the FAFSA for the specified academic year, and who indicated that: (1) if from two-parent household, that neither of their parents attended college, or (2) if from one-parent household, that their parent did not attend college.

## **LIMITATIONS**

Ethnicity, income and first generation data rely on student self-reporting. Consequently, these classifications are not independently verified.

Income levels are only reported for students who complete the FAFSA. Students who do not complete the FAFSA are assumed to not fit into the low-income student classification.

STEM interest is defined by student choice of major, pre-major or concentration. Accuracy for this classification is reliant on students updating their selections of majors in a timely fashion.

**PART ONE:**  
**ALL UNDERGRADUATE STUDENTS**  
**(all ethnicities, all income levels)**

## Part One, Section One:

### INTEREST IN STEM

Table 1. First-Year STEM-Interested Students								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of first-year students	3224	3409	3585	3340	3424	3517	3132	3327
Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
Percentage of first-year students interested in STEM	21.90%	20.15%	19.22%	22.99%	25.79%	29.26%	34.23%	32.34%

Table 2. First-Year STEM-Interested Students and Ethnicity								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
Number of first-year STEM-interested students who are <b>Hispanic</b>	260	268	304	349	379	487	515	509
Percentage	36.83%	39.01%	44.12%	45.44%	42.92%	47.33%	48.04%	47.30%
Number of first-year STEM-interested students who are <b>African American</b>	14	21	15	13	21	24	20	21
Percentage	1.98%	3.06%	2.18%	1.69%	2.38%	2.33%	1.87%	1.95%
Number of first-year STEM-interested students who are <b>Asian</b>	32	38	26	46	54	52	73	61
Percentage	4.53%	5.53%	3.77%	5.99%	6.12%	5.05%	6.81%	5.67%
Number of first-year STEM-interested students who are <b>American Indian</b>	47	39	29	40	51	35	28	40
Percentage	6.66%	5.68%	4.21%	5.21%	5.78%	3.40%	2.61%	3.72%
Number of first-year STEM-interested students who are <b>Native Hawaiian</b>	0	0	3	1	1	0	2	2
Percentage	0.00%	0.00%	0.44%	0.13%	0.11%	0.00%	0.19%	0.19%
Number of first-year STEM-interested students who are <b>White</b>	323	280	279	269	314	353	364	376
Percentage	45.75%	40.76%	40.49%	35.03%	35.56%	34.31%	33.96%	34.94%
Number of first-year STEM-interested students who are <b>two or more races</b>	0	0	21	32	46	45	41	37
Percentage	0.00%	0.00%	3.05%	4.17%	5.21%	4.37%	3.82%	3.44%
Number of first-year STEM-interested students who are <b>non-resident alien</b>	9	5	4	8	10	22	23	26
Percentage	1.27%	0.73%	0.58%	1.04%	1.13%	2.14%	2.15%	2.42%
Number of first-year STEM-interested students who are	21	36	8	10	7	11	6	4

<b>race/ethnicity unknown</b>								
Percentage	2.97%	5.24%	1.16%	1.30%	0.79%	1.07%	0.56%	0.37%

**Table 3. Pre-College Academic Preparation and STEM First-Year Students**

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Average high school GPA for first-year students interested in STEM	3.44	3.38	3.46	Not available	3.46	3.46	3.48	3.46
Average ACT composite score for first-year students interested in STEM	23.24	23.71	23.83	23.81	23.52	23.94	23.94	23.72
Average SAT composite score for first-year students interested in STEM	1142.47	1132.73	1198.28	1130.06	1137.41	1141.54	1145.62	1141.77

**Table 4. Financial Aid and STEM First-Year Students**

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Total Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
Number who completed the FAFSA	582	586	614	685	787	910	952	949
Percentage	82.44%	85.30%	89.11%	89.19%	89.13%	88.44%	88.81%	88.20%
Number with EFC < \$5199	220	224	232	282	340	404	406	444
Percentage	31.16%	32.61%	33.67%	36.72%	38.51%	39.26%	37.87%	41.26%
Number who indicated first generation status	112	144	144	168	188	231	228	227
Percentage	15.86%	20.96%	20.90%	21.88%	21.29%	22.45%	21.27%	21.10%



**Table 5. Total Undergraduate Interest in STEM:  
All Undergraduate STEM-Interested Students  
(not restricted to first-year students)**

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of ALL full-time students, not just those interested in STEM	16002	17086	17942	18042	18046	18130	17618	17354
Number of STEM-interested full-time students	3737	3961	4119	4240	4482	4670	4749	4727
Percentage of all full-time students who are interested in STEM	23.35%	23.18%	22.96%	23.50%	24.84%	25.76%	26.96%	27.24%
Number of ALL part-time <i>and</i> full-time students, not just those interested in STEM	20295	21580	22793	23064	23128	23027	22137	21489
Number of STEM-interested part-time <i>and</i> full-time students	4746	4949	5164	5316	5545	5755	5768	5540
Percentage of all part-time and full-time students who are interested in STEM	23.39%	22.93%	22.66%	23.05%	23.98%	24.99%	25.85%	25.78%

**Table 6. Average Cumulative GPA for STEM-Interested Undergraduate Students  
(not restricted to first-year students)**

	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Average Cum GPA for all STEM-interested undergraduate students, based on end of academic year data	3.17489	3.156651	3.13265	3.10637	3.11280	3.11155	3.12658	3.08361

## Part One, Section Two:

### GRADUATION IN STEM

**Table 7. Four-year STEM Graduation for First-Year Students Interested in STEM**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort
Number of first-year STEM-interested students who graduated in STEM within four years	53	69	79	98	127
Percentage of first-year STEM-interested students who graduated in STEM within four years	7.51%	10.04%	11.47%	12.76%	14.38%

**Table 8. Five-year STEM Graduation for First-Year Students Interested in STEM**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort
Number of first-year STEM-interested students who graduated in STEM within five years	133	151	154	185
Percentage of first-year STEM-interested students who graduated in STEM within five years	18.84%	21.98%	22.35%	24.09%

**Table 9. Six-year STEM Graduation for First-Year Students Interested in STEM**

	2008-09 cohort	2009-10 cohort	2010-11 cohort
Number of first-year STEM-interested students who graduated in STEM within six years	213	214	206
Percentage of first-year STEM-interested students who graduated in STEM within six years	30.17%	31.15%	29.90%

## Part One, Section Three:

### RETENTION OF STEM STUDENTS

Table 10. Second Year Retention of First-Year Students Interested in STEM <sup>1</sup>								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of first-year STEM students who returned to UNM for their second year	580	549	550	617	715	833	867	892
Percentage of first-year STEM students who returned to UNM for their second year	82.15%	79.91%	79.83%	80.34%	80.97%	80.95%	80.88%	82.90%

Table 11. Third Year Retention of First-Year Students Interested in STEM <sup>1</sup>							
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15
Number of first-year STEM students who returned to UNM for their third year	499	482	466	539	633	733	767
Percentage of first-year STEM students who returned to UNM for their third year	70.68%	70.16%	67.63%	70.18%	71.69%	71.23%	71.55%

Table 12. Fourth Year Retention of First-Year Students Interested in STEM <sup>1</sup>						
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
Number of first-year STEM students who returned to UNM for their fourth year	465	445	429	507	565	670
Percentage of first-year STEM students who returned to UNM for their fourth year	65.86%	64.77%	62.26%	66.02%	63.99%	65.11%

<sup>1</sup>Retention is defined as students enrolling in credit-bearing courses in the fall of the cohort academic year, and also enrolled in credit-bearing courses in the fall of the subsequent academic year. Retention does not include STEM persistence. For instance, a first-year STEM student who returns the second year as a History major counts as being retained. STEM degree persistence is measured in Section Four.

**Table 13. Full-time Undergraduate STEM Student Return or Graduate Rate<sup>1</sup>**

	Fall 2010	Spring 2011	Fall 2011	Spring 2012	Fall 2012	Spring 2013	Fall 2013	Spring 2014	Fall 2014	Spring 2015	Fall 2015	Spring 2016
Number of full-time STEM undergraduate students at UNM	3457	3209	3576	3374	3791	3560	4076	3692	4227	3765	4276	3739
Number who graduated before next full semester	118	274	107	307	108	290	121	332	98	347	128	337
Number who returned for the next full semester	2802	2370	2952	2506	3146	2699	3416	2737	3553	2819	3583	2806
Total number of returners & gradulators	2920	2644	3059	2813	3254	2989	3537	3069	3651	3166	3711	3143
Percentage of students who returned or graduated	84.5%	82.4%	85.5%	83.4%	85.8%	84.0%	86.8%	83.1%	86.4%	84.1%	86.8%	84.1%

<sup>1</sup>This benchmarking measure is designed to compare cohorts of students of various academic standings (for instance, a cohort that includes first-year students, sophomores, juniors and seniors). To measure the impact of a UNM intervention upon such a cohort, traditional retention measures may not be adequate. For instance, suppose a group of sophomores, juniors and seniors participate together in an undergraduate research project. In measuring the impact of this experience on student persistence, it would be meaningless to look at second-year retention rates, since all of these students are already passed their second years. Similarly, measuring third-year retention rates is inadequate, since some of the students have already passed this point as well. The Return or Graduate rate assumes that it is in the best interest of students to continue their educational careers through graduation. So if the students return the next semester, or if they graduate, then they are making successful progress.

Return or graduate rates are not exclusive to first-time students. They include all undergraduate enrolled students who are interested in STEM. Likewise, return or graduate does not include STEM degree persistence. STEM degree persistence is measured in Section Four.

## Part One, Section Four:

### STEM DEGREE PERSISTENCE

Table 14. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 2 <sup>nd</sup> year								
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort	2015-16 cohort
Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
BEFORE BEGINNING OF SECOND YEAR								
Number who drop out of UNM before their second year	126	138	139	151	168	196	205	184
Percentage who drop out of UNM before their second year	17.85%	20.09%	20.17%	19.66%	19.03%	19.05%	19.12%	17.10%
Number who stayed at UNM, but changed majors out of STEM before their second year	99	106	100	82	104	121	125	125
Percentage who stayed at UNM, but changed majors out of STEM before their second year	14.02%	15.43%	14.51%	10.68%	11.78%	11.76%	11.66%	11.62%
Total Number who dropped or changed major out of STEM before second year	225	244	239	233	272	317	330	309
Percentage who dropped or changed majors out of STEM before second year	31.87%	35.52%	34.69%	30.34%	30.80%	30.81%	30.78%	28.71%

<b>Table 15. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 3<sup>rd</sup> year</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
<b>BEFORE BEGINNING OF THIRD YEAR</b>								
Number who drop out of UNM before their third year	207	205	223	229	250	296	305	NA
Percentage who drop out of UNM before their third year	29.32%	29.84%	32.37%	29.82%	28.31%	28.77%	28.45%	NA
Number who stayed at UNM, but changed majors out of STEM before their third year	226	220	210	189	224	281	282	NA
Percentage who stayed at UNM, but changed majors out of STEM before their third year	32.01%	32.02%	30.48%	24.61%	25.37%	27.31%	26.31%	NA
Total Number who dropped or changed major out of STEM before third year	433	425	433	418	474	577	587	NA
Percentage who dropped or changed majors out of STEM before third year	61.33%	61.86%	62.84%	54.43%	53.68%	56.07%	54.76%	NA

<b>Table 16. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 4<sup>th</sup> year</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year students interested in STEM	706	687	689	768	883	1029	1072	1076
<b>BEFORE BEGINNING OF FOURTH YEAR</b>								
Number who drop out of UNM before their fourth year	241	242	260	261	318	359	NA	NA
Percentage who drop out of UNM before their fourth year	34.14%	35.23%	37.74%	33.98%	36.01%	NA	NA	NA
Number who stayed at UNM, but changed majors out of STEM before their fourth year	288	256	249	247	298	351	NA	NA
Percentage who stayed at UNM, but changed majors out of STEM before their fourth year	40.79%	37.26%	36.14%	32.16%	33.75%	34.11%	NA	NA
Total Number who dropped or changed major out of STEM before fourth year	529	498	509	508	616	710	NA	NA
Percentage who dropped or changed majors out of STEM before fourth year	74.93%	72.49%	73.88%	66.15%	69.76%	69.00%	NA	NA

**PART TWO:**  
**UNDERGRADUATE STUDENTS WHO IDENTIFY AS**  
**HISPANIC AND/OR LOW INCOME**



## Part Two, Section One:

### INTEREST IN STEM

<b>Table 17. First-Year STEM-Interested Students, Hispanic and/or Low-Income</b>								
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
Number of first-year Hispanic and/or low-income students	1816	2061	2375	2238	2232	2384	2105	2314
Number of first-year Hispanic and/or low-income students interested in STEM	374	375	417	467	541	672	692	703
Percentage of Hispanic and/or low-income first-year students interested in STEM	20.59%	18.20%	17.56%	20.87%	24.24%	28.19%	32.87%	30.38%

<b>Table 18. Total Undergraduate Interest in STEM:</b> <b>All Hispanic and/or Low-Income Undergraduate STEM-Interested Students</b> <b>(not restricted to first-year students)</b>								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of ALL full-time Hispanic and low-income students, not just those interested in STEM	9242	10477	11654	12085	12265	12538	12155	11950
Number of STEM-interested full-time Hispanic and low-income students	2071	2332	2541	2689	2867	3032	3079	3029
Percentage of all full-time Hispanic and low-income students who are interested in STEM	22.41%	22.26%	21.80%	22.25%	23.38%	24.18%	25.33%	25.35%
Number of ALL part-time <i>and</i> full-time Hispanic and low-income students, not just those interested in STEM	11755	13282	14886	15530	15852	15972	15462	14879
Number of STEM-interested part-time <i>and</i> full-time Hispanic and low-income students	2650	2948	3210	3401	3564	3764	3762	3574
Percentage of all part-time and full-time Hispanic and low-income students who are interested in STEM	22.54%	22.20%	21.56%	21.90%	22.48%	23.57%	24.33%	24.02%

## Part Two, Section Two:

### GRADUATION IN STEM

**Table 19. Four-year STEM Graduation for First-Year Students Interested in STEM, Hispanic and/or Low-Income Students**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort
Number of first-year STEM-interested Hispanic and low-income students who graduated in STEM within four years	28	25	35	48	61
Percentage of first-year STEM-interested Hispanic and low-income students who graduated in STEM within four years	7.49%	6.67%	8.39%	10.28%	11.28%

**Table 20. Five-year STEM Graduation for First-Year Students Interested in STEM, Hispanic and/or Low-Income Students**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort
Number of first-year STEM-interested Hispanic and low-income students who graduated in STEM within five years	59	56	72	95
Percentage of first-year STEM-interested Hispanic and low-income students who graduated in STEM within five years	15.78%	14.93%	17.27%	20.34%

**Table 21. Six-year STEM Graduation for First-Year Students Interested in STEM, Hispanic and/or Low-Income Students**

	2008-09 cohort	2009-10 cohort	2010-11 cohort
Number of first-year STEM-interested Hispanic and low-income students who graduated in STEM within six years	104	102	94
Percentage of first-year STEM-interested Hispanic and low-income students who graduated in STEM within six years	27.81%	27.20%	22.54%

## Part Two, Section Three:

### RETENTION OF STEM STUDENTS

<b>Table 22. Second Year Retention of First-Year Students Interested in STEM, Hispanic and/or Low-Income Students</b>								
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
Number of first-year STEM-interested Hispanic and low-income students who returned for their second year	298	297	330	366	431	533	558	578
Percentage of first-year STEM-interested Hispanic and low-income students who returned for their second year	79.68%	79.20%	79.14%	78.37%	79.67%	79.32%	80.64%	82.22%

<b>Table 23. Third Year Retention of First-Year Students Interested in STEM, Hispanic and/or Low-Income Students</b>								
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	
Number of first-year STEM-interested Hispanic and low-income students who returned for their third year	247	258	272	308	367	462	489	
Percentage of first-year STEM-interested Hispanic and low-income students who returned for their third year	66.04%	68.80%	65.23%	65.95%	67.84%	68.75%	70.66%	

<b>Table 24. Fourth Year Retention of First-Year Students Interested in STEM, Hispanic and/or Low-Income Students</b>							
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	
Number of first-year STEM-interested Hispanic and low-income students who returned for their fourth year	232	231	247	293	325	410	
Percentage of first-year STEM-interested Hispanic and low-income students who returned for their fourth year	62.03%	61.60%	59.23%	62.74%	60.07%	61.10%	

## Part Two, Section Four:

### STEM DEGREE PERSISTENCE

<b>Table 25. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 2<sup>nd</sup> year, Hispanic and/or Low Income Students</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year Hispanic and low-income students interested in STEM	374	375	417	467	541	672	692	703
<b>BEFORE BEGINNING OF SECOND YEAR</b>								
Number who drop out of UNM before second year	76	78	87	101	110	139	134	134
Percentage who drop out of UNM before second year	20.32%	20.80%	20.86%	21.63%	20.33%	20.68%	19.36%	17.78%
Number who stayed at UNM, but changed majors out of STEM before second year	48	64	70	55	77	89	94	84
Percentage who stayed at UNM, but changed majors out of STEM before second year	12.83%	17.07%	16.79%	11.78%	14.23%	13.24%	13.58%	11.95%
Total number who dropped or changed major before second year	124	142	157	156	187	228	228	218
Percent who dropped or changed major before second year	33.16%	37.87%	37.65%	33.40%	34.57%	33.93%	32.95%	31.01%

<b>Table 26. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 3<sup>rd</sup> year, Hispanic and/or Low Income Students</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year Hispanic and low-income students interested in STEM	374	375	417	467	541	672	692	703
<b>BEFORE BEGINNING OF THIRD YEAR</b>								
Number who drop out of UNM before third year	127	117	145	159	174	210	203	NA
Percentage who drop out of UNM before third year	33.96%	31.20%	34.77%	34.05%	32.16%	31.25%	29.34%	NA
Number who stayed at UNM, but changed majors out of STEM before third year	120	137	137	124	150	200	202	NA
Percentage who stayed at UNM, but changed majors out of STEM before third year	32.09%	36.53%	32.85%	26.55%	27.73%	29.76%	29.19%	NA
Total number who dropped or changed major before third year	247	254	282	283	324	410	405	NA
Percent who dropped or changed major before third year	66.04%	67.73%	67.63%	60.60%	59.89%	61.01%	58.53%	NA

<b>Table 27. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 4<sup>th</sup> year, Hispanic and/or Low Income Students</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year Hispanic and low-income students interested in STEM	374	375	417	467	541	672	692	703
<b>BEFORE BEGINNING OF FOURTH YEAR</b>								
Number who drop out of UNM before fourth year	142	144	170	174	216	262	NA	NA
Percentage who drop out of UNM before fourth year	37.97%	38.40%	40.77%	37.26%	39.93%	38.99%	NA	NA
Number who stayed at UNM, but changed majors out of STEM before fourth year	151	156	156	155	197	252	NA	NA
Percentage who stayed at UNM, but changed majors out of STEM before fourth year	40.37%	41.60%	37.41%	33.19%	36.41%	37.50%	NA	NA
Total number who dropped or changed major before fourth year	293	300	326	329	413	514	NA	NA
Percent who dropped or changed major before fourth year	78.34%	80.00%	78.18%	70.45%	76.34%	76.49%	NA	NA

**PART THREE:**

**UNDERGRADUATE STUDENTS WHO DO NOT IDENTIFY  
AS HISPANIC AND/OR LOW INCOME**



## Part Three, Section One:

### INTEREST IN STEM

Table 28. First-Year STEM-Interested Students, NOT Hispanic and/or Low-Income								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of first-year students who are NOT Hispanic or low-income	1411	1348	1210	1102	1192	1133	1027	1040
Number of first-year students interested in STEM who are NOT Hispanic or low-income	332	312	272	301	342	357	380	373
Percentage of first-year students interested in STEM who are NOT Hispanic or low-income	23.53%	23.15%	22.48%	27.31%	28.69%	31.51%	37.00%	35.87%

<b>Table 29. Total Undergraduate Interest in STEM:</b> <b>Undergraduate STEM-Interested Students who are NOT Hispanic and/or Low-Income</b> <b>(not restricted to first-year students)</b>								
	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16
Number of ALL full-time students who are NOT Hispanic or low-income, not just those interested in STEM	6754	6633	3282	5953	5778	5591	5455	5404
Number of STEM-interested full-time students who are NOT Hispanic or low-income	1666	1628	1578	1551	1615	1638	1661	1697
Percentage of all full-time students who are interested in STEM, and who are NOT Hispanic or low-income	24.67%	24.54%	48.08%	26.05%	27.95%	29.30%	30.45%	31.40%
Number of ALL part-time <i>and</i> full-time students who are NOT Hispanic or low-income, not just those interested in STEM	8532	8292	7900	7529	7271	7053	6846	6608
Number of STEM-interested part-time <i>and</i> full-time students who are NOT Hispanic or low-income	2096	1999	1954	1915	1981	1991	1997	1965
Percentage of all part-time and full-time students who are interested in STEM, and who are NOT Hispanic or low-income	24.57%	24.11%	24.73%	25.43%	27.25%	28.23%	29.17%	29.74%

## Part Three, Section Two:

### GRADUATION IN STEM

**Table 30. Four-year STEM Graduation for First-Year Students Interested in STEM,  
Students are NOT Hispanic and/or Low Income**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within four years	25	44	44	50	66
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within four years	7.53%	14.10%	16.18%	16.61%	19.29%

**Table 31. Five-year STEM Graduation for First-Year Students Interested in STEM,  
Students are NOT Hispanic and/or Low Income**

	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within five years	74	95	82	103
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within five years	22.29%	30.45%	30.15%	34.22%

**Table 32. Six-year STEM Graduation for First-Year Students Interested in STEM,  
Students are NOT Hispanic and/or Low Income**

	2008-09 cohort	2009-10 cohort	2010-11 cohort
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within six years	109	112	89
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who graduated in STEM within six years	32.83%	35.90%	32.72%

## Part Three, Section Three:

### RETENTION OF STEM STUDENTS

<b>Table 33. Second Year Retention of First-Year Students Interested in STEM, Students who are NOT Hispanic and/or Low-Income</b>								
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	<b>2015-16</b>
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their second year	282	252	220	251	284	300	309	314
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their second year	84.94%	80.77%	80.88%	83.39%	83.04%	84.03%	81.32%	84.18%

<b>Table 34. Third Year Retention of First-Year Students Interested in STEM, Students who are NOT Hispanic and/or Low-Income</b>								
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>	<b>2014-15</b>	
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their third year	252	224	194	231	266	271	278	
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their third year	75.90%	71.79%	71.32%	76.74%	77.78%	75.91%	73.16%	

<b>Table 35. Fourth Year Retention of First-Year Students Interested in STEM, Students who are NOT Hispanic and/or Low-Income</b>						
	<b>2008-09</b>	<b>2009-10</b>	<b>2010-11</b>	<b>2011-12</b>	<b>2012-13</b>	<b>2013-14</b>
Number of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their fourth year	233	214	182	214	240	260
Percentage of first-year STEM-interested students who are NOT Hispanic or low-income, and who returned for their fourth year	70.18%	68.59%	66.91%	71.10%	70.18%	72.83%

## Part Three, Section Four:

### STEM DEGREE PERSISTENCE

Table 36. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 2 <sup>nd</sup> year, Students who are NOT Hispanic and/or Low-Income								
	2008-09 cohort	2009-10 cohort	2010-11 cohort	2011-12 cohort	2012-13 cohort	2013-14 cohort	2014-15 cohort	2015-16 cohort
Number of first-year students interested in STEM who are NOT Hispanic or low-income	332	312	272	301	342	357	380	370
BEFORE BEGINNING OF SECOND YEAR								
Number who drop out of UNM before second year	50	60	52	50	58	57	71	59
Percentage who drop out of UNM before second year	15.06%	19.23%	19.12%	16.61%	16.96%	15.97%	18.68%	15.82%
Number who stayed at UNM, but changed majors out of STEM before second year	51	42	30	27	27	32	31	32
Percentage who stayed at UNM, but changed majors out of STEM before second year	15.36%	13.46%	11.03%	8.97%	7.89%	8.96%	8.16%	8.58%
Total number who dropped or changed major before second year	101	102	82	77	85	89	102	91
Percent who dropped or changed major before second year	30.42%	32.69%	30.15%	25.58%	24.85%	24.93%	26.84%	24.40%

<b>Table 37. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 3<sup>rd</sup> year, Students who are NOT Hispanic and/or Low-Income</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year students interested in STEM who are NOT Hispanic or low-income	332	312	272	301	342	357	380	380
<b>BEFORE BEGINNING OF THIRD YEAR</b>								
Number who drop out of UNM before third year	80	88	78	70	76	86	102	NA
Percentage who drop out of UNM before third year	24.10%	28.21%	28.68%	23.26%	22.22%	24.09%	NA	NA
Number who stayed at UNM, but changed majors out of STEM before third year	106	83	73	65	74	81	80	NA
Percentage who stayed at UNM, but changed majors out of STEM before third year	31.93%	26.60%	26.84%	21.59%	21.64%	22.69%	21.05%	NA
Total number who dropped or changed major before third year	186	171	151	135	150	167	182	NA
Percent who dropped or changed major before third year	56.02%	54.81%	55.51%	44.85%	43.86%	46.78%	47.90%	NA

<b>Table 38. First-Year STEM Students Dropping Out of UNM and/or Switching Out of STEM, before 4<sup>th</sup> year, Students who are NOT Hispanic and/or Low-Income</b>								
	<b>2008-09 cohort</b>	<b>2009-10 cohort</b>	<b>2010-11 cohort</b>	<b>2011-12 cohort</b>	<b>2012-13 cohort</b>	<b>2013-14 cohort</b>	<b>2014-15 cohort</b>	<b>2015-16 cohort</b>
Number of first-year students interested in STEM who are NOT Hispanic or low-income	332	312	272	301	342	357	380	380
<b>BEFORE BEGINNING OF FOURTH YEAR</b>								
Number who drop out of UNM before fourth year	99	98	90	87	102	97	NA	NA
Percentage who drop out of UNM before fourth year	29.82%	31.41%	33.09%	28.90%	29.82%	27.17%	NA	NA
Number who stayed at UNM, but changed majors out of STEM before fourth year	113	87	81	77	82	98	NA	NA
Percentage who stayed at UNM, but changed majors out of STEM before fourth year	34.04%	27.88%	29.78%	25.58%	23.98%	27.45	NA	NA
Total number who dropped or changed major before fourth year	212	185	171	164	184	195	NA	NA
Percent who dropped or changed major before fourth year	63.86%	59.29%	62.87%	54.49%	53.80%	54.62%	NA	NA

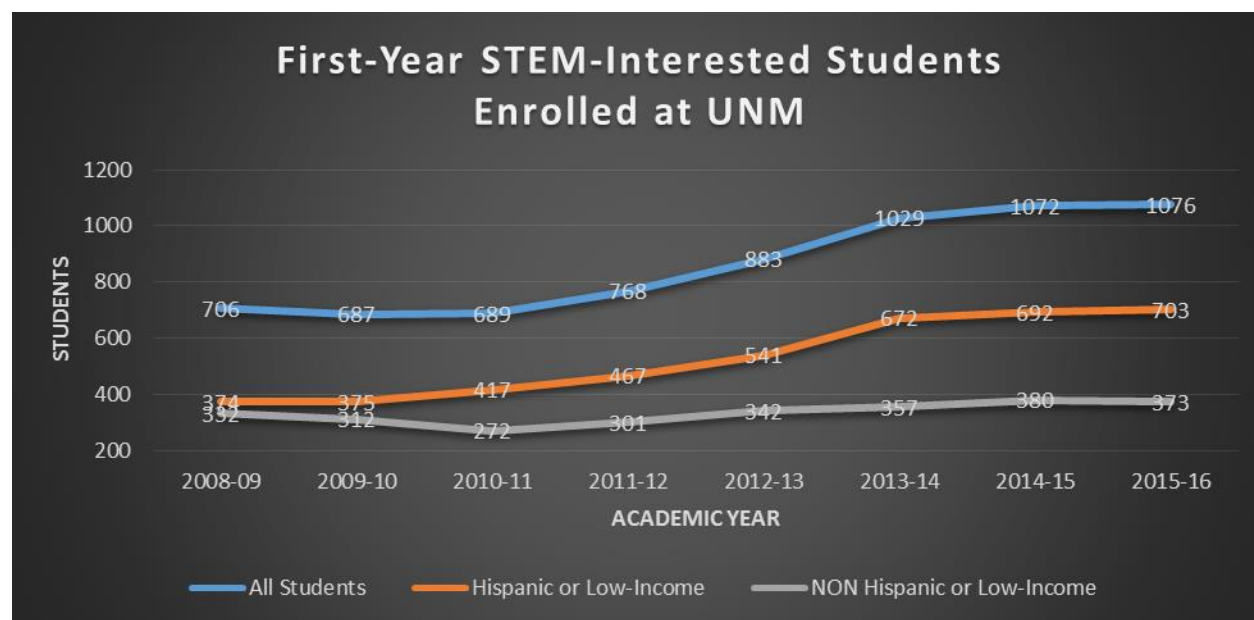


## **PART FOUR:**

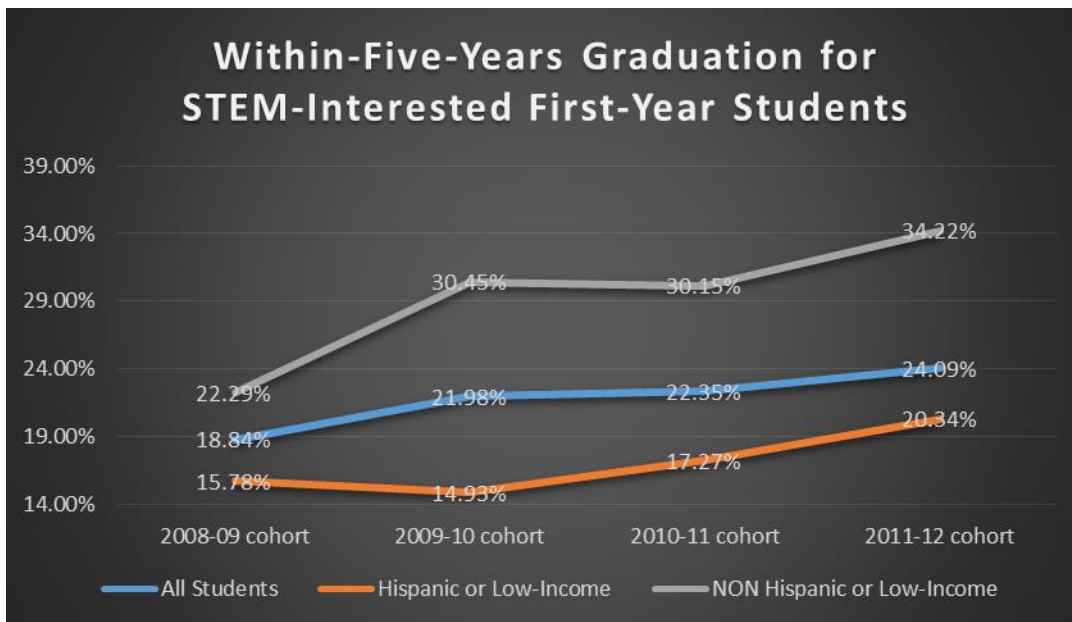
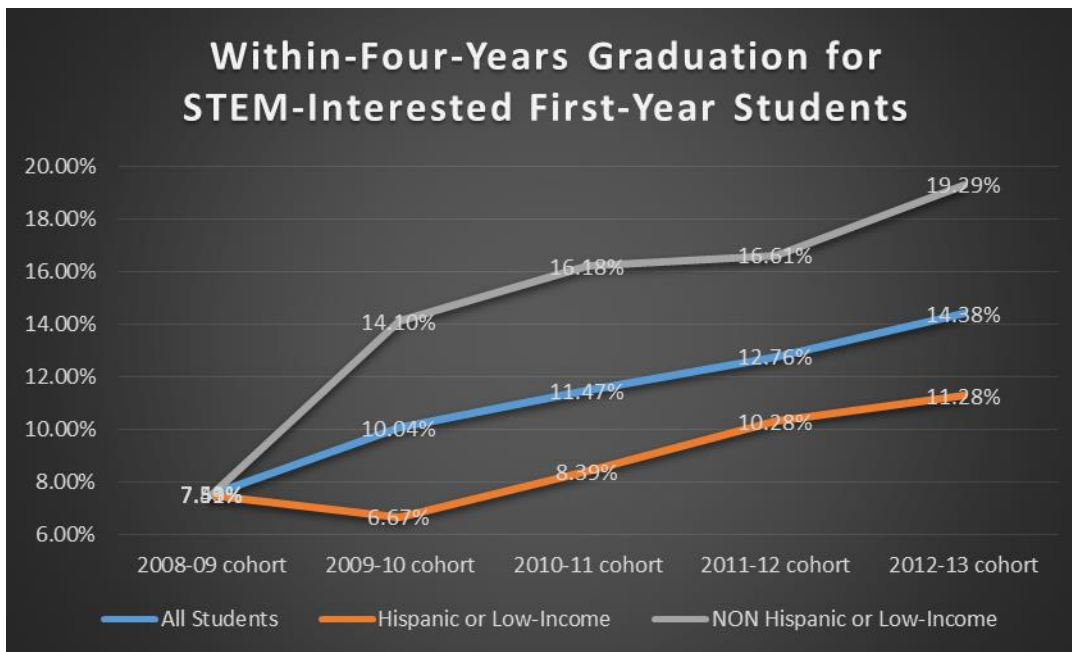
# **Achievement Gap Charts**

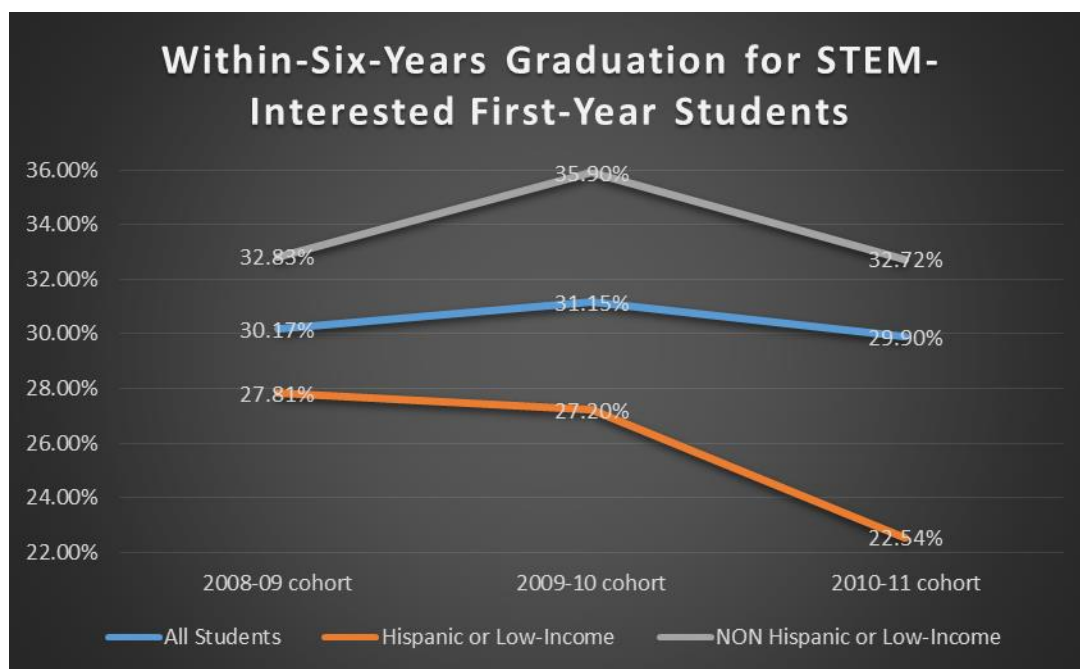
The following charts were created using data from the charts in Parts One, Two and Three. They illustrate selected longitudinal trends related to gaps in achievement between the three cohorts of students.

## Part Four, Section One: INTEREST IN STEM



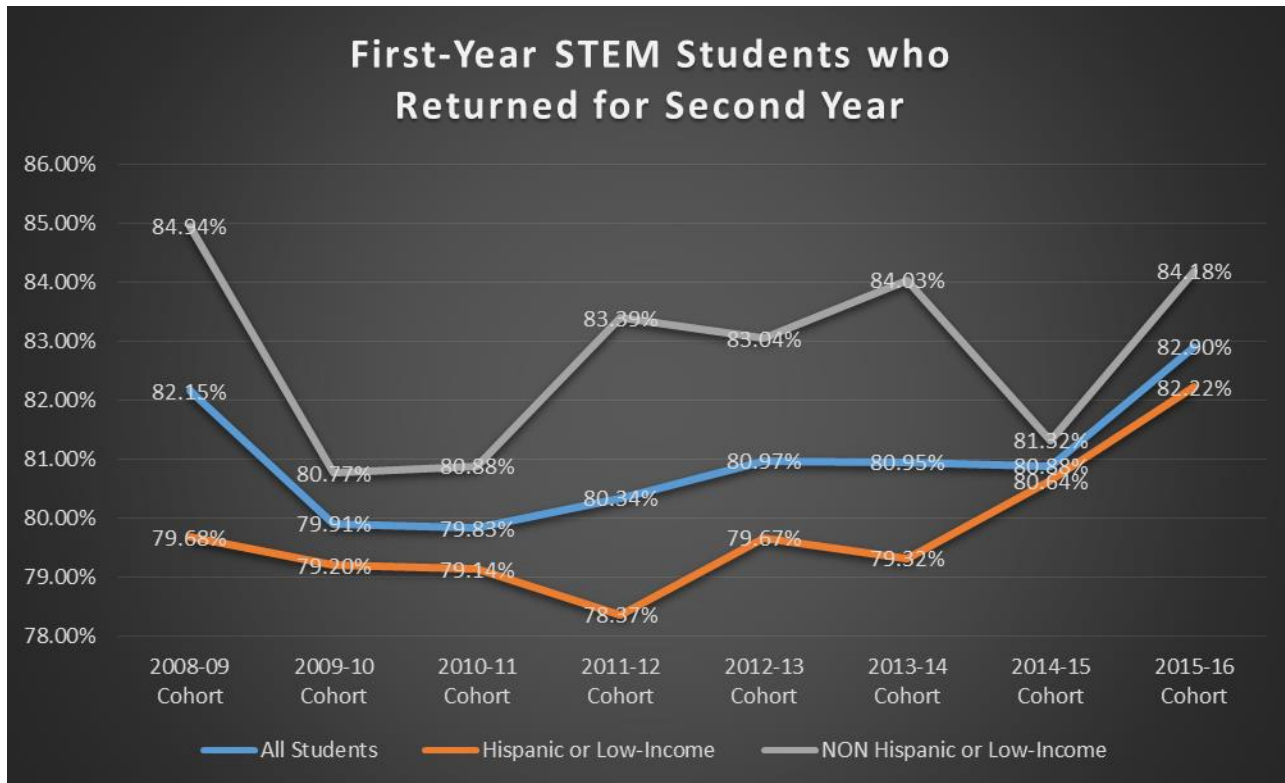
## Part Four, Section Two: GRADUATION IN STEM

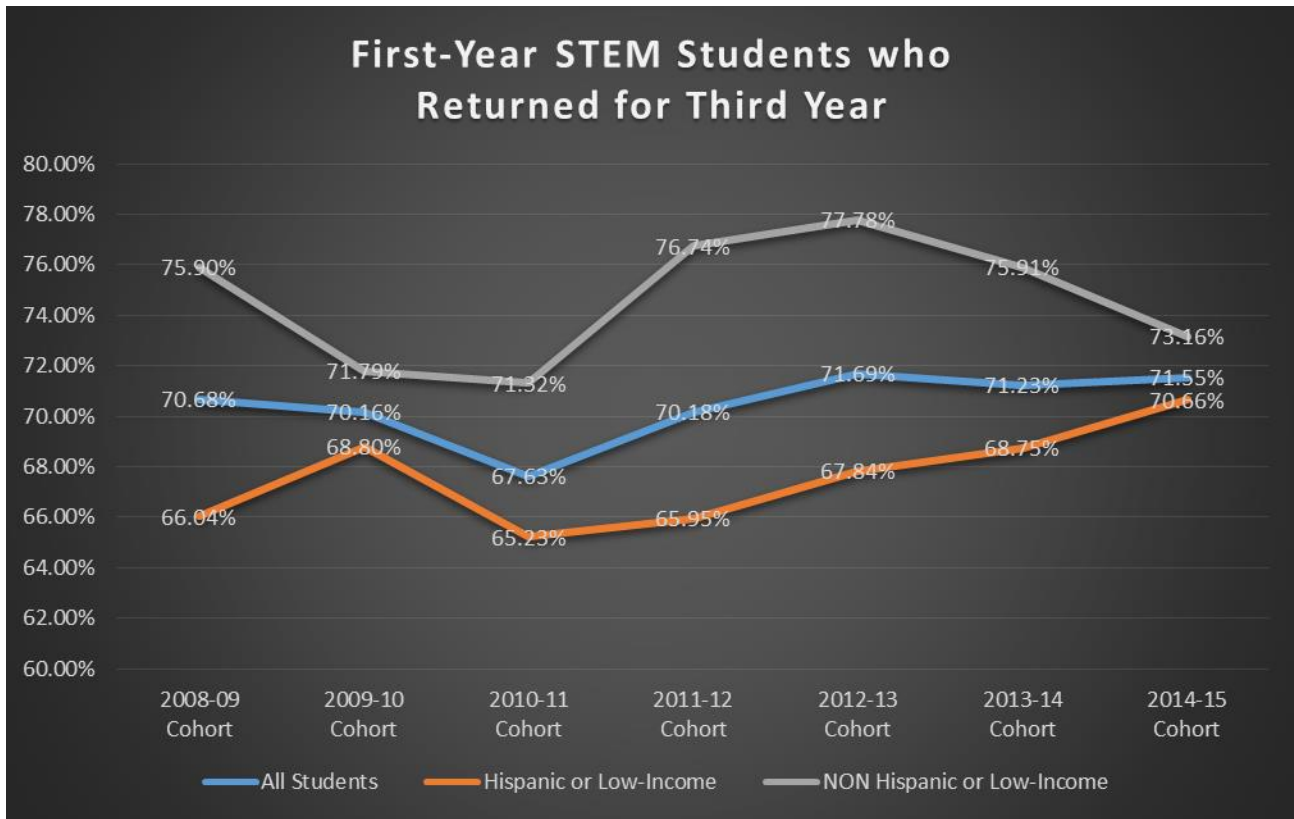


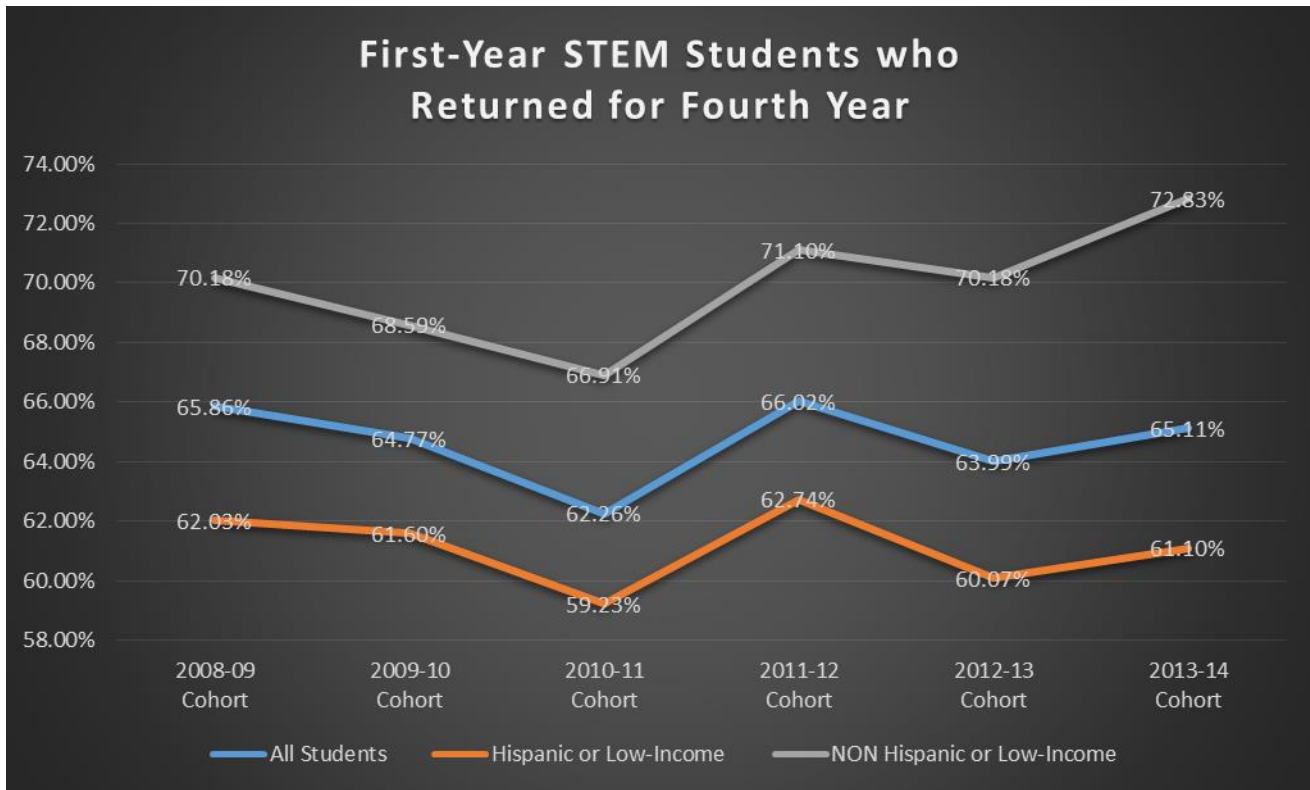


## Part Four, Section Three:

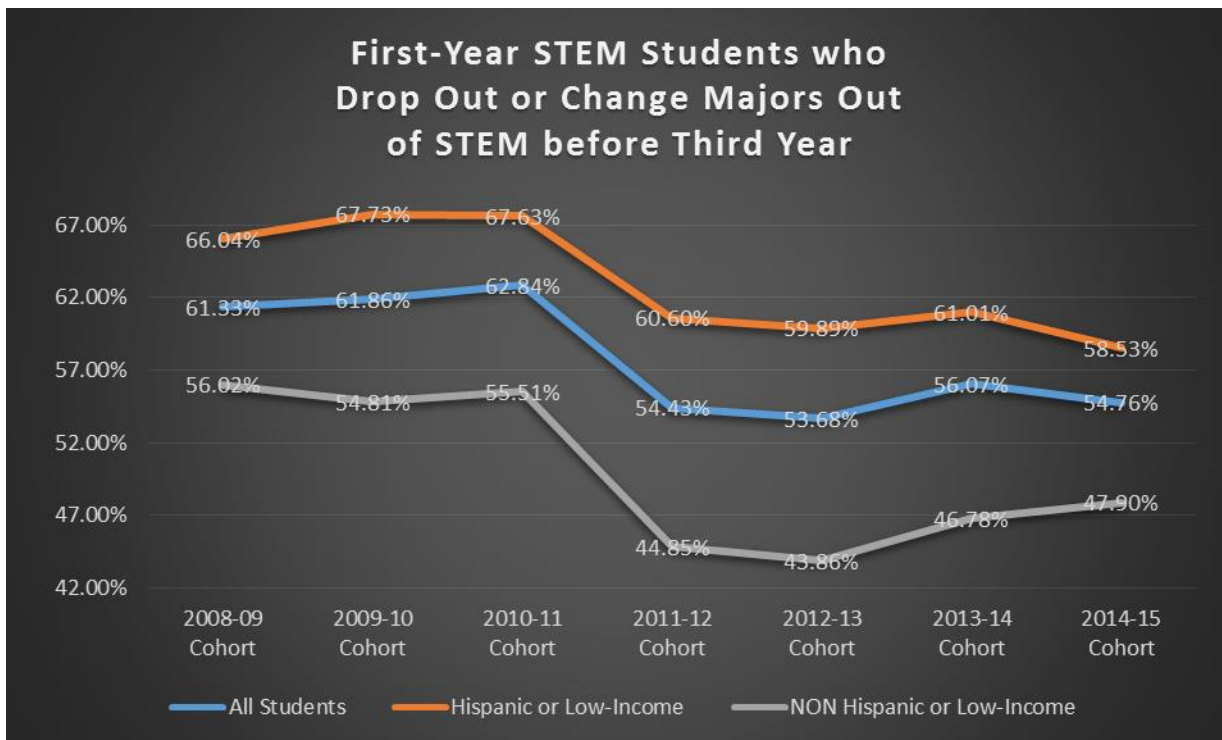
### RETENTION OF STEM STUDENTS







## Part Four, Section Four: STEM DEGREE PERSISTENCE





# **APPENDIX A:**

## **STEM Degree Majors**

Major Description	Major Code
Astrophysics	ASPH
Biochemistry	BIOC
Biology	BIOL
Chemical Engineering	CHE
Chemistry	CHEM
Civil Engineering	CE
Computer Engineering	CPE
Computer Science	CS
Construction Engineering	CONE
Construction Management	CONM
Earth & Planetary Sciences	EPS
Electrical Engineering	EE
Environmental Science	ENSC
General Engineering	GENG
Mathematics	MATH
Mechanical Engineering	ME
Nuclear Engineering	NE
Physics	PHYC
Pre Anthropology	FANT
Pre Biochemistry	FBIC
Pre Biology	FBIO
Pre Chemical Engineering	FCH
Pre Chemistry	FCHM
Pre Civil Engineering	FCE
Pre Computer Engineering	FCP
Pre Computer Science	FCS
Pre Construction Engineering	FCOE
Pre Construction Management	FCON
Pre Earth & Planetary Sciences	FEPS
Pre Electrical Engineering	FEE
Pre Environmental Science	FESC
Pre Mathematics	FMAT
Pre Mechanical Engineering	FME
Pre Nuclear Engineering	FNE
Pre Physics	FPHY
Pre Statistics	FSTA
Statistics	STAT