

# Market Analysis for a Bachelor's in Education

Prepared for Clarion University of Pennsylvania

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In the following report, Hanover Research assesses the market for a bachelor's in education at Clarion University of Pennsylvania by examining degree completions data, labor market projections, and existing programs in the region.

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# EXECUTIVE SUMMARY AND KEY FINDINGS

## INTRODUCTION

In this report, Hanover Research assesses the market for a bachelor's in education at Clarion University of Pennsylvania. Drawing on historical degree conferral data and long-term labor market projections, we evaluate trends in student and employer demand for programs designed to prepare individuals for a career in teaching. This report comprises three main sections:

- **Section I: Student Demand for Education Programs** evaluates potential student demand for a program in education by examining recent bachelor's degree completions. This section examines degree conferral trends nationwide, as well as trends in Pennsylvania and bordering states, with an eye towards male students, transfer students, online students, and veterans/military service personnel.
- **Section II: Labor Market Analysis** considers the employment outlook for teaching occupations. As with degree conferrals, this section examines trends nationwide, as well as trends in Pennsylvania and bordering states.
- **Section III: Competitor Profiles** identifies potential competitors by examining institutions that offer a bachelor's in education, including regional universities and programs focused on specific high growth concentrations.

## KEY FINDINGS

- **The most promising concentrations for a bachelor's in education are early childhood education, special education, and bilingual and multilingual education.** These majors report growth in degree completion numbers over the last five years and are also high-demand majors in the state of Pennsylvania, according to the United States Department of Education.
- **Majors such as elementary education, physical education, and general education are also still in high demand.** Physical education in particular is a popular choice for male students. Other concentrations for which teacher shortages currently exist in Pennsylvania include chemistry, mathematics, and Spanish.
- **The most popular majors for male students by overall headcount include physical education, elementary education, and secondary education.** Other majors with high proportions of male students and high compound annual growth rates include social studies teacher education, technical teacher education, and physics teacher education.
- **Employment for teachers is projected to grow in line with the broader economy.** From 2012 to 2022, the number of individuals in teaching positions will increase by 10.1 percent, compared to projected growth of 10.8 percent for all occupations. Preschool teachers, both special education and non-special education, will increase

at higher rates, between 16 and 17 percent. Growth is projected to be lower in Pennsylvania but the Pennsylvania labor market data are two years older than the national data and may not reflect the latest conditions.

- **An institution can employ a number of practices to attract and support veteran students.** For example, networking opportunities, community building, and policies specifically for veterans can be helpful. Accommodation for veteran-specific health and mental health issues, such as peer groups and trained counselors and staff, can create a welcoming environment for veterans.
- **The bachelor in education concentrations most commonly offered through distance education include:** elementary education and teaching, early childhood education and teaching, special education and teaching, general education, and religious education. In the state of Pennsylvania, Drexel University already operates an online bachelor's in education program specifically targeted at the degree completion market.
- **Potential competitor programs profiled for this report have the following qualities:**
  - Programs typically require 120-130 credits, which include general education requirements, pedagogical coursework, and practical coursework.
  - Field experience is generally required, such as student teaching. Special education programs may also require interaction with students with disabilities during the program. These experiences are often separate from the practical coursework.
  - Programs do not grant teaching licensure. Rather, they encourage students to take licensure exams during the program and, upon completion of the degree and the exams, students will be licensed. This also allows flexibility for students from out-of-state.
  - Some programs, such as the Boston University Bachelor of Science in Social Studies Education, offer several specializations, such as specific areas of study or degree paths tailored to special education or teaching English as a second language.
  - Programs appear to translate well to an online format, provided they account for field work requirements needed for state licensure. Some institutions, such as Drexel University, work with students for out-of-state field placements.

## SECTION I: STUDENT DEMAND FOR EDUCATION PROGRAMS

In this section, Hanover estimates potential student demand for a bachelor's program in education by examining current trends and analyzing degree completions data obtained from the National Center for Education Statistics (NCES).

### THE CONTINUING TEACHER SHORTAGE

For over a decade, experts have cited increasing student enrollments, smaller class sizes, and looming baby boomer teacher retirements as the reasons for a teacher shortage that has no end in sight.<sup>1</sup> However, a number of issues complicate the teacher shortage:<sup>2</sup>

- Many states do not have the budget to attract high numbers of new teachers and many of the most in-demand areas, such as math and science, require the highest teacher salaries.
- Data on the overall growth in the public school workforce can be misleading, as that workforce also includes administrators, counselors, librarians, nurses, aides, and custodians.
- Many districts experience high turnover, so the need for teachers is predicated on retaining them as much or more than attracting them. For example, on average, about 55 percent of new public school teachers leave their district within five years. This rate is even higher in low income districts.
- Shortages are not evenly distributed. Low income school districts face greater challenges in attracting and retaining teachers.

The distribution of teachers presents a particularly difficult problem, as it is challenging to attract teachers to geographic areas or teaching subjects that are viewed as less desirable. The federal government is attempting to combat this by designating areas with particular need as “teacher shortage areas.” For individuals who teach in these areas, additional financial aid programs are available. For instance, federal Perkins Loan borrowers who teach mathematics, science, foreign languages, bilingual education, or other fields with a designated shortage can “qualify for cancellation of up to 100 percent of their loan.”<sup>3</sup>

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<sup>1</sup> Voke, H. “Chapter 1. Responding to the Teacher Shortage, Keeping Good Teachers.” ASCD.

<http://www.ascd.org/publications/books/104138/chapters/Responding-to-the-Teacher-Shortage.aspx>

<sup>2</sup> Gardner, W. “A Closer Look at the Teacher Shortage.” Education Week. July 18, 2012.

[http://blogs.edweek.org/edweek/walt\\_gardners\\_reality\\_check/2012/07/a\\_closer\\_look\\_at\\_the\\_teacher\\_shortage.html](http://blogs.edweek.org/edweek/walt_gardners_reality_check/2012/07/a_closer_look_at_the_teacher_shortage.html)

<sup>3</sup> “Teacher Shortage Areas Nationwide Listing 1990-1991 through 2014-2015.” U.S. Department of Education Office of Postsecondary Education. March 2014. P. 1. <http://www2.ed.gov/about/offices/list/ope/pol/tsa.pdf>

In Pennsylvania, there are numerous high-need areas where the teacher shortage is critical. According to the Department of Education, the state of Pennsylvania has a current shortage of teachers in the following subject areas.<sup>4</sup>

**Figure 1.1: Pennsylvania Statewide Teacher Shortage, Academic Areas**

2014-2015 STATEWIDE ACADEMIC DISCIPLINES	
Chemistry	Building Maintenance
English as a Second Language	Business Related
Hearing Impaired (Pre-Kindergarten – Grade 12)	Carpentry
Mathematics (Grades 7 -12)	Electronic
Spanish	Health/Dental
Speech and Language Impaired (Pre-Kindergarten – Grade 12)	Masonry
Special Education (Pre-Kindergarten – Grade 12)	ROTC

Source: Department of Education<sup>5</sup>

The Department of Education also identifies several geographic locations with high need in Pennsylvania, as depicted in Figure 1.2.

**Figure 1.2: Pennsylvania Statewide Teacher Shortage, Geographic Areas**

GEOGRAPHIC REGIONS	
School Districts	Intermediate Units
Erie City	Intermediate Unit 3 – Allegheny
Harrisburg City	Intermediate Unit 8 – Appalachian
Keystone Central	Intermediate Unit 9 – Seneca Highland
Lancaster	Intermediate Unit 12 – Lincoln
Philadelphia City	Intermediate Unit 13 - Lancaster-Lebanon
Reading	Intermediate Unit 14 – Berks County
Warren County	Intermediate Unit 21 - Carbon Lehigh
William Penn School	Intermediate Unit 24 - Chester County
-	Intermediate Unit 25 – Delaware County
Schools	
Antonia Pantoja Community Charter School	Northumberland County Career and Technology Center
Cumberland Perry Area Vocational Technical School	Vista School
Delaware County Technical High School	Walter D. Palmer Leadership Learning
Devereux Leo Kanner Learning Center	Partners Charter School
Easter Seals of Southeastern Pennsylvania	Western Pennsylvania School for the Deaf
Independence Charter School	Woods Services
Lancaster County Career and Technical Center	Wordsworth Academy
Lehigh Career and Technical Institute	York County School of Technology
Mastery Charter School-Pickett Campus	-

Source: Department of Education<sup>6</sup>

<sup>4</sup> Ibid, 122.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

Thus, there are many subjects and districts in need in Clarion University's geographic area. The following section details the national and regional demand from students for bachelor's degrees in education.

## STUDENT DEMAND METHODOLOGY

Hanover Research uses student completions data from the National Center for Education Statistics (NCES) to analyze current trends in student demand. The NCES uses a taxonomic system of numeric codes to classify higher education academic programs; these codes are called the Classification of Instructional Programs, or CIP.<sup>7</sup>

All higher education institutions nationwide submit degree completions data to the NCES's Integrated Postsecondary Education Data System (IPEDS). These data are classified by CIP code and academic award level. The completions data analyzed in this report were drawn from IPEDS.<sup>8</sup> In considering these data, it should be noted that institutions classify their programs independently, meaning that two programs that are identical in all respects could hypothetically be classified under different CIP codes, which can skew trends.

Year-to-year trends in degree completions are analyzed in terms of Compound Annual Growth Rate (CAGR), Average Annual Change (AAC), and Standard Deviation (STDEV):

- CAGR reflects the percentage growth that would occur each year if the same change occurred yearly between the first year and the final year. This measure offers an impression of a theoretical, steady growth rate by ignoring data presented during the middle years.
- AAC is determined by calculating the average numerical year-to-year difference, allowing for a better gauge of annual fluctuations.
- STDEV highlights the variation or "dispersion" that exists from the AAC. It provides a metric to understand variance between the AAC and the actual year-to-year change.

Utilizing all three metrics allows measurement not only of the magnitude of completions growth, but also the consistency of growth over time. Note that the three metrics are calculated only when data for all five years are present, so as not to misrepresent trends.

All data are for the academic year ending in the year indicated in the table. Additionally, a "-" alone in a cell indicates that no data were reported by any institution for that year, CIP code, and award level.

Hanover includes all education-related CIP classifications in this report. Note that Hanover eliminated from **the top majors by CAGR** figures in this section any CIP classifications that had:

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<sup>7</sup> For more information, see "CIP 2010." Integrated Postsecondary Education Data System. National Center for Education Statistics. <http://nces.ed.gov/ipeds/cipcode/Default.aspx?y=55>

<sup>8</sup> "Integrated Postsecondary Education Data System," Op. cit.

- Nationally: Fewer than 50 conferrals in 2012,
- Regionally: Fewer than 20 conferrals in 2012, and
- Statewide: Fewer than 10 conferrals in 2012.

This is to eliminate CIP classifications that would not lead to a conclusive discussion. A full list of degree completions can be found in the Appendix of this report.

The completions data below include the education-related CIP classifications with the highest growth rates and those with the highest headcount. Information is presented at the national, regional, and state level for the CIP codes of interest. The Appendix includes completions data for all CIP classifications examined for this report.

The regional data includes completion statistics for Delaware, Maryland, New Jersey, New York, Ohio, Pennsylvania, and West Virginia. Hanover also outlines completions data specific to the state of Pennsylvania.

## **NATIONAL DEGREE COMPLETIONS**

Nationwide conferral data suggest that, overall, student demand for education bachelor's degrees has remained essentially flat in recent years. Between 2008 and 2012, bachelor's conferrals increased by 0.3 percent across all educational CIP classifications examined for this report (see Appendix).

Some specific education specializations, however, saw a more rapid increase in bachelor's completions over this period, as shown in the following figures, which present the top 10 majors by CAGR and headcount for all students, as well as the top majors by percentage and overall numbers of male students.

The highest growing CIP classifications across all education-related fields are 13.1015 – Education/Teaching of Individuals in Early Childhood Special Education Programs and 13.0201 – Bilingual and Multilingual Education. Note that these majors do not overlap with the top majors by headcount, which are more standard educational specialties, such as elementary education, early childhood education, physical education, and special education. Among the top 10 majors by headcount, 13.1210 – Early Childhood Education and Teaching and 13.0101 – Education, General are growing fastest.



**Figure 1.3: Top 10 Majors by CAGR, National**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	72	111	105	166	236	34.6%	41	29.4
13.0201 Bilingual and Multilingual Education	178	393	415	431	415	23.6%	59	91.1
13.1007 Education/Teaching of Individuals with Multiple Disabilities	116	78	121	155	176	11.0%	15	31.6
13.1301 Agricultural Teacher Education	455	499	528	556	655	9.5%	50	29.0
13.1329 Physics Teacher Education	48	53	38	44	62	6.6%	4	11.8
13.1210 Early Childhood Education and Teaching	9,521	9,765	10,186	11,287	12,162	6.3%	660	343.1
13.1323 Chemistry Teacher Education	78	68	71	84	99	6.1%	5	9.9
13.0101 Education, General	2,798	2,950	3,066	3,425	3,541	6.1%	186	101.1
13.1319 Technical Teacher Education	253	263	251	267	304	4.7%	13	17.5
13.1325 French Language Teacher Education	61	72	68	58	72	4.2%	3	10.0

Source: IPEDS

**Figure 1.4: Top 10 Majors by 2012 Headcount, National**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1202 Elementary Education and Teaching	43,410	42,628	41,649	41,288	40,387	-1.8%	-756	238.5
13.1210 Early Childhood Education and Teaching	9,521	9,765	10,186	11,287	12,162	6.3%	660	343.1
13.1314 Physical Education Teaching and Coaching	9,521	9,664	9,277	9,168	9,047	-1.3%	-119	187.5
13.1001 Special Education and Teaching, General	6,962	7,134	7,377	7,515	8,073	3.8%	278	166.2
13.1205 Secondary Education and Teaching	4,564	4,495	4,241	4,203	4,474	-0.5%	-23	188.5
13.1312 Music Teacher Education	3,429	3,717	3,951	4,017	3,913	3.4%	121	153.5
13.0101 Education, General	2,798	2,950	3,066	3,425	3,541	6.1%	186	101.1
13.1305 English/Language Arts Teacher Education	2,898	2,759	2,674	2,873	2,984	0.7%	22	138.4
13.1203 Junior High/Intermediate/Middle School Education and Teaching	2,747	2,706	2,645	2,857	2,958	1.9%	53	111.1
13.1311 Mathematics Teacher Education	2,144	2,111	2,252	2,249	2,438	3.3%	74	93.7

Source: IPEDS

Across all education majors nationally, men made up approximately 20 percent of the bachelor's degree completions between 2008 and 2012. Thus, majors in which male students accounted for over 50 percent of completions can be considered to have a particularly strong draw for men. Nationally, these include 13.1309 – Technology Teacher Education/Industrial Arts Teacher Education, 13.0403 – Adult and Continuing Education Administration, and 13.1329 – Physics Teacher Education, all of which are disproportionately male. The highest overall male headcounts are in physical education teaching, elementary education and teaching, and secondary education and teaching. Note that 13.1314 – Physical Education Teaching and Coaching is both the highest number of males and a highly disproportionately male major, suggesting that it is may be a good choice for an education major that would appeal to men.

**Figure 1.5: Top 10 Male Majors by Percentage, National**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	3,101	2,542	-2.4%	82%
13.1329 Physics Teacher Education	245	162	6.6%	66%
13.1320 Trade and Industrial Teacher Education	5,405	3,493	-9.1%	65%
13.1314 Physical Education Teaching and Coaching	46,677	27,232	-1.3%	58%
13.1328 History Teacher Education	4,506	2,573	-4.6%	57%
13.1318 Social Studies Teacher Education	10,789	6,097	-1.8%	57%
13.1332 Geography Teacher Education	50	28	-14.5%	56%
13.1319 Technical Teacher Education	1,338	739	4.7%	55%
13.1337 Earth Science Teacher Education	94	49	--	52%
13.1317 Social Science Teacher Education	3,164	1,647	-0.7%	52%

Source: IPEDS

**Figure 1.6: Top 10 Male Majors by Overall Headcount, National**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1314 Physical Education Teaching and Coaching	46,677	27,232	-1.3%	58%
13.1202 Elementary Education and Teaching	209,362	18,880	-1.8%	9%
13.1205 Secondary Education and Teaching	21,977	8,781	-0.5%	40%
13.1312 Music Teacher Education	19,027	7,753	3.4%	41%
13.1318 Social Studies Teacher Education	10,789	6,097	-1.8%	57%
13.1001 Special Education and Teaching, General	37,061	3,848	3.8%	10%
13.1311 Mathematics Teacher Education	11,194	3,704	3.3%	33%
13.1320 Trade and Industrial Teacher Education	5,405	3,493	-9.1%	65%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	13,913	3,147	1.9%	23%
13.1305 English/Language Arts Teacher Education	14,188	2,936	0.7%	21%

Source: IPEDS

## REGIONAL DEGREE COMPLETIONS

Regionally, the fastest growing major is 13.1015 – Education/Teaching of Individuals in Early Childhood Special Education Programs. In spite of overall smaller numbers, this major has expanded from only 19 students in 2008 to 143 in 2012, presenting a CAGR of almost 66 percent. Note that 13.1312 – Music Teacher Education has grown at a rate of 6.6 percent since 2008 and is a well-established, larger major.

**Figure 1.7: Top 10 Majors by CAGR, Regional**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	19	32	42	91	143	65.6%	31.0	19.6
13.1007 Education/Teaching of Individuals with Multiple Disabilities	21	15	15	65	81	40.1%	15.0	21.7
13.1329 Physics Teacher Education	14	17	12	18	25	15.6%	2.8	4.7
13.1323 Chemistry Teacher Education	20	12	21	23	27	7.8%	1.8	6.2
13.1319 Technical Teacher Education	58	55	62	64	78	7.7%	5.0	6.3
13.1325 French Language Teacher Education	18	24	18	22	24	7.5%	1.5	4.6
13.1099 Special Education and Teaching, Other	171	158	139	152	222	6.7%	12.8	35.2
13.1312 Music Teacher Education	913	1,187	1,225	1,242	1,181	6.6%	67.0	125.1
13.1301 Agricultural Teacher Education	57	47	49	60	69	4.9%	3.0	8.2
13.1206 Teacher Education, Multiple Levels	360	331	449	468	427	4.4%	16.8	62.6

Source: IPEDS

Regional majors with the overall highest headcount are similar to those at the national level. Among those in the top 10, music teacher education again seems to be a particularly promising major, as it demonstrates high growth that the others in the top 10 lack.

**Figure 1.8: Top 10 Majors by 2012 Headcount, Regional**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1202 Elementary Education and Teaching	8,465	8,230	8,011	8,006	7,877	-1.8%	-147.0	91.4
13.1001 Special Education and Teaching, General	2,594	2,534	2,753	2,484	2,438	-1.5%	-39.0	173.2
13.1210 Early Childhood Education and Teaching	1,936	1,887	1,951	1,938	2,185	3.1%	62.3	114.2
13.1314 Physical Education Teaching and Coaching	1,896	1,738	1,651	1,718	1,700	-2.7%	-49.0	83.3
13.1312 Music Teacher Education	913	1,187	1,225	1,242	1,181	6.6%	67.0	125.1
13.1205 Secondary Education and Teaching	1,167	1,070	960	1,060	1,158	-0.2%	-2.3	101.4
31.0501 Health and Physical Education/Fitness, General	872	947	922	896	966	2.6%	23.5	49.0
13.1209 Kindergarten/Preschool Education and Teaching	922	883	759	874	892	-0.8%	-7.5	86.9
13.1203 Junior High/Intermediate/Middle School Education and Teaching	1,031	943	790	767	805	-6.0%	-56.5	71.3
13.1318 Social Studies Teacher Education	866	808	713	742	713	-4.7%	-38.3	45.3

Source: IPEDS

The most disproportionately male majors in the region are similar to the national figures. Note that 13.1318 – Social Studies Teacher Education is an established major that reports 58 percent of its degree completions from males.

**Figure 1.9: Top 10 Male Majors by Percentage, Regional**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	598	488	-6.8%	81.6%
13.1329 Physics Teacher Education	86	57	-3.8%	66.3%
13.1314 Physical Education Teaching and Coaching	8,703	5,308	-3.4%	61.0%
31.0501 Health and Physical Education/Fitness, General	4,603	2,757	1.4%	59.9%
13.1320 Trade and Industrial Teacher Education	102	61	3.7%	59.8%
13.1317 Social Science Teacher Education	66	39	7.5%	59.1%
13.1318 Social Studies Teacher Education	3,842	2,211	-4.7%	57.5%
13.1319 Technical Teacher Education	317	178	1.7%	56.2%
39.0401 Religious Education	774	411	-2.1%	53.1%
31.0599 Health and Physical Education/Fitness, Other	1,289	672	-6.7%	52.1%

Source: IPEDS

Among the top 10 CIP classifications with the highest male headcounts, 13.1312 – Music Teacher Education major is particularly promising, with a highly-male student population, high growth, and high overall numbers. Note that Physical Education appears to be extremely popular among male students, with highly disproportionate male completions and large overall numbers.

**Figure 1.10: Top 10 Male Majors by Overall Headcount, Regional**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1314 Physical Education Teaching and Coaching	8,703	5,308	-3.4%	61.0%
13.1202 Elementary Education and Teaching	40,589	4,293	-1.4%	10.6%
31.0501 Health and Physical Education/Fitness, General	4,603	2,757	1.4%	59.9%
13.1318 Social Studies Teacher Education	3,842	2,211	-4.7%	57.5%
13.1205 Secondary Education and Teaching	5,415	2,191	-4.8%	40.5%
13.1312 Music Teacher Education	5,748	2,074	7.6%	36.1%
13.1001 Special Education and Teaching, General	12,803	1,337	1.5%	10.4%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	4,336	1,099	-6.4%	25.3%
13.1311 Mathematics Teacher Education	2,911	1,030	0.2%	35.4%
13.1305 English/Language Arts Teacher Education	3,293	716	-2.6%	21.7%

Source: IPEDS

## PENNSYLVANIA

The top majors by CAGR in Pennsylvania are altogether less high-growth than the regional and national counterparts. While 13.1015 – Education/Teaching of Individuals in Early Childhood Special Education Programs has shown tremendous growth since 2008, it is a small major overall. Among the top 10, 13.1210 – Early Childhood Education and Teaching shows both high growth and high overall numbers.

**Figure 1.11: Top 10 Majors by CAGR, Pennsylvania**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	2	1	7	56	91	159.7%	22.3	20.5
13.1324 Drama and Dance Teacher Education	6	6	8	5	11	16.4%	1.3	3.3
13.1210 Early Childhood Education and Teaching	242	255	302	270	395	13.0%	38.3	57.4
13.1099 Special Education and Teaching, Other	62	77	45	72	100	12.7%	9.5	24.5
13.1314 Physical Education Teaching and Coaching	104	118	134	150	134	6.5%	7.5	13.6
13.1330 Spanish Language Teacher Education	11	15	6	5	13	4.3%	0.5	6.3
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	40	54	58	44	47	4.1%	1.8	10.1
13.1318 Social Studies Teacher Education	99	91	105	116	111	2.9%	3.0	9.6
13.1302 Art Teacher Education	69	89	92	104	75	2.1%	1.5	18.6
13.1209 Kindergarten/Preschool Education and Teaching	110	99	115	106	119	2.0%	2.3	12.3

Source: IPEDS

The top CIP classifications by headcount are similar in Pennsylvania to those nationally and regionally. However, note that the growth rates among the largest overall majors is small across the board, apart from 13.1210 – Early Childhood Education and Teaching and 13.1314 – Physical Education Teaching and Coaching.

**Figure 1.12: Top 10 Majors by 2012 Headcount, Pennsylvania**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1202 Elementary Education and Teaching	4,108	3,989	3,940	3,938	3,934	-1.1%	-43.5	47.5
13.1001 Special Education and Teaching, General	693	714	678	658	717	0.9%	6.0	37.0
13.1210 Early Childhood Education and Teaching	242	255	302	270	395	13.0%	38.3	57.4
13.1205 Secondary Education and Teaching	275	282	258	286	280	0.5%	1.3	19.0
13.1312 Music Teacher Education	178	184	199	192	172	-0.9%	-1.5	13.2
13.1314 Physical Education Teaching and Coaching	104	118	134	150	134	6.5%	7.5	13.6
13.1209 Kindergarten/Preschool Education and Teaching	110	99	115	106	119	2.0%	2.3	12.3
13.1318 Social Studies Teacher Education	99	91	105	116	111	2.9%	3.0	9.6
13.1305 English/Language Arts Teacher Education	96	95	85	93	103	1.8%	1.8	7.9
13.0101 Education, General	101	90	68	66	102	0.2%	0.3	21.8

Source: IPEDS

The top majors for males, by both percentage and headcount, are similar to the regional and national figures. Note again that 13.1318 – Social Studies Teacher Education and 13.1314 – Physical Education Teaching and Coaching are options with high male enrollment and high overall numbers. CIP 13.1314 – Physical Education Teaching and Coaching also shows growth compared to other examined areas.

**Figure 1.13: Top 10 Male Majors by Percentage, Pennsylvania**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1329 Physics Teacher Education	14	10	0.0%	71.4%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	11	7	--	63.6%
13.1320 Trade and Industrial Teacher Education	47	29	-20.5%	61.7%
13.1318 Social Studies Teacher Education	522	311	2.9%	59.6%
13.1323 Chemistry Teacher Education	16	9	-12.0%	56.3%
13.1328 History Teacher Education	60	33	-1.8%	55.0%
13.1314 Physical Education Teaching and Coaching	640	337	6.5%	52.7%
13.0699 Educational Assessment, Evaluation, and Research, Other	16	8	--	50.0%
13.1319 Technical Teacher Education	4	2	--	50.0%
13.1331 Speech Teacher Education	2	1	--	50.0%

Source: IPEDS

**Figure 1.14: Top 10 Male Majors by Overall Headcount**

CIP	2008-2012 TOTAL	2008-2012 TOTAL MALE	CAGR	% MALE
13.1202 Elementary Education and Teaching	19,909	2,450	-1.1%	12.3%
13.1205 Secondary Education and Teaching	1,381	563	0.5%	40.8%
13.1312 Music Teacher Education	925	347	-0.9%	37.5%
13.1314 Physical Education Teaching and Coaching	640	337	6.5%	52.7%
13.1001 Special Education and Teaching, General	3,460	323	0.9%	9.3%
13.1318 Social Studies Teacher Education	522	311	2.9%	59.6%
13.1305 English/Language Arts Teacher Education	472	118	1.8%	25.0%
13.1311 Mathematics Teacher Education	303	117	-8.2%	38.6%
13.0101 Education, General	427	74	0.2%	17.3%
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	243	58	4.1%	23.9%

Source: IPEDS

## DISTANCE EDUCATION PROGRAMS

Beginning in 2012, IPEDS lists programs that offer distance education. Note that this does not signify programs with all-distance enrollments; it merely means that that degree option is available via distance education. However, this can provide a rough measure of the commonality of distance education among educational specializations. The figure below details the number of distance education programs listed per CIP classification nationally. According to 2012 data, the most common majors to offer distance education programs are Elementary Education and Teaching, Early Childhood Education and Teaching, Special

Education and Teaching, and Religious Education. These programs may be particularly popular and/or may translate well to an online format.

**Figure 1.15: Distance Education Program Counts, by Major**

CIP CLASSIFICATION	NUMBER OF PROGRAMS
13.1202 Elementary Education and Teaching	64
13.1210 Early Childhood Education and Teaching	27
13.1001 Special Education and Teaching, General	19
39.0401 Religious Education	17
13.9999 Education, Other	16
13.0101 Education, General	14
13.1305 English/Language Arts Teacher Education	12
13.1311 Mathematics Teacher Education	8
13.1205 Secondary Education and Teaching	7
13.1328 History Teacher Education	7
13.1209 Kindergarten/Preschool Education and Teaching	6
13.0501 Educational/Instructional Technology	5
13.1317 Social Science Teacher Education	5
13.1320 Trade and Industrial Teacher Education	5
13.1319 Technical Teacher Education	4
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	4
13.1099 Special Education and Teaching, Other	3
13.1302 Art Teacher Education	3
13.1314 Physical Education Teaching and Coaching	3
13.1322 Biology Teacher Education	3
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	2
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	2
13.1203 Junior High/Intermediate/Middle School Education and Teaching	2
13.1303 Business Teacher Education	2
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	2
13.1318 Social Studies Teacher Education	2
13.0201 Bilingual and Multilingual Education	1
13.0406 Higher Education/Higher Education Administration	1
13.0499 Educational Administration and Supervision, Other	1
13.0901 Social and Philosophical Foundations of Education	1
13.1011 Education/Teaching of Individuals with Specific Learning Disabilities	1
13.1014 Education/Teaching of Individuals Who are Developmentally Delayed	1
13.1206 Teacher Education, Multiple Levels	1
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	1
13.1312 Music Teacher Education	1
13.1316 Science Teacher Education/General Science Teacher Education	1
13.1323 Chemistry Teacher Education	1
13.1329 Physics Teacher Education	1
13.1335 Psychology Teacher Education	1
13.1337 Earth Science Teacher Education	1
31.0501 Health and Physical Education/Fitness, General	1
51.3817 Nursing Education	1

Source: IPEDS

## SERVING VETERANS

In supporting veterans in pursuing higher education, an important concern is to provide commitment and support from the leaders of the institution, as a public commitment from the president or other administrators will have an influence throughout the college or university. It can also be helpful to provide veterans with resources specific to their needs, such as program websites, welcome activities, marketing, handbooks, and financial planning that are specifically geared towards veterans.<sup>9</sup>

Providing veterans with opportunities to network with one another as well as to voice their specific concerns can be helpful as well. Accommodations for veteran-specific health and mental health issues can be very beneficial, with options including creating a mentor group, having counselors who are trained to assist veterans, and/or making counseling resources more accessible for veterans.<sup>10</sup>

In order to accomplish all of this, staff and leadership should be trained in accommodating veterans' needs and there should be a distinct set of policies for veterans and deployed military personnel. Institutions may also consider waiving fees for veterans or offering unique tuition discounts or scholarships. Serving the needs of the veteran community will build popularity for a specific institution or program and attract future veteran students.<sup>11</sup>

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<sup>9</sup> "Best Practices for Serving the Student Veteran." CAEL. 2012. P. 1.

<http://sunytaaccctpla.files.wordpress.com/2013/12/best-practices-handout-final.pdf>

<sup>10</sup> Ibid, 2.

<sup>11</sup> Ibid.



## SECTION II: LABOR MARKET ANALYSIS

This section considers the employment outlook for the occupations most commonly associated with education. We examine national employment projection data, as well as data for Pennsylvania and the surrounding region gathered from state labor departments.

### EMPLOYMENT PROJECTIONS METHODOLOGY

The BLS and state departments of labor data follow a similar classification process to that of NCES and its CIP codes. The BLS uses Standard Occupational Classification (SOC) codes to classify occupations. When constructing labor market assessments, Hanover Research uses the CIP-SOC Crosswalk to identify SOC codes related to the relevant academic fields. The crosswalk is provided by NCES.<sup>12</sup> For this report, Hanover includes all teaching occupations for birth to 12<sup>th</sup> grade education, as well as teaching specializations including special education, technical education, and “all other” teachers and instructors. Relevant occupations are listed in the following figure.

**Figure 2.1: Relevant Occupation by SOC Code**

SOC	OCCUPATION
25-2011	Preschool Teachers, Except Special Education
25-2012	Kindergarten Teachers, Except Special Education
25-2021	Elementary School Teachers, Except Special Education
25-2022	Middle School Teachers, Except Special and Career/Technical Education
25-2023	Vocational Education Teachers, Middle School
25-2031	Secondary School Teachers, Except Special and Career/Technical Education
25-2032	Career/Technical Education Teachers, Secondary School
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School
25-2053	Special Education Teachers, Middle School
25-2054	Special Education Teachers, Secondary School
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors
25-3021	Self-Enrichment Education Teachers
25-3999	Teachers & Instructors, All Other

Source: U.S. Bureau of Labor Statistics<sup>13</sup>

### NATIONAL EMPLOYMENT PROJECTIONS

In this section, Hanover Research highlights the occupational projections on a national level to demonstrate how the field is growing on a broader scale. Figure 2.2 displays Bureau of Labor Statistics (BLS) projections for employment trends in education from 2012 to 2022.

<sup>12</sup> “Resources: 2000-2010 CIP Conversion.” National Center for Education Statistics.

<http://nces.ed.gov/ipeds/cipcode/resources.aspx?y=55>

<sup>13</sup> “Occupational Employment and Wages, May 2013.” United States Department of Labor: Bureau of Labor Statistics.

<http://www.bls.gov/oes/home.htm>

**Figure 2.2: National Employment Projections, 2012-2022**

SOC	TITLE	2012	2022	CHANGE #	CHANGE %	AVERAGE ANNUAL OPENINGS
<b>00-0000</b>	<b>All occupations</b>	<b>145,355.8</b>	<b>160,983.7</b>	<b>15,628.0</b>	<b>10.8%</b>	<b>5,055.7</b>
25-2011	Preschool teachers, except special education	438.2	514.6	76.4	17.4%	19.9
25-2012	Kindergarten teachers, except special education	158.5	179.1	20.6	13.0%	6.5
25-2021	Elementary school teachers, except special education	1,361.2	1,529.1	167.9	12.3%	46.7
25-2022	Middle school teachers, except special and career/technical education	614.4	690.4	76.0	12.4%	21.1
25-2023	Career/technical education teachers, middle school	18.2	19.1	0.9	5.2%	0.5
25-2031	Secondary school teachers, except special and career/technical education	955.8	1,008.7	52.9	5.5%	31.3
25-2032	Career/technical education teachers, secondary school	85.4	89.7	4.3	5.0%	2.8
25-2051	Special education teachers, preschool	22.3	25.9	3.6	16.2%	0.7
25-2052	Special education teachers, kindergarten and elementary school	194.6	206.6	12.0	6.2%	4.5
25-2053	Special education teachers, middle school	94.6	99.5	4.9	5.2%	2.1
25-2054	Special education teachers, secondary school	131.3	137.4	6.1	4.6%	2.9
25-2059	Special education teachers, all other	40.7	44.6	3.9	9.5%	1.1
25-3011	Adult basic and secondary education and literacy teachers and instructors	77.4	84.2	6.7	8.7%	2.0
25-3021	Self-enrichment education teachers	316.2	360.1	43.9	13.9%	9.8
25-3099	Teachers and instructors, all other	981.6	1,057.5	75.9	7.7%	24.4
<b>Total</b>		<b>5,490.4</b>	<b>6,046.5</b>	<b>556.1</b>	<b>10.1%</b>	<b>176.3</b>

Source: U.S. Bureau of Labor Statistics<sup>14</sup>  
 All numbers are in thousands.

**The employment projections on the national level indicate that education is a growing field, increasing at close to the same rate as all occupations, which is 10.8 percent.** From 2012 to 2022, the number of individuals in teaching positions will increase by approximately 10.1 percent. In particular, preschool teachers, both special education and non-special education, will increase at higher rates, between 16 and 17 percent.

<sup>14</sup> "Employment Projections." United States Department of Labor: Bureau of Labor Statistics.  
<http://data.bls.gov/projections/occupationProj>

## REGIONAL EMPLOYMENT PROJECTIONS

As with the degree completions data in Section I, Hanover Research provides employment projection data for Clarion University's region. This comprises data from Pennsylvania and all bordering states, including Delaware, Maryland, New Jersey, New York, Ohio, and West Virginia.

Growth in teaching occupations is projected to be significantly lower, regionally, with several occupations showing negative change between 2010 and 2020. Note that the state data used for regional projections covers a less recent time period, 2010 to 2020, while the national data covers 2012 to 2022. Thus, these figures may demonstrate slower growth than the most up-to-date figures. Still, self-enrichment education teachers, special education teachers, and preschool teachers all show higher growth than the average.

**Figure 2.3: Regional Employment Projections, 2010-2020**

SOC	OCCUPATION	2010	2020	CHANGE #	CHANGE %	AVERAGE ANNUAL OPENINGS
25-2011	Preschool Teachers, Except Special Education	84,515	94,552	10,037	11.9%	3,214
25-2012	Kindergarten Teachers, Except Special Education	38,144	41,412	3,268	8.6%	1,319
25-2021	Elementary School Teachers, Except Special Education	263,243	278,271	15,028	5.7%	7,295
25-2022	Middle School Teachers, Except Special and Career/Technical Education	143,135	152,927	9,792	6.8%	4,119
25-2023	Vocational Education Teachers, Middle School	2,865	2,860	0	0.0%	60
25-2031	Secondary School Teachers, Except Special and Career/Technical Education	223,767	220,190	-3,582	-1.6%	6,281
25-2032	Career/Technical Education Teachers, Secondary School	17,137	15,700	-1,437	-8.4%	467
25-2041	Special Education Teachers, Preschool, Kindergarten, and Elementary School	62,866	70,238	7,377	11.7%	2,589
25-2053	Special Education Teachers, Middle School	30,898	34,264	3,371	10.9%	1,252
25-2054	Special Education Teachers, Secondary School	38,408	37,927	-481	-1.3%	1,163
25-3011	Adult Basic and Secondary Education and Literacy Teachers and Instructors	25,147	26,600	1,453	5.8%	527
25-3021	Self-Enrichment Education Teachers	68,763	80,239	11,471	16.7%	2,198
25-3999	Teachers & Instructors, All Other	165,376	173,209	7,833	4.7%	3,314
<b>Total</b>		<b>1,164,264</b>	<b>1,228,389</b>	<b>64,130</b>	<b>5.5%</b>	<b>33,798</b>

Source: State Departments of Labor

Delaware does not maintain projections for 25-2023 – Vocational Education Teachers, Middle School and 25-2032 – Vocational Education Teachers, Secondary School.

Maryland does not maintain projections for 25-2021 – Elementary School Teachers, Except Special Education.

West Virginia does not maintain projections for 25-2053 – Special Education Teachers, Middle School; 25-3999 – Teachers and Instructors, All; and 25-2023 – Vocational Education Teachers, Middle School.

## PENNSYLVANIA EMPLOYMENT PROJECTIONS

In Pennsylvania, growth across teaching occupations is also much lower than the national figures. Many of the occupations show negative growth through 2020. However, preschool teachers and self-enrichment education teachers report higher than average growth. Again, this may be due to the fact that Pennsylvania's data are from 2010, while the national figures are up to date as of 2012.

**Figure 2.4: Pennsylvania Employment Projections, 2010-2020**

SOC	TITLE	2010	2020	CHANGE #	CHANGE %	AVERAGE ANNUAL OPENINGS
<b>00-0000</b>	<b>All Occupations</b>	<b>5,983,460</b>	<b>6,363,730</b>	<b>43,910</b>	<b>6.4%</b>	<b>185,472</b>
25-2011	Preschool Teachers, Except Special Education	14,100	15,570	1,470	10.4%	514
25-2012	Kindergarten Teachers, Except Special Education	6,390	6,630	240	3.8%	190
25-2021	Elementary School Teachers, Except Special Education	57,570	59,110	1,540	2.7%	1,420
25-2022	Middle School Teachers, Except Special & Vocational Education	27,490	28,300	810	2.9%	685
25-2023	Vocational Education Teachers, Middle School	550	530	-20	-3.6%	12
25-2031	Secondary School Teachers, Except Special & Vocational Education	49,730	46,790	-2,940	-5.9%	1,360
25-2032	Vocational Education Teachers, Secondary School	4,600	4,080	-520	-11.3%	126
25-2041	Special Education Teachers, Preschool, Kindergarten, & Elementary School	9,450	10,030	580	6.1%	337
25-2053	Special Education Teachers, Middle School	4,330	4,570	240	5.5%	152
25-2054	Special Education Teachers, Secondary School	6,920	6,510	-410	-5.9%	204
25-3011	Adult Literacy, Remedial Education, & GED Teachers & Instructors	2,630	2,740	110	4.2%	51
25-3021	Self-Enrichment Education Teachers	11,590	12,470	880	7.6%	265
25-3999	Teachers & Instructors, All Other	14,480	14,940	460	3.2%	268
<b>Total</b>		<b>209,830</b>	<b>212,270</b>	<b>2,440</b>	<b>1.2%</b>	<b>5,584</b>

Source: Pennsylvania Department of Labor and Industry.

## SECTION III: PROGRAM PROFILES

In this section of the report, Hanover Research profiles bachelor's in education programs at institutions in Pennsylvania. Hanover focuses on programs with the following characteristics:

- Programs that are geographically close to Clarion University of Pennsylvania,
- Programs that focus on a high-growth specialization,
- Programs that focus on a specialization which is broadly popular and particularly popular for male students,
- Programs that are focused on a transfer student population, and/or
- Programs that are offered online.

### DREXEL UNIVERSITY

<b>Program Name</b>	Bachelor of Science in Education
<b>Department</b>	Drexel University Online
<b>Credits</b>	120, students may transfer up to 90
<b>Specialization</b>	PK-4 Elementary Education
<b>Duration</b>	At least 2.5 years, part-time
<b>Teaching Certification</b>	Yes; Elementary Education Certification
<b>Tuition</b>	\$440 per credit (discounted from \$732 per credit)
<b>Online</b>	Yes
<b>Field Work</b>	190 hours of in-school, pre-student teaching activities, 12 weeks of full-day student teaching
<b>Notable Features</b>	Designed for transfer students

Source: Drexel University<sup>15</sup>

Drexel University offers an online bachelor of science in education for students who have already completed some college credits. The program offers courses part-time and lasts 10 terms or 2.5 years. Students may take longer to complete the program, dependent on transfer credits into the program. However, enrollment is only offered part-time.<sup>16</sup>

Students can obtain a teaching certification for elementary education. The program is approved by the Pennsylvania Department of Education. Students must take the PECT and PAPA exams, and those who complete the program are recommended for PK-4 certification. The certification can also be transitioned to those from other states in some instances.<sup>17</sup> In

<sup>15</sup> [1] "Bachelor of Science in Education Frequently Asked Questions." Drexel Online. <http://www.drexel.com/online-degrees/education-degrees/bs-ed/faq.aspx#Anchor-Wha-26108>

[2] "Bachelor of Science in Education Tuition." Drexel Online. <http://www.drexel.com/online-degrees/education-degrees/bs-ed/tuition.aspx>

<sup>16</sup> "Bachelor of Science in Education." Drexel Online. <http://www.drexel.com/online-degrees/education-degrees/bs-ed/index.aspx>

<sup>17</sup> Ibid.

order to obtain the teacher certification, students must complete 12 consecutive weeks of full-day student teaching and 190 hours of in-school, pre-student teaching activities that are embedded in pedagogical courses.<sup>18</sup> These Field Experiences are formal school and community activities that take place in a “collaborative, educational setting” and are required by the Pennsylvania Department of Education for certification.<sup>19</sup>

Students in the program are eligible for financial aid including federal grants and loans, state grants, and Drexel loans.<sup>20</sup> Although the program offers educational certification for Pennsylvania, students do not need to be located in Pennsylvania to complete the program. Drexel works with those students who live outside of the Philadelphia area to find suitable field placements.<sup>21</sup>

### *MILITARY FRIENDLY UNIVERSITY*

Note that Drexel University also serves the military and veteran community. There is no cap on the number of veterans who can enroll through the Yellow Ribbon Post-9/11 GI Bill. Military personnel, veterans, and their immediate families are also eligible for a 10 to 30 percent tuition reduction. Drexel also offers credit for military experience or classes that have been evaluated for college equivalency by the American Council on Education. Drexel’s online course offerings are flexible for military personnel and veterans.<sup>22</sup>

### *CURRICULUM*

The program consists of a minimum of 180.5 quarter credits including:

- Content courses - 65.5 quarter credits
- Pedagogy courses - 89.5 quarter credits, and
- Free electives - 26 quarter credits

Altogether, this is equal to 120 semester hours. Students take pedagogy courses in a sequence and are free to choose content and elective courses at their discretion. Students join the sequence at whatever level they have completed previous college coursework. Course offerings can be found in the figures below.

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<sup>18</sup> Ibid.

<sup>19</sup> “Bachelor of Science in Education Frequently Asked Questions,” Op. cit.

<sup>20</sup> Ibid.

<sup>21</sup> Ibid.

<sup>22</sup> “Online Degrees: Military-Friendly University.” Drexel Online. <http://www.drexel.com/prospective-students/military.aspx>

**Figure 3.1: Drexel University Content Course Requirements**

CONTENT COURSE REQUIREMENTS	
Principles of Communication	3 credits
Expository Writing and Reading	3 credits
Persuasive Writing and Reading	3 credits
Analytical Writing and Reading	3 credits
The History of Philadelphia	3 credits
Introduction to Music	3 credits
Introduction to Nutrition & Food	3 credits
Sociology of Education I	3 credits
Literature Elective	3 credits
General Biology I	3 credits
General Biology II	3 credits
General Chemistry I	4 credits
Principles of Microeconomics	4 credits
Environmental Science and Society	3 credits
Mathematical Analysis I	3 credits
Mathematical Analysis II	3 credits
Mathematical Analysis III	3 credits
Applied Physics	3 credits
General Psychology I	3 credits
Educational Psychology	3 credits
Cognitive Psychology	3 credits

Source: Drexel University<sup>23</sup>**Figure 3.2: Drexel University Content Course Requirements**

PEDAGOGY COURSE REQUIREMENTS	
Foundations in Education I: A Historical and Philosophical Perspective	3 credits
Freshman Pedagogy Seminar I	1 credits
Freshman Pedagogy Seminar II	1 credits
Freshman Pedagogy Seminar III	1 credits
Science Teaching Methods	3 credits
Child Development I: Typical Development	3 credits
Child Development II: Atypical Development	3 credits
Special Education Foundations: Referral and Assessment	4.5 credits
Sophomore Pedagogy Seminar	1 credits
Early Language Development	3 credits
Diversity and Today's Teacher	3 credits
Math Methods and Content: Early Childhood	3 credits
Math: Methods & Content	3 credits
Early Literacy I	3 credits
Inclusionary Practices for Exceptional Students	4.5 credits
Literacy and Content Skill Development	4.5 credits
Instructing English Language Learners	3 credits
Junior Pedagogy Seminar	1 credits

<sup>23</sup> "Bachelor of Science in Education Curriculum." Drexel Online. <http://www.drexel.com/online-degrees/education-degrees/bs-ed/curriculum.aspx>

PEDAGOGY COURSE REQUIREMENTS	
Assessment of Young Children I	3 credits
Assessment of Young Children II	4 credits
Current Research in Curriculum & Instruction	3 credits
Multimedia in Instructional Design	3 credits
Language Arts Processes	3 credits
Engaging the Learner	3 credits
Early Literacy II	3 credits
Expressive Arts for PK-4	3 credits
Social Studies Teaching Methods	3 credits
Senior Pedagogy Seminar	1 credits
Student Teaching	9 credits
Family and Community Partnerships	3 credits

Source: Drexel University<sup>24</sup>

## PENNSYLVANIA STATE UNIVERSITY

Program Name	Bachelor of Science in Special Education
Department	Department of Educational Psychology, Counseling, and Special Education in the College of Education
Credits	121
Specialization	Special Education
Duration	Four years
Teaching Certification	Yes, Pennsylvania Instructional I Certificate in Teaching the Mentally and/or Physically Handicapped
Tuition	\$670 per credit / \$1,194 per credit lower division \$725 per credit / \$1,255 per credit upper division
Online	No
Field Work	80 hours of field experience with two disability areas
Notable Features	Optional combined master's program

Source: Penn State University<sup>25</sup>

The Special Education program is housed in the Department of Educational Psychology, Counseling, and Special Education in the College of Education at Penn State. Upon completion of the program, students become eligible for the Pennsylvania Instructional I Certificate in Teaching the Mentally and/or Physically Handicapped. The program cites four mission statements as its goals:<sup>26</sup>

- To have a positive influence on the inclusion of persons who are culturally, physically or intellectually diverse in the mainstream of American life,
- To provide national leadership in the development and sharing of new knowledge in special education,

<sup>24</sup> Ibid.

<sup>25</sup> "University Park, Hershey, Dickinson, and Great Valley Tuition." Penn State University. <http://tuition.psu.edu/tuitiondynamic/rates.aspx?location=up>

<sup>26</sup> Quoted from source. "Program Mission Statement." Penn State University. <http://www.ed.psu.edu/epcse/special-education/program-mission>



- To develop the next generation of college and university faculty in special education, and
- To develop teachers who can apply the current knowledge of effective practices in special education.

In addition to the bachelor's program, there is also a combined bachelor's and master's program focused on special education. The bachelor's program has the following requirements:<sup>27</sup>

- Eighty hours of experience with children with disabilities. Hours must be completed with two different settings serving two different levels of disability. Ideally, this should be in the classroom.
- Pass the Praxis 1 (Reading, Writing, and Math) examinations.
- Maintain a 3.0 GPA as required by the College of Education and the Pennsylvania Department of Education.
- Complete required coursework.

During the first four semesters of the program, students complete general education requirements. Program checklist courses are required, as well as special education courses. The special education course offerings are provided in the figure below.

**Figure 3.3: Penn State University Special Education Coursework**

SPECIAL EDUCATION COURSEWORK	
Independent Studies (1-18)	Fundamentals of Reading Instruction in Special Education (3)
Special Topics (1-9)	Teaching and Assessing Reading Skills of Students with Special Needs (3)
Autism and Related Disorders (3)	Specialized Reading Applications in Special Education (3)
Special Topics (1-9)	Autism: Issues and Concerns (1)
Observing in Exceptional Settings (3)	Autism and Applied Behavior Analysis (4)
Teaching Exceptional Students in General Education Settings (3)	Communication and Social Competence (3)
Motivating Exceptional Learners (4)	Assessment and Curriculum (3)
Human Rights: Historical and Current Issues in Special Education (3)	Asperger Syndrome (1)
Working with Families and Professionals in Special Education (3)	Experience with Exceptional Children (3)
Fundamental Literacy Skills for Students with Special Needs (3)	Practicum in Special Education (15)
Writing and Content Literacy for Students with Special Needs (3)	Experience with an Integrated Inclusion Classroom (4)
Mathematics Instruction for Students with Special Needs (3)	Independent Studies (1-18)
Intervention for Students with Severe Disabilities (3)	Special Topics (1-9)

<sup>27</sup> "Frequently Asked Questions." Penn State University. <http://www.ed.psu.edu/epcse/special-education/programs/bachelors-of-science/frequently-asked-questions>

SPECIAL EDUCATION COURSEWORK	
Instruction for Students with Mild Disabilities (4)	Foundations of Inclusive : Legal, Etiology, Collaboration, and Assessment (3)
Early Special Education (3-4)	Creating and Maintaining a Positive General Education Classroom (3)
Technologies for Persons with Disabilities (2)	Special Topics (1-9)
Orientation to Human Variation and Special Education Services (3)	Students with Autism in Inclusive Settings: Practical Applications (1)
Foundational Skills for Working with Students with Special Education Needs in General Education Classrooms (1)	Extended Applications for Tutoring in Reading, Math and Progress Monitoring (3)
Evidenced-Based Methods for Monitoring Student Progress and Making Instructional Decisions (2)	Comprehension Strategies, Motivation and Monitoring Progress (3)
Evidence-Based Practices for Inclusive Behavior Management (2)	Instructional Design and Delivery in Reading and Math (3)
Effective and Explicit Instruction for Students with Learning Difficulties (2)	Orton-Gillingham Multisensory Instruction in Reading, Spelling and Writing I (3)
434A Evidence-Based Practices for Inclusive Elementary Classrooms (2)	Foundational Skills for Working with Students with Special Education Needs in General Education Classrooms (1)
Evidenced-Based Practices for Inclusive Secondary Classrooms (2)	Orton-Gillingham Multisensory Instruction in Reading, Spelling and Writing I (3)
Inclusive Education and Assessment (6)	Orton-Gillingham Multisensory Instruction in Reading, Spelling and Writing II (3)
Assessment for Instruction (4)	Students with Autism in Inclusive Settings (2)

Source: Penn State University<sup>28</sup>

## BOSTON UNIVERSITY

<b>Program Name</b>	Bachelor of Science in Social Studies Education
<b>Department</b>	School of Education
<b>Credits</b>	128-162 (depending on concentration)
<b>Specializations</b>	History, History with Special Education, History with Teaching of English as a Second Language, Political Science, Political Science with Special Education, Political Science with Teaching of English as a Second Language.
<b>Duration</b>	Four years
<b>Teaching Certification</b>	Yes, licensure in Elementary Education
<b>Tuition</b>	\$45,686 per year
<b>Online</b>	No
<b>Field Work</b>	Yes, integrated with courses
<b>Notable Features</b>	Six available concentrations in history and political science fields.

Source: Boston University<sup>29</sup>

<sup>28</sup> "Undergraduate Level Coursework Special Education (SPLED)." Penn State University. <http://www.ed.psu.edu/epcse/special-education/programs/bachelors-of-science/undergraduate-level-coursework>

<sup>29</sup> [1] "Tuition & Fees." Boston University. <http://www.bu.edu/admissions/apply/costs-aid-scholarships/tuition-and-fees/>  
 [2] "B.S. in Social Studies Education." Boston University. <http://www.bu.edu/academics/sed/programs/social-studies-education/bs/>

Boston University's social studies education program prepares graduates to be "classroom teachers, museum educators, developers of learning materials, social education curriculum specialists, and youth service educators."<sup>30</sup>

Students who complete the program are eligible to gain licensure in Elementary Education in Massachusetts. Licenses also include a specialty in History and Political Science/Political Philosophy.<sup>31</sup>

The program involves field work via the "professional studies" component of the curriculum, which integrates field-based activities with on-campus courses. The undergraduate program culminates in a student-teaching experience. There are six program concentrations, shown below.<sup>32</sup>

**Figure 3.4: Boston University Bachelor of Science in Social Studies Education Options**

HISTORY CONCENTRATION OPTIONS	POLITICAL SCIENCE CONCENTRATION OPTIONS
Concentration options in History at the School of Education include History on its own, or combined with either Special Education (Moderate) 5–12 or Teaching English as a Second Language.	Concentration options in Political Science at the School of Education include Political Science on its own, or combined with either Special Education (Moderate) 5–12 or Teaching English as a Second Language.
History (Total Credits: 128)	Political Science (Total Credits: 128)
History with Special Education (Moderate) 5–12 (Total Credits: 154)	Political Science with Special Education (Moderate) 5–12 (Total Credits: 162)
History with Teaching of English as a Second Language (Total Credits: 156)	Political Science with Teaching of English as a Second Language (Total Credits: 152)

Source: Boston University

One example of program curriculum, for the History with Teaching of English as a Second Language concentration, is outlined in the figure below.

**Figure 3.5: Boston University Bachelor of Science in Social Studies Education Curriculum**

BACHELOR OF SCIENCE IN SOCIAL STUDIES EDUCATION: HISTORY WITH TEACHING OF ENGLISH AS A SECOND LANGUAGE (TOTAL CREDITS: 156)
<b>Distribution Requirements (44)</b>
Writing Seminar (4)
Writing and Research Seminar (4)
Two courses in CAS Humanities (8)
World Regional Geography (4)
MA (Exempt with score of 580 or above on SAT or 23 or above on ACT) (4)
Lab Science (4)
Natural Science or Lab Science (4)
Two electives (8)
<b>History Subject-Specific Requirements (48)</b>
World History I and II (8)
Emergence of the United States to 1865 (4)

<sup>30</sup> "B.S. in Social Studies Education," Op. cit.

<sup>31</sup> Ibid.

<sup>32</sup> Ibid.

BACHELOR OF SCIENCE IN SOCIAL STUDIES EDUCATION: HISTORY WITH TEACHING OF ENGLISH AS A SECOND LANGUAGE (TOTAL CREDITS: 156)	
The United States Since 1865 (4)	
The Historian's Craft (4)	
Economic History of the United States or Intro to Macroeconomics (4)	
Course focused on Asia, Latin America, or Africa (4)	
190 or 200-, 300- or higher level courses (HI 190 preferred) (4)	
Two 400- or 500-level colloquia (8)	
CAS PH 270 or 271 or HI 203, 302, 448, or 456 (4)	
Introduction to American Politics (4)	
<b>Professional Studies (64)</b>	
Introduction to Education (6)	
Special Education and Adolescents (2)	
Introduction to Adolescent Development (2)	
Pre-Practicum (2)	
Teaching of Reading (4)	
Reading and Writing Assessment (2)	
Social and Civic Context of Education (4)	
Teaching English Language Learners in Middle/High Schools (4)	
History Methods (4)	
Developing Historical Literacy (4)	
History Laboratory (2) or Project Citizen: Promoting Civic Engagement (2)	
Classroom Management (2)	
Practicum (5–8 or 8–12) (8)	
Literacy Development for Bilingual Students (4)	
Language Acquisition (4)	
Methods in Teaching English as a Second Language (4)	
Half Practicum in Teaching English as a Second Language 5–12 (4)	
Student Teaching Seminar (2)	
Foreign Language Requirement	

Source: Boston University

## ASHFORD UNIVERSITY

Program Name	Bachelor of Arts in Physical Education
Department	College of Education
Credits	125
Specialization	Physical Education
Duration	Four years
Teaching Certification	Qualifies students for both elementary and secondary physical education endorsements
Tuition	\$420.00 per credit hour (online), \$77,010 total
Online	Yes
Field Work	No, practicum courses
Notable Features	Program can qualify students for elementary, middle, or secondary school licensure

Source: Ashford University<sup>33</sup>

<sup>33</sup> [1] "Tuition and Fees." Ashford University. [http://www.ashford.edu/admissions/online\\_tuition\\_fees.htm](http://www.ashford.edu/admissions/online_tuition_fees.htm)

Ashford University's physical education program prepares students to teach physical education at the elementary, middle school, and secondary school levels. There is no field work requirement, although there are a number of practicum courses that must be completed. The program is also aligned to National Association for Sport and Physical Education (NASPE) K-12 standards. Graduates from the program will be equipped to:<sup>34</sup>

- Identify physical education content and disciplinary concepts related to the development of a physically educated person,
- Demonstrate how individuals learn and develop by providing opportunities that support their physical, cognitive, social, and emotional development,
- Apply knowledge of how individuals differ in their approaches to learning, by creating appropriate instruction adapted to these differences,
- Use an understanding of individual and group motivation and behavior to create a safe learning environment that encourages positive social interaction, active engagement in learning, and self-motivation,
- Use knowledge of effective verbal, nonverbal, and media communication techniques to enhance learning and engagement in physical activity settings,
- Use assessment to foster physical, cognitive, social, and emotional development of students in physical activity,
- Evaluate the effects of their actions on others (e.g., students, parents/guardians, fellow professionals) and seek opportunities to grow professionally,
- Use information technology to enhance learning and to enhance personal and professional productivity, and
- Foster relationships with colleagues, parents/guardians, and community agencies to support students' growth and well-being.

Financial aid, including private loans, federal loans, and grants, is available for the program.<sup>35</sup> The program curriculum is provided in the figure below.

**Figure 3.6: Ashford University Bachelor of Arts in Physical Education Curriculum**

DEGREE REQUIREMENTS
<b>Physical Education Major Requirements (47 credits):</b>
Introduction to Education (Elementary and Secondary) & Field Experience (1 credit)
Educational Psychology (3 credits)
Foundation of American Education (2 credits)
Principles of Education (Preschool, Elementary, and Secondary) & Field Experience II (2 credits)
Integrating Technology in the Classroom (2 credits)
Human Relations Skills for Educators (1 credit)
Child & Adolescent Development (3 credits)

[2] "BA Physical Education." Ashford University. <http://www.ashford.edu/degrees/campus/ba-physical-education.htm>

<sup>34</sup> Quoted from source. "BA Physical Education," Op. cit.

<sup>35</sup> "Ashford University Program Disclosures." Ashford University. <http://www.ashford.edu/static/programdisclosures/?p=iape#iape>

DEGREE REQUIREMENTS
Survey of Exceptional Students (3 credits)
Behavior Management in the Classroom (3 credits)
Reading in Secondary Education Content Areas (3 credits)
Specific Methods in Elementary PE (3 credits)
Practicum in Elementary PE (1 credit)
Specific Methods in Secondary PE (3 credits)
Practicum in Secondary PE (1 credit)
Student Teaching Elementary PE (8 credits)
Student Teaching Secondary PE (7 credits)
Student Teaching Seminar (1 credit)
<b>Additional Endorsement Requirements (29 credits):</b>
Personal Health & Wellness (2 credits)
Foundation of Movement & Motor Activities (3 credits)
Human Biology (4 credits)
Prevention & Care of Athletic Injuries (2 credits)
Individual & Team Sports Skills (3 credits)
Applied Kinesiology & Biomechanics (3 credits)
Curriculum & Administration of Physical Education (3 credits)
Adapted Physical Education (3 credits)
PED Sport Skills Courses (6 credits):
Activity: 1 credit each (6 distinct total courses)

Source: Ashford University<sup>36</sup>

<sup>36</sup> "BA Physical Education," Op. cit.

## APPENDIX: DEGREE COMPLETIONS DATA

**Figure A.1: National Education Degree Completions**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.0101 Education, General	2,798	2,950	3,066	3,425	3,541	6.1%	185.8	101.1
13.0201 Bilingual and Multilingual Education	178	393	415	431	415	23.6%	59.3	91.1
13.0202 Multicultural Education	3	1	3	5	0	--	--	--
13.0203 Indian/Native American Education	0	7	9	6	0	--	--	--
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	-	-	0	4	0	--	--	--
13.0301 Curriculum and Instruction	1	14	0	11	22	116.6%	5.3	11.1
13.0401 Educational Leadership and Administration, General	28	93	0	14	0	--	--	--
13.0402 Administration of Special Education	-	-	-	2	-	--	--	--
13.0403 Adult and Continuing Education Administration	11	7	9	4	10	-2.4%	-0.3	4.5
13.0404 Educational, Instructional, and Curriculum Supervision	39	43	29	42	41	1.3%	0.5	9.8
13.0406 Higher Education/Higher Education Administration	0	0	12	8	8	--	--	--
13.0407 Community College Education	0	0	-	-	-	--	--	--
13.0408 Elementary and Middle School Administration/Principalship	4	0	0	0	-	--	--	--
13.0409 Secondary School Administration/Principalship	-	0	-	-	-	--	--	--
13.0410 Urban Education and Leadership	81	76	68	72	83	0.6%	0.5	7.5
13.0499 Educational Administration and Supervision, Other	2	3	1	1	1	-15.9%	-0.3	1.1
13.0501 Educational/Instructional Technology	54	53	58	42	30	-13.7%	-6.0	8.4
13.0601 Educational Evaluation and Research	3	0	0	0	0	--	--	--
13.0607 Learning Sciences	-	-	-	0	0	--	--	--
13.0699 Educational Assessment, Evaluation, and Research, Other	-	-	5	3	8	--	--	--
13.0701 International and Comparative Education	-	2	0	2	2	--	--	--
13.0901 Social and Philosophical Foundations of Education	10	0	0	15	29	30.5%	4.8	10.4
13.1001 Special Education and Teaching, General	6,962	7,134	7,377	7,515	8,073	3.8%	277.8	166.2
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	138	146	123	124	143	0.9%	1.3	15.4
13.1004 Education/Teaching of the Gifted and Talented	-	-	-	-	0	--	--	--
13.1005 Education/Teaching of Individuals with Emotional Disturbances	132	145	160	144	154	3.9%	5.5	12.5
13.1006 Education/Teaching of Individuals with Mental Retardation	183	180	221	206	191	1.1%	2.0	23.0

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1007 Education/Teaching of Individuals with Multiple Disabilities	116	78	121	155	176	11.0%	15.0	31.6
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	58	52	50	63	61	1.3%	0.8	7.3
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	20	19	24	17	23	3.6%	0.8	5.2
13.1011 Education/Teaching of Individuals with Specific Learning Disabilities	375	374	318	324	333	-2.9%	-10.5	26.5
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	260	270	215	206	273	1.2%	3.3	43.7
13.1013 Education/Teaching of Individuals with Autism		2	12	18	19	--	--	--
13.1014 Education/Teaching of Individuals Who are Developmentally Delayed			1	1	4	--	--	--
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	72	111	105	166	236	34.6%	41.0	29.4
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	-	-	94	111	159	--	--	--
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	-	-	0	0	2	--	--	--
13.1019 Education/Teaching of Individuals in Secondary Special Education Programs	-	-	13	14	12	--	--	--
13.1099 Special Education and Teaching, Other	400	373	331	333	446	2.8%	11.5	60.7
13.1202 Elementary Education and Teaching	43,410	42,628	41,649	41,288	40,387	-1.8%	-755.8	238.5
13.1203 Junior High/Intermediate/Middle School Education and Teaching	2,747	2,706	2,645	2,857	2,958	1.9%	52.8	111.1
13.1205 Secondary Education and Teaching	4,564	4,495	4,241	4,203	4,474	-0.5%	-22.5	188.5
13.1209 Kindergarten/Preschool Education and Teaching	2,197	2,202	1,955	2,156	2,149	-0.6%	-12.0	158.8
13.1210 Early Childhood Education and Teaching	9,521	9,765	10,186	11,287	12,162	6.3%	660.3	343.1
13.1301 Agricultural Teacher Education	455	499	528	556	655	9.5%	50.0	29.0
13.1302 Art Teacher Education	1,489	1,546	1,529	1,519	1,464	-0.4%	-6.3	40.3
13.1303 Business Teacher Education	435	418	402	361	346	-5.6%	-22.3	10.8
13.1305 English/Language Arts Teacher Education	2,898	2,759	2,674	2,873	2,984	0.7%	21.5	138.4
13.1306 Foreign Language Teacher Education	143	153	136	147	112	-5.9%	-7.8	19.3
13.1307 Health Teacher Education	1,778	1,764	1,678	1,680	1,591	-2.7%	-46.8	41.2
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	401	375	379	340	369	-2.1%	-8.0	26.4
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	818	686	556	553	488	-12.1%	-82.5	53.2



CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1310 Sales and Marketing Operations/Marketing and Distribution Teacher Education	27	37	27	33	31	3.5%	1.0	7.7
13.1311 Mathematics Teacher Education	2,144	2,111	2,252	2,249	2,438	3.3%	73.5	93.7
13.1312 Music Teacher Education	3,429	3,717	3,951	4,017	3,913	3.4%	121.0	153.5
13.1314 Physical Education Teaching and Coaching	9,521	9,664	9,277	9,168	9,047	-1.3%	-118.5	187.5
13.1315 Reading Teacher Education	117	126	133	148	124	1.5%	1.8	15.2
13.1316 Science Teacher Education/General Science Teacher Education	754	739	740	796	830	2.4%	19.0	27.7
13.1317 Social Science Teacher Education	630	617	645	660	612	-0.7%	-4.5	29.2
13.1318 Social Studies Teacher Education	2,308	2,140	2,050	2,148	2,143	-1.8%	-41.3	98.9
13.1319 Technical Teacher Education	253	263	251	267	304	4.7%	12.8	17.5
13.1320 Trade and Industrial Teacher Education	1,248	1,168	1,115	1,021	853	-9.1%	-98.8	42.6
13.1321 Computer Teacher Education	23	6	15	3	4	-35.4%	-4.8	10.3
13.1322 Biology Teacher Education	482	387	429	423	478	-0.2%	-1.0	58.8
13.1323 Chemistry Teacher Education	78	68	71	84	99	6.1%	5.3	9.9
13.1324 Drama and Dance Teacher Education	153	181	191	170	156	0.5%	0.8	19.5
13.1325 French Language Teacher Education	61	72	68	58	72	4.2%	2.8	10.0
13.1326 German Language Teacher Education	21	15	14	18	23	2.3%	0.5	4.4
13.1327 Health Occupations Teacher Education	8	8	12	9	7	-3.3%	-0.3	2.7
13.1328 History Teacher Education	994	936	872	882	822	-4.6%	-43.0	30.7
13.1329 Physics Teacher Education	48	53	38	44	62	6.6%	3.5	11.8
13.1330 Spanish Language Teacher Education	546	553	532	545	545	0.0%	-0.3	12.8
13.1331 Speech Teacher Education	57	58	65	58	44	-6.3%	-3.3	7.9
13.1332 Geography Teacher Education	15	14	11	2	8	-14.5%	-1.8	5.4
13.1333 Latin Teacher Education	4	4	2	6	6	10.7%	0.5	2.2
13.1334 School Librarian/School Library Media Specialist	7	1	2	2	8	3.4%	0.3	4.3
13.1335 Psychology Teacher Education	10	13	12	15	13	6.8%	0.8	2.3
13.1337 Earth Science Teacher Education	-	-	26	32	36	--	--	--
13.1338 Environmental Education	-	-	0	1	1	--	--	--
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	540	516	459	413	384	-8.2%	-39.0	13.2
13.1401 Teaching English as a Second or Foreign Language/ESL Language Instructor	317	384	344	313	353	2.7%	9.0	45.6
13.1402 Teaching French as a Second or Foreign Language	-	-	-	-	1	--	--	--

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1499 Teaching English or French as a Second or Foreign Language, Other	-	-	1	8	36	--	--	--
13.1501 Teacher Assistant/Aide	0	-	1	0	0	--	--	--
13.1599 Teaching Assistants/Aides, Other	0	-	-	-	-	--	--	--
13.9999 Education, Other	1,918	1,420	1,450	1,675	2,012	1.2%	23.5	320.5
Grand Total	108,497	107,793	106,454	108,572	110,099	0.4%	400.5	1,454.7

Source: National Center for Education Statistics

**Figure A.2: Regional Education Degree Completions**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.0101 Education, General	568	710	648	660	726	6.3%	39.5	74.6
13.0201 Bilingual and Multilingual Education	17	3	17	20	16	-1.5%	-0.3	10.2
13.0202 Multicultural Education	-	-	-	1	0	--	--	--
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	-	-	0	3	0	--	--	--
13.0401 Educational Leadership and Administration, General	13	0	0	0	0	--	--	--
13.0404 Educational, Instructional, and Curriculum Supervision	38	43	29	42	41	1.9%	0.8	9.9
13.0410 Urban Education and Leadership	46	56	36	37	40	-3.4%	-1.5	11.2
13.0499 Educational Administration and Supervision, Other	2	1	1	1	0	--	--	--
13.0501 Educational/Instructional Technology	-	1	1	3	1	--	--	--
13.0699 Educational Assessment, Evaluation, and Research, Other	-	-	5	3	8	--	--	--
13.0701 International and Comparative Education	-	-	-	-	1	--	--	--
13.0901 Social and Philosophical Foundations of Education	-	-	-	12	10	--	--	--
13.1001 Special Education and Teaching, General	2,594	2,534	2,753	2,484	2,438	-1.5%	-39.0	173.2
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	24	23	24	27	22	-2.2%	-0.5	3.0
13.1005 Education/Teaching of Individuals with Emotional Disturbances	2	2	2	3	3	10.7%	0.3	0.4
13.1006 Education/Teaching of Individuals with Mental Retardation	0	0	0	0	0	--	--	--
13.1007 Education/Teaching of Individuals with Multiple Disabilities	21	15	15	65	81	40.1%	15.0	21.7
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	1					--	--	--
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	8	10	9	11	9	3.0%	0.3	1.8

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1011 Education/Teaching of Individuals with Specific Learning Disabilities	86	106	89	96	97	3.1%	2.8	13.3
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	197	201	162	138	175	-2.9%	-5.5	29.0
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	19	32	42	91	143	65.6%	31.0	19.6
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	-	-	74	81	104	--	--	--
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	-	-	0	0	2	--	--	--
13.1019 Education/Teaching of Individuals in Secondary Special Education Programs	-	-	12	11	10	--	--	--
13.1099 Special Education and Teaching, Other	171	158	139	152	222	6.7%	12.8	35.2
13.1101 Counselor Education/School Counseling and Guidance Services	22	26	25	15	20	-2.4%	-0.5	5.9
13.1202 Elementary Education and Teaching	8,465	8,230	8,011	8,006	7,877	-1.8%	-147.0	91.4
13.1203 Junior High/Intermediate/Middle School Education and Teaching	1,031	943	790	767	805	-6.0%	-56.5	71.3
13.1205 Secondary Education and Teaching	1,167	1,070	960	1,060	1,158	-0.2%	-2.3	101.4
13.1206 Teacher Education, Multiple Levels	360	331	449	468	427	4.4%	16.8	62.6
13.1207 Montessori Teacher Education			3	11	4	--	--	--
13.1209 Kindergarten/Preschool Education and Teaching	922	883	759	874	892	-0.8%	-7.5	86.9
13.1210 Early Childhood Education and Teaching	1,936	1,887	1,951	1,938	2,185	3.1%	62.3	114.2
13.1299 Teacher Education and Professional Development, Specific Levels and Methods, Other	135	131	93	117	75	-13.7%	-15.0	26.9
13.1301 Agricultural Teacher Education	57	47	49	60	69	4.9%	3.0	8.2
13.1302 Art Teacher Education	418	428	470	478	415	-0.2%	-0.8	38.4
13.1303 Business Teacher Education	41	56	46	36	30	-7.5%	-2.8	10.4
13.1305 English/Language Arts Teacher Education	667	660	601	655	710	1.6%	10.8	47.5
13.1306 Foreign Language Teacher Education	75	87	80	72	64	-3.9%	-2.8	8.5
13.1307 Health Teacher Education	386	406	422	491	404	1.1%	4.5	56.8
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	49	64	51	47	35	-8.1%	-3.5	11.2
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	138	135	112	109	104	-6.8%	-8.5	8.4
13.1310 Sales and Marketing Operations/Marketing and Distribution Teacher Education	2	11	7	6	15	65.5%	3.3	5.8
13.1311 Mathematics Teacher Education	582	584	586	534	625	1.8%	10.8	51.3
13.1312 Music Teacher Education	913	1,187	1,225	1,242	1,181	6.6%	67.0	125.1

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1314 Physical Education Teaching and Coaching	1,896	1,738	1,651	1,718	1,700	-2.7%	-49.0	83.3
13.1315 Reading Teacher Education	-	-	-	0	-	--	--	--
13.1316 Science Teacher Education/General Science Teacher Education	121	110	117	113	142	4.1%	5.3	15.1
13.1317 Social Science Teacher Education	9	14	12	13	18	18.9%	2.3	2.9
13.1318 Social Studies Teacher Education	866	808	713	742	713	-4.7%	-38.3	45.3
13.1319 Technical Teacher Education	58	55	62	64	78	7.7%	5.0	6.3
13.1320 Trade and Industrial Teacher Education	19	24	22	19	18	-1.3%	-0.3	3.1
13.1321 Computer Teacher Education	-	-	-	-	1	--	--	--
13.1322 Biology Teacher Education	149	86	86	90	107	-7.9%	-10.5	31.0
13.1323 Chemistry Teacher Education	20	12	21	23	27	7.8%	1.8	6.2
13.1324 Drama and Dance Teacher Education	35	32	40	24	22	-11.0%	-3.3	8.5
13.1325 French Language Teacher Education	18	24	18	22	24	7.5%	1.5	4.6
13.1326 German Language Teacher Education	6	2	0	2	1	-36.1%	-1.3	2.2
13.1327 Health Occupations Teacher Education	-	-	1	-	-	--	--	--
13.1328 History Teacher Education	80	66	103	77	77	-1.0%	-0.8	23.7
13.1329 Physics Teacher Education	14	17	12	18	25	15.6%	2.8	4.7
13.1330 Spanish Language Teacher Education	122	131	138	143	140	3.5%	4.5	4.6
13.1331 Speech Teacher Education	2	1	1	1	0	--	--	--
13.1332 Geography Teacher Education	1	8	2	-	-	--	--	--
13.1333 Latin Teacher Education	0	4	1	4	0	--	--	--
13.1335 Psychology Teacher Education	1		5	5	1	0.0%	0.0	3.2
13.1337 Earth Science Teacher Education	-	-	3	9	10	--	--	--
13.1338 Environmental Education	-	-	0	-	-	--	--	--
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	101	103	101	81	57	-13.3%	-11.0	11.2
13.9999 Education, Other	860	757	661	663	634	-7.3%	-56.5	44.4
31.0501 Health and Physical Education/Fitness, General	872	947	922	896	966	2.6%	23.5	49.0
31.0599 Health and Physical Education/Fitness, Other	284	275	215	230	285	0.1%	0.3	41.6
31.0601 Outdoor Education	-	-	1	-	-	--	--	--
39.0401 Religious Education	170	149	156	125	174	0.6%	1.0	31.0
<b>Grand Total</b>	<b>26,877</b>	<b>26,424</b>	<b>25,812</b>	<b>26,009</b>	<b>26,464</b>	<b>-0.4%</b>	<b>-103.3</b>	<b>442.4</b>

Source: National Center for Education Statistics

**Figure A.3: Pennsylvania Education Degree Completions**

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.0101 Education, General	101	90	68	66	102	0.2%	0.3	21.8
13.0202 Multicultural Education	-	-	-	1	0	--	--	--
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	-	-	0	1	0	--	--	--
13.0403 Adult and Continuing Education Administration	11	7	9	3	10	-2.4%	-0.3	5.1
13.0699 Educational Assessment, Evaluation, and Research, Other	-	-	5	3	8	--	--	--
13.1001 Special Education and Teaching, General	693	714	678	658	717	0.9%	6.0	37.0
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	13	9	7	9	11	-4.1%	-0.5	2.6
13.1005 Education/Teaching of Individuals with Emotional Disturbances	2	2	2	3	3	10.7%	0.3	0.4
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	1	-	-	-	-	--	--	--
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	8	10	9	11	9	3.0%	0.3	1.8
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	9	20	15	-	-	--	--	--
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	2	1	7	56	91	159.7%	22.3	20.5
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	-	-	24	18	16	--	--	--
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	-	-	-	-	1	--	--	--
13.1099 Special Education and Teaching, Other	62	77	45	72	100	12.7%	9.5	24.5
13.1202 Elementary Education and Teaching	4,108	3,989	3,940	3,938	3,934	-1.1%	-43.5	47.5
13.1203 Junior High/Intermediate/Middle School Education and Teaching	-	-	0	1	10	--	--	--
13.1205 Secondary Education and Teaching	275	282	258	286	280	0.5%	1.3	19.0
13.1209 Kindergarten/Preschool Education and Teaching	110	99	115	106	119	2.0%	2.3	12.3
13.1210 Early Childhood Education and Teaching	242	255	302	270	395	13.0%	38.3	57.4
13.1301 Agricultural Teacher Education			8	4	12	--	--	--
13.1302 Art Teacher Education	69	89	92	104	75	2.1%	1.5	18.6
13.1303 Business Teacher Education	12	16	15	9	3	-29.3%	-2.3	4.1
13.1305 English/Language Arts Teacher Education	96	95	85	93	103	1.8%	1.8	7.9

CIP	2008	2009	2010	2011	2012	CAGR	AAC	STDEV
13.1306 Foreign Language Teacher Education	29	32	31	27	26	-2.7%	-0.8	2.5
13.1307 Health Teacher Education	27	20	12	3	14	-15.1%	-3.3	8.3
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	17	21	22	13	14	-4.7%	-0.8	4.9
13.1311 Mathematics Teacher Education	76	64	61	48	54	-8.2%	-5.5	7.7
13.1312 Music Teacher Education	178	184	199	192	172	-0.9%	-1.5	13.2
13.1314 Physical Education Teaching and Coaching	104	118	134	150	134	6.5%	7.5	13.6
13.1316 Science Teacher Education/General Science Teacher Education	14	11	16	18	12	-3.8%	-0.5	4.3
13.1317 Social Science Teacher Education	6	5	3	5	8	7.5%	0.5	2.1
13.1318 Social Studies Teacher Education	99	91	105	116	111	2.9%	3.0	9.6
13.1319 Technical Teacher Education	-	-	-	-	4	--	--	--
13.1320 Trade and Industrial Teacher Education	10	14	13	6	4	-20.5%	-1.5	3.9
13.1321 Computer Teacher Education	-	-	-	-	1	--	--	--
13.1322 Biology Teacher Education	12	7	6	10	11	-2.2%	-0.3	3.3
13.1323 Chemistry Teacher Education	5	3	5	0	3	-12.0%	-0.5	3.2
13.1324 Drama and Dance Teacher Education	6	6	8	5	11	16.4%	1.3	3.3
13.1325 French Language Teacher Education	0	1	1	5	0	--	--	--
13.1326 German Language Teacher Education	1	0	0	0	0	--	--	--
13.1328 History Teacher Education	14	13	13	7	13	-1.8%	-0.3	4.3
13.1329 Physics Teacher Education	2	5	2	3	2	0.0%	0.0	2.2
13.1330 Spanish Language Teacher Education	11	15	6	5	13	4.3%	0.5	6.3
13.1331 Speech Teacher Education	-	1	0	1	-	--	--	--
13.1333 Latin Teacher Education	0	1	0	1	0	--	--	--
13.1338 Environmental Education	-	-	0	-	-	--	--	--
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	40	54	58	44	47	4.1%	1.8	10.1
13.1401 Teaching English as a Second or Foreign Language/ESL Language Instructor	0	-	-	-	-	--	--	--
13.1499 Teaching English or French as a Second or Foreign Language, Other	-	-	1	0	-	--	--	--
13.9999 Education, Other	58	53	60	46	51	-3.2%	-1.8	8.4
<b>Grand Total</b>	<b>6,523</b>	<b>6,474</b>	<b>6,440</b>	<b>6,417</b>	<b>6,704</b>	<b>0.7%</b>	<b>45.3</b>	<b>139.9</b>

Source: National Center for Education Statistics<sup>37</sup><sup>37</sup> Ibid.

**Figure A.4: CIP Classifications by Percentage Male, National**

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
<b>All CIPs Listed Below</b>	<b>538,272</b>	<b>109,510</b>	<b>20.3%</b>
13.1329 Physics Teacher Education	245	162	66.1%
13.1320 Trade and Industrial Teacher Education	5,405	3,493	64.6%
13.1314 Physical Education Teaching and Coaching	46,677	27,232	58.3%
13.1328 History Teacher Education	4,506	2,573	57.1%
13.1318 Social Studies Teacher Education	10,789	6,097	56.5%
13.1332 Geography Teacher Education	50	28	56.0%
13.1319 Technical Teacher Education	1,338	739	55.2%
13.1337 Earth Science Teacher Education	94	49	52.1%
13.1317 Social Science Teacher Education	3,164	1,647	52.1%
13.1321 Computer Teacher Education	51	26	51.0%
13.0699 Educational Assessment, Evaluation, and Research, Other	16	8	50.0%
13.1338 Environmental Education	2	1	50.0%
13.0501 Educational/Instructional Technology	237	109	46.0%
13.1333 Latin Teacher Education	22	10	45.5%
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	284	125	44.0%
13.1310 Sales and Marketing Operations/Marketing and Distribution Teacher Education	155	66	42.6%
13.1323 Chemistry Teacher Education	400	169	42.3%
13.1303 Business Teacher Education	1,962	801	40.8%
13.1312 Music Teacher Education	19,027	7,753	40.7%
13.1301 Agricultural Teacher Education	2,693	1,081	40.1%
13.1205 Secondary Education and Teaching	21,977	8,781	40.0%
13.1019 Education/Teaching of Individuals in Secondary Special Education Programs	39	15	38.5%
13.1316 Science Teacher Education/General Science Teacher Education	3,859	1,449	37.5%
13.1326 German Language Teacher Education	91	33	36.3%
13.0410 Urban Education and Leadership	380	136	35.8%
13.1322 Biology Teacher Education	2,199	779	35.4%
13.1311 Mathematics Teacher Education	11,194	3,704	33.1%
13.1307 Health Teacher Education	8,491	2,781	32.8%
13.1499 Teaching English or French as a Second or Foreign Language, Other	45	14	31.1%
13.1335 Psychology Teacher Education	63	19	30.2%

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
13.1331 Speech Teacher Education	282	85	30.1%
13.0203 Indian/Native American Education	22	6	27.3%
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	2,312	590	25.5%
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	4	1	25.0%
13.0408 Elementary and Middle School Administration/Principalship	4	1	25.0%
13.9999 Education, Other	8,475	2,006	23.7%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	13,913	3,147	22.6%
13.1305 English/Language Arts Teacher Education	14,188	2,936	20.7%
13.1401 Teaching English as a Second or Foreign Language/ESL Language Instructor	1,711	314	18.4%
13.1330 Spanish Language Teacher Education	2,721	482	17.7%
13.0404 Educational, Instructional, and Curriculum Supervision	194	34	17.5%
13.0101 Education, General	15,780	2,760	17.5%
13.0401 Educational Leadership and Administration, General	135	23	17.0%
13.1302 Art Teacher Education	7,547	1,212	16.1%
13.1334 School Librarian/School Library Media Specialist	20	3	15.0%
13.1005 Education/Teaching of Individuals with Emotional Disturbances	735	110	15.0%
13.1306 Foreign Language Teacher Education	691	103	14.9%
13.0901 Social and Philosophical Foundations of Education	54	8	14.8%
13.1325 French Language Teacher Education	331	49	14.8%
13.1324 Drama and Dance Teacher Education	851	119	14.0%
13.0499 Educational Administration and Supervision, Other	8	1	12.5%
13.0406 Higher Education/Higher Education Administration	28	3	10.7%
13.1001 Special Education and Teaching, General	37,061	3,848	10.4%
13.1006 Education/Teaching of Individuals with Mental Retardation	981	101	10.3%
13.1011 Education/Teaching of Individuals with Specific Learning Disabilities	1,724	164	9.5%
13.1202 Elementary Education and Teaching	209,362	18,880	9.0%
13.1099 Special Education and Teaching, Other	1,883	159	8.4%
13.0301 Curriculum and Instruction	48	4	8.3%
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	364	29	8.0%
13.1013 Education/Teaching of Individuals with Autism	51	4	7.8%
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	103	8	7.8%
13.1007 Education/Teaching of Individuals with Multiple Disabilities	646	45	7.0%



CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
13.1315 Reading Teacher Education	648	37	5.7%
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	690	37	5.4%
13.0201 Bilingual and Multilingual Education	1,832	91	5.0%
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	674	32	4.7%
13.1327 Health Occupations Teacher Education	44	2	4.5%
13.1210 Early Childhood Education and Teaching	52,921	1,819	3.4%
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	1,224	36	2.9%
13.1209 Kindergarten/Preschool Education and Teaching	10,659	291	2.7%
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	1,864	50	2.7%
13.0202 Multicultural Education	12	0	0.0%
13.0402 Administration of Special Education	2	0	0.0%
13.0601 Educational Evaluation and Research	3	0	0.0%
13.0701 International and Comparative Education	6	0	0.0%
13.1014 Education/Teaching of Individuals Who are Developmentally Delayed	6	0	0.0%
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	2	0	0.0%
13.1402 Teaching French as a Second or Foreign Language	1	0	0.0%

Source: National Center for Education Statistics

**Figure A.5: CIP Classifications by Percentage Male, Regional**

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
<b>All CIPs Listed Below</b>	<b>130,973</b>	<b>29,273</b>	<b>22.4%</b>
13.1309 Technology Teacher Education/Industrial Arts Teacher Education	598	488	81.6%
13.0501 Educational/Instructional Technology	6	4	66.7%
13.1329 Physics Teacher Education	86	57	66.3%
13.1314 Physical Education Teaching and Coaching	8,703	5,308	61.0%
31.0501 Health and Physical Education/Fitness, General	4,603	2,757	59.9%
13.1320 Trade and Industrial Teacher Education	102	61	59.8%
13.1317 Social Science Teacher Education	66	39	59.1%
13.1318 Social Studies Teacher Education	3,842	2,211	57.5%
13.1319 Technical Teacher Education	317	178	56.2%

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
39.0401 Religious Education	774	411	53.1%
31.0599 Health and Physical Education/Fitness, Other	1289	672	52.1%
13.1337 Earth Science Teacher Education	22	11	50.0%
13.0699 Educational Assessment, Evaluation, and Research, Other	16	8	50.0%
13.1316 Science Teacher Education/General Science Teacher Education	603	299	49.6%
13.1328 History Teacher Education	403	198	49.1%
13.1323 Chemistry Teacher Education	103	48	46.6%
13.1310 Sales and Marketing Operations/Marketing and Distribution Teacher Education	41	17	41.5%
13.1303 Business Teacher Education	209	86	41.1%
13.0410 Urban Education and Leadership	215	87	40.5%
13.1205 Secondary Education and Teaching	5,415	2,191	40.5%
13.1331 Speech Teacher Education	5	2	40.0%
13.1019 Education/Teaching of Individuals in Secondary Special Education Programs	33	13	39.4%
13.1332 Geography Teacher Education	11	4	36.4%
13.1312 Music Teacher Education	5,748	2,074	36.1%
13.1311 Mathematics Teacher Education	2,911	1,030	35.4%
13.1307 Health Teacher Education	2109	703	33.3%
13.1322 Biology Teacher Education	518	167	32.2%
13.1301 Agricultural Teacher Education	282	78	27.7%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	4,336	1,099	25.3%
13.1333 Latin Teacher Education	9	2	22.2%
13.1305 English/Language Arts Teacher Education	3,293	716	21.7%
13.1206 Teacher Education, Multiple Levels	2035	411	20.2%
13.1101 Counselor Education/School Counseling and Guidance Services	108	21	19.4%
13.0101 Education, General	3312	641	19.4%
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	443	83	18.7%
13.1326 German Language Teacher Education	11	2	18.2%
13.0201 Bilingual and Multilingual Education	73	13	17.8%
13.0404 Educational, Instructional, and Curriculum Supervision	193	34	17.6%
13.1306 Foreign Language Teacher Education	378	58	15.3%
13.9999 Education, Other	3575	541	15.1%
13.1302 Art Teacher Education	2209	328	14.8%

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
13.1299 Teacher Education and Professional Development, Specific Levels and Methods, Other	551	76	13.8%
13.1325 French Language Teacher Education	106	13	12.3%
13.1330 Spanish Language Teacher Education	674	82	12.2%
13.1324 Drama and Dance Teacher Education	153	17	11.1%
13.1202 Elementary Education and Teaching	40,589	4,293	10.6%
13.1001 Special Education and Teaching, General	12,803	1,337	10.4%
13.1007 Education/Teaching of Individuals with Multiple Disabilities	197	19	9.6%
13.0901 Social and Philosophical Foundations of Education	22	2	9.1%
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	47	4	8.5%
13.1335 Psychology Teacher Education	12	1	8.3%
13.1011 Education/Teaching of Individuals with Specific Learning Disabilities	474	35	7.4%
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	259	18	6.9%
13.1099 Special Education and Teaching, Other	842	48	5.7%
13.1210 Early Childhood Education and Teaching	9897	491	5.0%
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	327	16	4.9%
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	120	5	4.2%
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	246	8	3.3%
13.1209 Kindergarten/Preschool Education and Teaching	4330	126	2.9%
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	873	19	2.2%
13.0202 Multicultural Education	1	0	0.0%
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	3	0	0.0%
13.0499 Educational Administration and Supervision, Other	5	0	0.0%
13.0701 International and Comparative Education	1	0	0.0%
13.1005 Education/Teaching of Individuals with Emotional Disturbances	12	0	0.0%
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	1	0	0.0%
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	2	0	0.0%
13.1207 Montessori Teacher Education	18	0	0.0%
13.1327 Health Occupations Teacher Education	1	0	0.0%

Source: National Center for Education Statistics

**Figure A.6: CIP Classifications by Percentage Male, Pennsylvania**

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
<b>All CIPs Listed Below</b>	<b>32,517</b>	<b>5,134</b>	<b>15.8%</b>
13.1329 Physics Teacher Education	14	10	71.4%
13.1203 Junior High/Intermediate/Middle School Education and Teaching	11	7	63.6%
13.1320 Trade and Industrial Teacher Education	47	29	61.7%
13.1318 Social Studies Teacher Education	522	311	59.6%
13.1323 Chemistry Teacher Education	16	9	56.3%
13.1328 History Teacher Education	60	33	55.0%
13.1314 Physical Education Teaching and Coaching	640	337	52.7%
13.0699 Educational Assessment, Evaluation, and Research, Other	16	8	50.0%
13.1319 Technical Teacher Education	4	2	50.0%
13.1331 Speech Teacher Education	2	1	50.0%
13.1307 Health Teacher Education	76	36	47.4%
13.1317 Social Science Teacher Education	27	12	44.4%
13.1303 Business Teacher Education	55	24	43.6%
13.1316 Science Teacher Education/General Science Teacher Education	71	30	42.3%
13.1205 Secondary Education and Teaching	1,381	563	40.8%
13.1311 Mathematics Teacher Education	303	117	38.6%
13.1312 Music Teacher Education	925	347	37.5%
13.1322 Biology Teacher Education	46	14	30.4%
13.1305 English/Language Arts Teacher Education	472	118	25.0%
13.1301 Agricultural Teacher Education	24	6	25.0%
13.1399 Teacher Education and Professional Development, Specific Subject Areas, Other	243	58	23.9%
13.1324 Drama and Dance Teacher Education	36	8	22.2%
13.0101 Education, General	427	74	17.3%
13.1306 Foreign Language Teacher Education	145	23	15.9%
13.1325 French Language Teacher Education	7	1	14.3%
13.1330 Spanish Language Teacher Education	50	7	14.0%
13.1302 Art Teacher Education	429	57	13.3%
13.1202 Elementary Education and Teaching	19,909	2,450	12.3%
13.9999 Education, Other	268	28	10.4%
13.1001 Special Education and Teaching, General	3,460	323	9.3%

CIP	TOTAL	TOTAL MALE	PERCENTAGE MALE
13.1009 Education/Teaching of Individuals with Vision Impairments Including Blindness	47	4	8.5%
13.1003 Education/Teaching of Individuals with Hearing Impairments Including Deafness	49	4	8.2%
13.1017 Education/Teaching of Individuals in Elementary Special Education Programs	58	4	6.9%
13.1015 Education/Teaching of Individuals in Early Childhood Special Education Programs	157	9	5.7%
13.1012 Education/Teaching of Individuals with Speech or Language Impairments	44	2	4.5%
13.1099 Special Education and Teaching, Other	356	15	4.2%
13.1210 Early Childhood Education and Teaching	1,464	41	2.8%
13.1209 Kindergarten/Preschool Education and Teaching	549	11	2.0%
13.1308 Family and Consumer Sciences/Home Economics Teacher Education	87	1	1.1%
13.0202 Multicultural Education	1	0	0.0%
13.0299 Bilingual, Multilingual, and Multicultural Education, Other	1	0	0.0%
13.1005 Education/Teaching of Individuals with Emotional Disturbances	12	0	0.0%
13.1008 Education/Teaching of Individuals with Orthopedic and Other Physical Health Impairments	1	0	0.0%
13.1018 Education/Teaching of Individuals in Junior High/Middle School Special Education Programs	1	0	0.0%
13.1326 German Language Teacher Education	1	0	0.0%
13.1333 Latin Teacher Education	2	0	0.0%
13.1499 Teaching English or French as a Second or Foreign Language, Other	1	0	0.0%
13.1338 Environmental Education	0	0	0.0%
13.1401 Teaching English as a Second or Foreign Language/ESL Language Instructor	0	0	0.0%

Source: National Center for Education Statistics

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1700 K Street, NW, 8th Floor  
Washington, DC 20006

P 202.559.0500 F 866.808.6585  
[www.hanoverresearch.com](http://www.hanoverresearch.com)