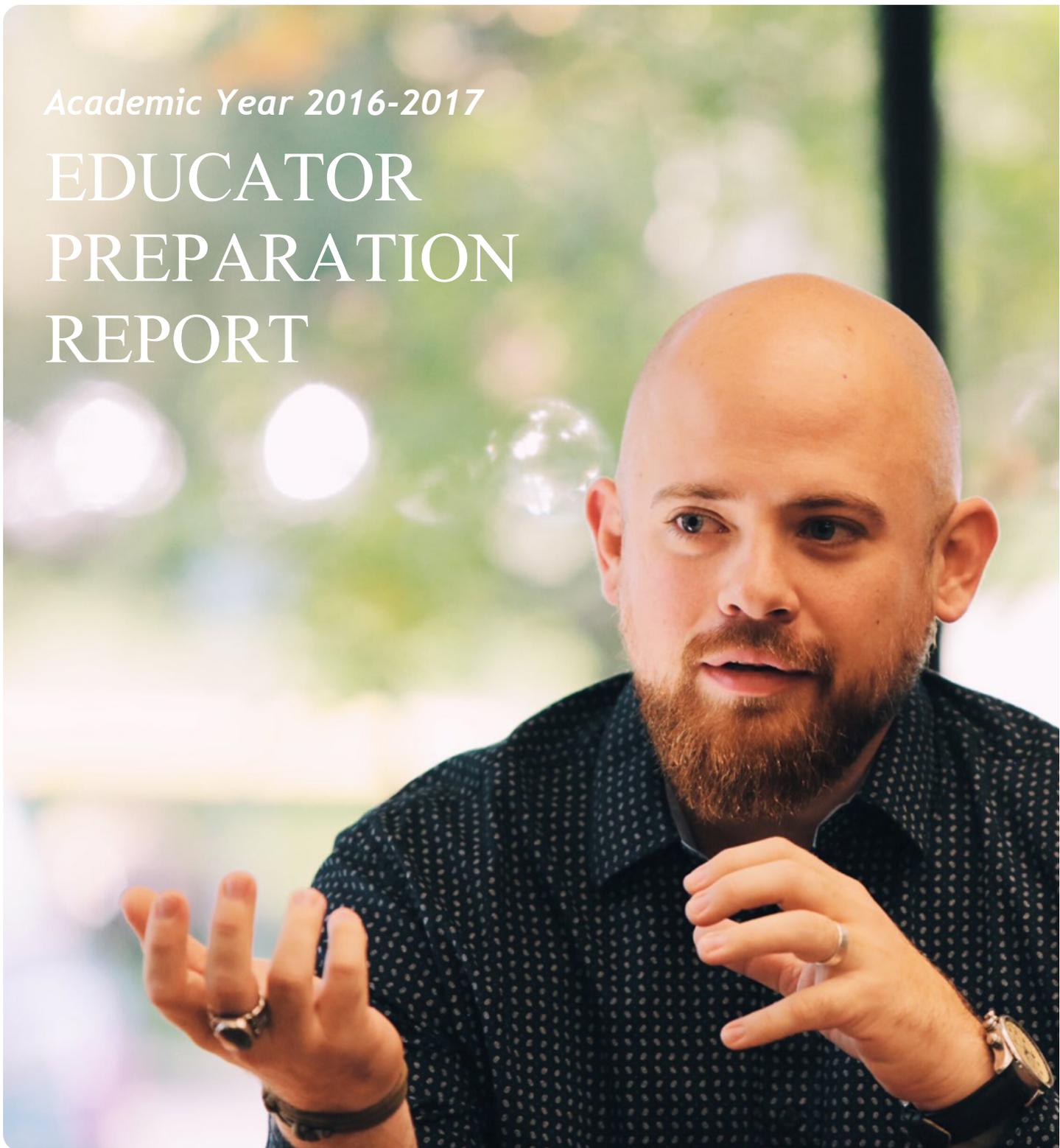


Academic Year 2016-2017

EDUCATOR PREPARATION REPORT



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This report was prepared by the Colorado Department of Higher Education (CDHE) in conjunction with the Colorado Department of Education (CDE) pursuant to §23-1-121(6) C.R.S.

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Executive Summary

Promising Progress and Work to Do

Preparing future educators of Colorado students continues to be an important goal for the state. Unfortunately, declines in enrollment and completion of educator preparation programs have occurred for the past several years. This report describes educator preparation enrollment, completion, and effectiveness during the 2016-2017 academic year.

Report Highlights:

- Overall enrollment in educator preparation programs in Colorado during the academic year 2016-17 was 10,964.
- Declines in enrollment may be beginning to stabilize as there is roughly only a 1% change in the last three years of reporting.
- The largest number of candidates were enrolled in elementary education programs, followed by two high-needs areas: special education generalist and culturally and linguistically diverse education, respectively.
- The completion rates in the high-needs areas of culturally and linguistically diverse education and science went up, while those in math and world languages declined from 2015-16.
- Minority students continue to be slightly underrepresented in educator preparation programs compared to their overall representation in four-year colleges and universities in the state.
- The findings within mirror those found in a recent report entitled *Teacher Shortages Across the Nation and Colorado: Similar Issues, Varying Magnitudes* and lend support for the goals in the Colorado Commission on Higher Education (CCHE) Master Plan, *Colorado Rises: Advancing Education and Talent Development*.
- Future reports by the Colorado Department of Education will provide a clear snapshot of educator preparation effectiveness.

Introduction

Pursuant to §23-1-121(6) Colorado Revised Statutes, the Colorado Commission on Higher Education reports annually to the Joint Education Committee of the General Assembly on enrollment, graduation rates, and effectiveness of educator preparation programs at institutions of higher education and designated agencies. This report fulfills the statutory requirement.

Traditional and Alternative Preparation

There are two pathways to becoming an educator in Colorado. The traditional route involves candidates enrolling in an approved public or private college or university, completing an approved program, and applying for licensure. C.R.S. §23-1-121 grants CCHE the authority to approve educator preparation programs at public and private colleges and universities.

Along with educator preparation programs at institutions of higher education, the State has approved certain designated agencies as alternative certification educator preparation programs, referenced through this report as alternative educator preparation programs. Per C.R.S. §22-60.5-205 these alternative certification programs are under the sole authority of the Colorado State Board of Education (CSBE) and Colorado Department of Education (CDE). This option exists for those individuals who already hold a degree yet need the additional coursework and training in pedagogy. Alternative teacher and principal candidates receive instruction while they are working as the principal or teacher of record in a school.

Data regarding enrollment, completion, and effectiveness of both approaches are described.

Methodology

Colorado Department of Higher Education (CDHE) staff collected data for this report using the Student Unit Record Data System (SURDS) from all 22 public and private institutions authorized to offer educator preparation programs for initial licensure, add-on endorsements, and advanced studies for licensed educators for academic years 2013-2014 through 2016-2017. A complete list of authorized institutions of higher education (IHEs) is found in Appendix A of this report.

CDE staff collected data on designated agencies authorized by the CSBE to offer alternative certification for teacher or principal initial licensure. These data were collected in the Designated Agency Data Collection (DADC), which CDE has established as an annually required

process to fulfill statutory mandates for educator preparation reporting. A complete list of authorized designated agencies is found in Appendix B of this report.

Alignment to Master Plan

The figures within demonstrate CDHE’s commitment to the Master Plan, *Colorado Rises: Advancing Education and Talent Development* in matters related to educator preparation. Specifically, CDHE would like to see an increase in the number of students completing educator preparation programs. The state Master Plan also expresses the need to erase equity gaps, improve student success, and invest in affordability and innovation.

Enrollment

Colorado continues to see record low enrollment numbers in educator preparation programs at institutions of higher education and designated agencies. Declines were seen in male, female, and notably Native American or Alaskan Native students, as well as candidates over the age of 25. These decreased enrollments are consistent with national and global trends in higher education and those regarding teacher shortages¹. Data from the National Student Clearinghouse Research Center shows college enrollment has dropped nationwide for 5 years². The same study found enrollment for education programs has dropped 3.2% across the nation.

Demographics

Gender

In Colorado, more than three-quarters of all education candidates are female. Though this proportion is comparable to what one would see in the teaching profession³, this year marks the fifth consecutive year that the number of males enrolled in education programs at Colorado IHEs have declined: a 15% drop since 2013. Table 1 shows the gender of candidates enrolled at IHEs.

Table 1: IHE-Based Educator Preparation Program Enrollments by Gender

Gender	2012-13	2013-14	2014-15	2015-16	2016-17
Female	8,613 76.72%	7,946 75.65%	7,464 75.45%	7,609 76.89%	7,562 77.25%
Male	2,601 23.17%	2,523 24.02%	2,410 24.36%	2,279 23.02%	2,219 22.67%
Unspecified	14 <1%	35 <1%	17 <1%	8 <1%	10 <1%
Totals	11,227	10,504	9,891	9,896	9,789

Males are represented much more in alternative educator preparation programs. Table 2 shows the breakdown by gender at designated agencies.

Table 2: Designated Agency-Based Educator Preparation Program Enrollments by Gender

Gender	2015-16	2016-17
Female	719 64.83%	773 65.79%
Male	390 35.17%	401 34.13%
Unspecified	0 -	1 <1%
Total	1,109	1,175

These data come from new DADC data collection methods and will be available annually.

Age

The majority (81%) of education candidates enrolled in IHEs are consistently under the age of 35 at the time of enrollment. Table 3 provides detail regarding the age of candidates enrolled in IHEs.

Table 3: IHE-Based Educator Preparation Program Enrollments by Age

Age	2012-13	2013-14	2014-15	2015-16	2016-17
24 years or younger	5,441 48.46%	4,989 47.5%	4,868 49.22%	4,876 49.27%	5,095 52.05%
25-34 years	3,499 31.17%	3,269 31.12%	3,075 31.09%	2,973 30.04%	2,841 29.02%
35+ years	2,465 21.96%	2,246 21.38%	2,095 21.18%	2,047 20.69%	1,999 20.42%
Totals	11,227	10,504	9,891	9,896	9,789

Candidates in alternative educator preparation programs are required to possess a bachelor's degree prior to being admitted. Therefore, the majority of candidates are 25 years old or older. Table 4 provides the breakdown of alternative preparation candidates at designated agencies by age.

Table 4: Designated Agency-Based Educator Preparation Program Enrollments by Age

Age	2015-16	2016-17
24 years or younger	163 14.70%	118 10.04%
25-34 years	520 46.89%	573 48.77%
35+ years	426 38.41%	484 41.19%
Total	1,109	1,175

These data come from new DADC data collection methods and will be available annually.

Race and Ethnicity

The year 2014 marked the first period in Colorado when the majority of K-12 students were minority (black/African American (non-Hispanic), Hispanic, Asian, or other non-white ethnicity), yet teachers are still overwhelmingly white.⁴ In addition, the majority of educator preparation candidates in Colorado are non-Hispanic whites. However, education preparation providers continue to actively recruit and prepare more diverse candidates. For two years in a row, there has been an increase in the number of minority candidates enrolled in traditional education preparation programs, but a decline in the number of non-Hispanic white students enrolled. Of note, however, this year yielded a decline in Native American or Alaskan Native candidates. Alternative preparation programs report the same or an increase the number of candidates across all races and ethnicities, except for those who did not specify a race or ethnicity during the 2015-16 academic year. This may be due to more accurate reporting methods.

Table 5 shows the number of candidates by race and ethnicity for those enrolled in traditional preparation programs.

Table 5: IHE-Based Educator Preparation Program Enrollments by Race and Ethnicity

Federal Race and Ethnicity Categories	2012-13	2013-14	2014-15	2015-16	2016-17
Asian	164 1.16%	160 1.52%	133 1.34%	147 1.49%	153 1.56%
Black or African American, non-Hispanic	224 2.0%	204 1.94%	193 1.95%	222 2.24%	233 2.38%
Hawaiian or Pacific Islander	12 <1%	12 <1%	13 <1%	11 <1%	10 <1%
Hispanic or Latino	1,329 11.83%	1,218 11.60%	1,226 12.40%	1,375 13.89%	1,449 14.80%
Native American or Alaskan Native	92 <1%	74 <1%	76 <1%	76 <1%	52 <1%
Unspecified	1,279 11.39%	1,001 9.53%	862 8.71%	735 7.43%	624 6.37%
White, non-Hispanic	7,924 70.58%	7,575 72.12%	7,145 72.24%	7,064 71.38%	7,020 71.71%
More than one race/ethnicity (non-Hispanic)	207 1.84%	227 2.16%	213 2.15%	257 2.60%	283 2.89%
Non-Resident Alien	35 <1%	33 <1%	40 <1%	41 <1%	44 <1%
Totals	11,227	10,504	9,891	9,896	9,789

In alternative educator preparation programs, the majority of candidates are also non-Hispanic whites, followed by Hispanic or Latino. Table 6 details the enrollment of candidates in alternative programs by race and ethnicity.

Table 6: Designated Agency-Based Educator Preparation Program Enrollments by Race and Ethnicity

Federal Race and Ethnicity Categories	2015-16	2016-17
Asian	25 2.25%	25 2.13%
Black or African American, non-Hispanic	45 4.06%	63 5.36%
Native Hawaiian or Pacific Islander	0 -	4 <1%
Hispanic or Latino	117 10.55%	136 11.58%
Native American or Alaskan Native	3 <1%	3 <1%
White, non-Hispanic	830 74.84%	918 78.13%
More than one race/ethnicity (non-Hispanic)	16 1.44%	26 2.21%
Unspecified	73 6.58%	0 -
Total	1,109	1,175

Traditional Preparation

Table 7 lists all State-approved educator preparation programs at institutions of higher education and summarizes total annual enrollment for the last five years. In total, 9,789 students were enrolled in approved educator preparation programs at 22 public and private institutions in Colorado during the 2016-17 academic year. The University of Northern Colorado led all public institutions in total enrollment in educator preparation programs with 2,786 students, followed by Metropolitan State University of Denver (1,740) and the University of Colorado, Colorado Springs (849). Among private colleges and universities, Regis University enrolled the most educator preparation candidates with 512, followed by Colorado Christian University (246), and University of Phoenix (143).

Table 7: IHE-Based Preparation Program Enrollments by Institution

Institution	2012-13	2013-14	2014-15	2015-16	2016-17	Percent Change 2015-16 to 2016-17
Adams State University ¹	314	246	175	188	316	+68%
Argosy University	-	-	-	51	56	+10%
Colorado Christian University	209	195	165	201	246	+22%
Colorado College	42	43	37	26	24	-8%
Colorado Mesa University	260	200	217	228	217	-5%
Colorado Mountain College	-	-	-	92	118	+28%
Colorado State University	576	868	892	792	518	-35%
Colorado State University - Global Campus	-	-	-	40	62	55%
Colorado State University - Pueblo	325	280	282	334	307	-8%
Fort Lewis College	170	180	171	157	130	-17%
Metropolitan State University of Denver	1913	1770	1448	1687	1740	+3%
Regis University	869	706	545	509	512	+1%
Relay Graduate School of Education	-	-	-	-	70	N/A
Rocky Mountain College of Art and Design	40	20	39	35	40	+14%
University of Colorado Boulder	786	712	803	708	617	-13%
University of Colorado Colorado Springs	713	655	778	757	849	+12%
University of Colorado Denver	866	864	774	725	682	-6%
University of Denver	350	239	289	255	263	+3%
University of Northern Colorado	3498	3222	2900	2822	2786	-1%
University of Phoenix	289	195	265	255	143	-44%
Western State Colorado University	88	98	97	71	123	+73%
Totals	11,387	10,537	9,891	9,896	9,789	-1%

Denver Seminary prepares only school counselors and is, therefore, not included in this table.

¹Adams State University enrollment increase is due to the number of previous Public Education and Business Coalition (PEBC): Boettcher Teacher Residency students the university regained.

Alternative Preparation

Table 8 lists enrollment for teacher and principal candidates at all CSBE-approved alternative certification educator preparation programs. The ASPIRE program at the University of Colorado, Denver continues to enroll the largest number of alternative preparation teacher candidates. The Principal Institute and School Leaders for America continue to prepare the largest number of principal candidates. Total alternative preparation enrollment increased by 7.54% for teacher candidates and declined by 16.22% for principal candidates from the 2015-16 to the 2016-17 academic years.

Table 8: Educator Preparation Program Enrollments by Designated Agency

Designated Agency	2015-16		2016-17		Percent Change 2015-16 to 2016-17 Teacher, Principal
	Teacher	Principal	Teacher	Principal	
The Archdiocese of Denver	24	-	30	-	25.00%
University of Colorado, Denver: ASPIRE	193	-	231	-	19.69%
Boulder Journey School	37	-	34	-	-8.11%
Catapult Leadership	-	12	-	1	-91.67%
Centennial BOCES	33	-	41	-	24.24%
Colorado Christian University	20	-	34	-	70.00%
Colorado State University, Global Campus	3	-	4	-	33.33%
Colorado State University, Pueblo	33	-	40	-	21.21%
Denver Public Schools: Denver Teacher Residency	54	-	41	-	-24.07%
Denver Public Schools: Harvard Fellows	-	-	2	-	-
Denver Public Schools: Lead in Denver	-	14	-	11	-21.43%
Douglas County School District	12	-	28	-	133%
Eagle Rock School and Professional Development Center	4	-	3	-	-25.00%
East Central BOCES	9	2	22	3	144.44%, 50.00%
Friends' School	31	-	34	-	9.68%
Global Village Charter Collaborative	13	-	19	-	46%
Metropolitan State University	175	-	163	-	-6.86%
Mountain BOCES	38	5	35	7	-7.89%, 40.00%
Northeast BOCES	11	-	1	-	-90.91%
Northwest BOCES	10	-	3	-	-70%
Pikes Peak BOCES	131	-	126	-	-3.82%
Pinnacle Charter School	-	-	4	-	-
Principal Institute, LLC	--	20	-	26	-30.00%
Public Education and Business Coalition: Boettcher Teacher Residency	75	-	104	-	38.67%
Relay	-	-	2	-	-
San Luis Valley BOCES	10	-	7	-	-30.00%
School Leaders for America	5	20	3	13	-40.00%, -35.00%
Southeast BOCES	10	-	5	-	-50.00%
Stanley British Primary School: Stanley Teacher Preparation	56	-	46	-	-17.86%
Uncompahgre BOCES: West Central Licensing Program	15	-	10	-	-33.33%
University of Colorado, Boulder	-	-	3	-	-
University of Colorado, Colorado Springs	15	-	10	-	-33.33%
University of Northern Colorado	2	-	2	-	0.00%
Western State Colorado University	16	1	26	1	62.50%, 0.00%
Totals	1,035	74	1,113	62	7.54%, -16.22%

These data come from new DADC data collection methods and will be available annually.

Completion

In an address to the Joint Session of Congress in 2009, President Barack Obama stated, “By 2020, America will once again have the highest proportion of college graduates in the world⁵.” Since then, efforts to improve postsecondary education graduation rates have come into focus. In CCHE’s Master Plan, *Colorado Rises: Advancing Education and Talent Development*, the Commission outlined a plan for the state to increase postsecondary credential attainment to 66% by 2025, a goal that includes all credentials post high school⁶.

Candidates in educator preparation complete their programs in a variety of ways. Some programs result in an academic degree and satisfaction of the requirements for licensure, for example, a BA or MA in elementary education. Others do not end in an academic degree but are post-baccalaureate certificate programs that lead to an add-on endorsement in an approved area. As such, reported within is the completion status, rather than graduation rate, of education students.

Just over half (54.8%) of students who enrolled in colleges and universities in the fall of 2010 completed school within 6 years². Moreover, enrollment rates declined 3.2%, down slightly from the previous year.

Overall, completion in Colorado educator programs is up slightly from the 2015-16 academic year. During the 2016-17 academic year, 2,674 students completed traditional educator preparation programs at colleges/universities, versus 2,472 completers in 2015-2016. This slight gain (8%) marks the first time in seven years the number of completers from university/college-based educator preparation programs have increased. Additionally, the number of candidates eligible to work with students in special education, culturally and linguistically diverse education, and science increased. Unfortunately, candidates who completed programs in mathematics dropped slightly (1%) as well as those in world languages (16%). Table 9 shows the completion figures for candidates by endorsement/licensure area at IHEs.

Traditional Preparation

Table 9: IHE-Based Educator Preparation Completers by Endorsement/Licensure Area

Endorsement/Licensure Area	2012-13	2013-14	2014-15	2015-16	2016-17	Percent Change 2015-16 to 2016-17
Administrator	5	10	11	20	10	-50%
Agriculture, Food and Natural Resources	11	9	5	6	5	-17%
Business	9	6	4	4	0	-100%
Business/Marketing Education	0	2	2	1	2	+100%
Culturally and Linguistically Diverse Bilingual Education Specialist	5	1	1	0	2	+200%
Culturally and Linguistically Diverse Education	290	213	279	240	468	95%
Drama Theatre Arts	7	9	15	9	17	89%
Early Childhood Education (ECE)	111	103	81	101	113	12%
ECE Special Education	22	18	23	25	34	36%
ECE Special Education: Specialist	45	35	41	47	66	40%
Elementary Education	992	905	856	751	711	-5%
English Language Arts	192	191	178	157	132	-16%
Family and Consumer Sciences	8	3	6	6	8	33%
Gifted Education, Core	8	10	4	6	0	-100%
Gifted Education, Specialist ¹	-	-	-	-	7	
Health Education	1	0	0	0	0	0%
Instructional Technology Specialist	10	8	6	10	10	0%
Instructional Technology Teacher	10	5	1	1	0	-100%
Librarian, Teacher ¹	9	5	9	1	20	1900%
Mathematics	75	105	105	84	83	-1%
Music (K-12)	102	118	92	85	73	-14%
Physical Education	85	71	61	57	60	5%
Principal	231	277	302	396	432	9%
Reading Specialist	40	27	10	8	9	13%
Reading Teacher	48	39	43	31	47	52%
Science	135	124	129	108	115	6%
Social Studies	212	193	167	158	170	8%
Special Ed Specialist: Visually Impaired	0	2	2	0	0	--
Special Ed. Specialist: Deaf/Hard of Hearing	4	4	2	8	5	-38%
Special Education Director	0	8	2	8	4	-50%
Special Education: Generalist	219	203	229	153	192	25%
Speech	5	2	1	1	0	-100%
Technology Education	1	5	3	2	3	50%
Undeclared or Unknown	4	2	5	10	4	-60%
Visual Arts	96	83	68	73	69	-5%
World Language	44	36	29	31	26	-16%
Totals	2,858	2,704	2,563	2,472	2,674	8%

¹Gifted Education, Specialist is a new add-on endorsement available 2016-17.

Alternative Preparation

Candidates who completed programs in alternative preparation programs largely did so in the areas of elementary education (236), special education generalist (89), and 81 candidates each for both mathematics and English language arts. Table 10 lists all of the completers at designated agencies by their endorsement/licensure area.

Table 10: Designated Agency-Based Educator Preparation Completers by Endorsement/Licensure Area

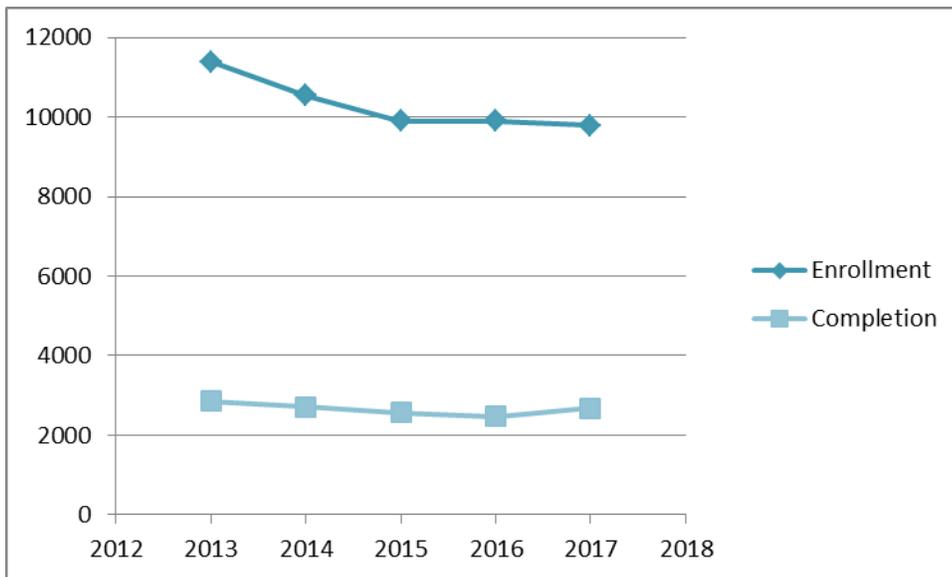
Endorsement/Licensure Area	2015-16	2016-17	Percent Change 2015-16 to 2016-17
Agriculture, Food and Natural Resources	5	7	40.00%
Business	8	12	50.00%
Business/Marketing Education	4	2	-50.00%
Dance	1	-	-100%
Drama Theatre Arts	7	5	-28.57%
Early Childhood Education (ECE)	58	60	3.45%
Elementary Education	230	236	2.61%
English Language Arts	75	81	8.00%
Family and Consumer Sciences	1	3	200.00%
Health Education	1	3	200.00%
Instructional Technology Teacher	4	2	-50.00%
Librarian, Teacher ¹	0	5	
Mathematics	75	81	8.00%
Music (K-12)	9	11	22.22%
Physical Education	24	22	-8.33%
Principal	39	11	-71.79%
Science	88	69	-21.59%
Social Studies	28	37	32.14%
Special Education Generalist	69	89	28.99%
Speech	1	0	-100%
Technology Education	3	3	0.00%
Visual Arts	14	17	21.43%
World Language	30	26	-13.33%
Total	774	782	1.03%

These data come from new DADC data collection methods and will be available annually.

Enrollment Versus Completion

There is some evidence to suggest that enrollment may be stabilizing. Figure 1 depicts the difference between the enrollment and completion of educator preparation programs at IHEs.

Figure 1: Five-year Enrollment vs. Completion at IHEs



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Effectiveness

Reauthorization and Programmatic Approval

In an effort to examine effectiveness, CDHE and CDE monitor educator preparation providers through regular and systematic programmatic review. As stipulated in §23-1-121(4)(a)(I), C.R.S., the Colorado Commission on Higher Education (CCHE) and CDHE, in conjunction with the Colorado State Board of Education (CSBE) and CDE, are required to review all educator preparation providers no more frequently than once every five years to ensure the programs meet the statutory requirements for reauthorization. Review teams are comprised of academic experts in the field of educator preparation, individuals familiar with the P20 pipeline in Colorado and, when possible, a local K-12 practitioner from a partner district associated with the institution. Per statute, each reauthorization visit coincided with accreditation visits from national accreditation agencies, when applicable, to reduce or eliminate duplicative reporting.

In addition to on-campus reauthorization site visits, both CDE and CDHE review all new educator preparation program proposals submitted by institutions of higher education. Upon successful review by CDE and CDHE staff, new program proposals are approved by both the CSBE and CCHE.

Alternative program providers also undergo a rigorous initial authorization and reauthorization process; however, this falls fully under the purview of CDE.

Reauthorization

During the 2016-17 academic year, the educator preparation providers at the following institutions underwent reauthorization review and were approved by both the CSBE and CCHE:

- Argosy University
- Colorado College
- Colorado Mesa University
- Colorado Mountain College
- University of Denver
- Western State Colorado University
- Colorado State University, Pueblo

Program Approval

During the 2016-17 academic year, the following new programs were approved by the CSBE and the CCHE:

- Elementary Education and Culturally and Linguistically Diverse Education - Naropa
- Early Childhood Education with Special Education Endorsement - Colorado Mesa

CSBE approved the following new designated agency and program:

- Special Education Generalist endorsement - Colorado River BOCES

CSBE approved the following new program at an existing designated agency:

- Special Education Generalist endorsement - Denver Teacher Residency

Future Educator Preparation Reports

Pursuant to C.R.S. 22-2-112(1)(q), in 2018 and beyond, this report will be produced by the Colorado Department of Education and the Colorado Department of Higher Education to provide a more comprehensive picture of the educator pipeline. In addition to providing educator preparation enrollment and completion details, the new joint agency report will include information regarding new educators' outcomes by combining completion data with that collected by CDE from educators in their first three years of placement. Beginning in 2018, the agencies will be able to answer questions about educator placement, classroom performance, and teacher retention and mobility. The new joint agency annual report will allow for a more in-depth examination of the effectiveness of educator preparation programs.

Teacher Shortage

As previously mentioned, the enrollment and completion rates of candidates in educator preparation programs in Colorado reflect declines also seen nationwide. In the wake of this reduction of newly prepared educators, school districts have struggled to fill positions—particularly in high needs areas. Following several consecutive years of declines in both enrollment and completion of educator preparation programs, Colorado HB17-1003, Strategic Plan to Address Teacher Shortages was passed. The bill required an in-depth study of the teacher

shortage crisis in Colorado and subsequent action plan to address it. The findings are consistent with what has been reported herein⁷.



End Notes

- 1 Sutchter, L., Darling-Hammond, L., and Carver-Thomas, D. (2016). *A Coming Crisis in Teaching? Teacher Supply, Demand, and Shortages in the U.S.* Palo Alto, CA: Learning Policy Institute.
- 2 Shapiro, D., Dundar, A., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. (2016, November). *Completing College: A National View of Student Attainment Rates - Fall 2010 Cohort* (Signature Report No. 12). Herndon, VA: National Student Clearinghouse Research Center.
- 3 U.S. Department of Education, National Center for Education Statistics. (2016). *Digest of Education Statistics, 2015* (NCES 2016-014), [Introduction](#) and [Chapter 2](#).
- 4 Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A & Hwang, Y., A. (2017, April). *Completing College: A National View of Student Attainment Rates by Race and Ethnicity - Fall 2010 Cohort* (Signature Report No. 12b). Herndon, VA: National Student Clearinghouse Research Center.
- 5 President Barack Obama, "Address to Joint Session of Congress," February 24, 2009, http://www.whitehouse.gov/the_press_office/Remarks-of-President-Barack-Obama-Address-to-Joint-Session-of-Congress.
- 6 *Colorado Rises: Advancing Education and Talent Development*, (2016) Colorado Department of Higher Education.
- 7 *Teacher Shortages Across the Nation and Colorado: Similar Issues, Varying Magnitudes*. (2017) Colorado Department of Higher Education.

Appendix A: IHE-Based Enrollment and Endorsement/Licensure Area

APPROVED EDUCATOR PREPARATION PROGRAMS	Adams State University	Argosy University	Colorado Christian University	Colorado College	Colorado Mesa University	Colorado Mountain College	Colorado State University	Colorado State University - Global Campus	Colorado State University - Pueblo	Denver Seminary	Fort Lewis College	Metropolitan State University of Denver	Regis University	Relay Graduate School of Education	Rocky Mountain College of Art and Design	University of Colorado Boulder	University of Colorado Colorado Springs	University of Colorado Denver	University of Denver	University of Northern Colorado	University of Phoenix	Western State Colorado University
Administrator	•																4	31	•	16		•
Agriculture, Food & Natural Resources							29															•
Business & Marketing Education	1						1					•									•	•
Culturally & Linguistically Diverse Education	211				•	118		69		61	38	132				166	180	131		254		1
Culturally & Linguistically Diverse Bilingual Education Specialist											5					•				3		
Dance Education																				•		

Approved Programs	ASU	AU	CCU	CC	CMU	CMC	CSU	CSUG	CSUP	DS	FLC	MSUD	RU	RGSE	RMCAD	UCB	UCCS	UCD	DU	UNC	UP	WSCU
Drama Theatre Arts	.						.				3									72		.
Early Childhood Education	.		8				98				232	232	1				98	.		254		
ECE Special Education Specialist																		94	27	3		
ECE Special Education					.								14				98			115		
Elementary Education	28		123	13	102	118			128		53	569	149	31		160	294	96	51	1,009	24	33
English Lang Arts	3		18	2	16		94		12		6	141	12	7		44	77	25	13	122	34	5
Family and Consumer Sciences							25															.
Gifted Ed, Core																						
Gifted Education, Specialist																						
Gifted Education, Director																						
Health											
Instructional Technology Specialist									.									21				

Approved Programs	ASU	AU	CCU	CC	CMU	CMC	CSU	CSUG	CSUP	DS	FLC	MSUD	RU	RGSE	RMCAD	UCB	UCCS	UCD	DU	UNC	UP	WSCU
Instructional Technology Teacher							•		4				•					•				•
Librarian, Teacher																		31	11			
Mathematics	2		•	1	2		45	5	11		8	70	4	16		31	74	10	8	81	11	2
Music	•		6	•	10		44		19		12	110	1			109			•	149		4
Physical Education	4				11				25		10	62								100		4
Principal	42	56	2		22		15	54					130				62	151	122	167	27	38
Reading Specialist)				•									42				17					2
Reading Teacher	•			•									15			24	•	58		3		•
Science	10		10	1	11		58	3	12		4	51	9	13		48	89	21	3	114	15	4
Social Studies	17		17	2	21		52		15		14	151	6	3		25	78	34	18	166	28	14
Special Education, Director																	•		•	44		
Special Education, Generalist	65		65		10				14			242	93			30	207	39		280	•	11

Approved Programs	ASU	AU	CCU	CC	CMU	CMC	CSU	CSUG	CSUP	DS	FLC	MSUD	RU	RGSE	RMCAD	UCB	UCCS	UCD	DU	UNC	UP	WSCU
Special Education, Specialist																•				•		
Special Education Specialist-Visually Impaired																				1		
Special Education Specialist-Deaf/Hard of Hearing																				23		
Speech							1						•									
Technology Education							5															•
Trade and Industry Education																						•
Visual Arts	2			3	8		37		12		9	98	•		40				7	86		5
World Language	•			2	4		14		5		6	36	•			•	8	3	1	60		•

•Denotes an IHE with an approved program, but no candidates enrolled during the 2016-17 academic year.

Appendix B: DA-Based Enrollment and Endorsement/Licensure Area

APPROVED EDUCATOR PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher Residency	Denver Public Schools: Harvard Fellows	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	East Central BOCES	Friends' School	Global Village Charter Collaborative	Metropolitan State University of Denver	Mountain BOCES	Northeast BOCES	Northwest BOCES	Pikes Peak BOCES	Pinnacle Charter School	Principal Institute, LLC	PEBC: Boettcher Teacher Residency	Relay	San Luis Valley BOCES	School Leaders for America	Southwest BOCES	Stanley British Primary: Stanley Teacher Preparation	Uncompahgre BOCES: West Central Licensing Program	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University	
Agriculture, Food & Natural Resources		4			2																		1					1							
Business Education					1							1					1	1					2			1	1	2							
Business & Marketing Education		2						1									3																		
Dance Education																					2														
Drama Theatre Arts					1							1					3					1								1					
Early Childhood Education	2	4			4									6		8	2	1			1							3							
Elementary Education	4	49	34		6	11		10	25			8		5	28	14	27	17				1		41		1		2	43	1				6	

APPROVED EDUCATOR PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher Residency	Denver Public Schools: Harvard Fellows	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	East Central BOCES	Friends' School	Global Village Charter Collaborative	Metropolitan State University of Denver	Mountain BOCES	Northeast BOCES	Northwest BOCES	Pikes Peak BOCES	Pinnacle Charter School	Principal Institute, LLC	PEBC: Boettcher Teacher Residency	Relay	San Luis Valley BOCES	School Leaders for America	Southwest BOCES	Stanley British Primary: Stanley Teacher Preparation	Uncompahgre BOCES: West Central Licensing Program	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University		
English Lang Arts	5	35			4	3		2		1		4		2			9	4		2	9	1		15	1					1		2				
Family and Consumer Science						1								1						1																
Health		3										1					1	1																		
Instructional Technology Teacher								2									1										1			1						
Librarian, Teacher	1											1					2				3															
Mathematics	4	23			11	4	4	6	5			2	1	1		2	20	4			13			12	1	1				3	1	2			3	
Music	1	2			1	3						2									6			2		2										
Physical Education	2	4			4							2		3			6	1			4	1		1											3	

APPROVED EDUCATOR PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher Residency	Denver Public Schools: Harvard Fellows	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	East Central BOCES	Friends' School	Global Village Charter Collaborative	Metropolitan State University of Denver	Mountain BOCES	Northeast BOCES	Northwest BOCES	Pikes Peak BOCES	Pinnacle Charter School	Principal Institute, LLC	PEBC: Boettcher Teacher Residency	Relay	San Luis Valley BOCES	School Leaders for America	Southwest BOCES	Stanley British Primary: Stanley Teacher Preparation	Uncompahgre BOCES: West Central Licensing Program	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University		
Principal				1						11				3				7					26				13								1	
Science		27			2	2		4	5			2	1	5		1	15	2					13			1	1					2	2	4		1
Social Studies	5	14			1			2		1		2					4				3	1		8									1			2
Special Education, Generalist	4	49			2	8		2	6								48						7													10
Technology Education		1				1						1						1																		
Visual Arts		7			1			9						3			5						1			1										
World Language	2	7			1	1		2				1	1			2	10	2					1				0						1	2	1	