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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 Colorado Commission on Higher Education, the Colorado Department of Education, and the state¹. Enrollment in educator preparation programs increased in 2017-18 by 6 percent for traditional programs and 2 percent for alternative programs. Unfortunately, there was a decline in completion rates of 4.5 percent and 1.9 percent, respectively. This report describes educator preparation program enrollment and completion, as well as legislation addressing teacher shortages during the 2017-2018 academic year.

Report Highlights:

- Overall enrollment in educator preparation programs in Colorado during the academic year 2017-18 was 11,599.
- From academic years 2016-17 to 2017-18 there has been significant increase in enrollment but a drop in completion of educator preparation programs.
- The largest number of candidates were enrolled in elementary education, culturally and linguistically diverse education, principal, and special education generalist preparation programs; both culturally and linguistically diverse education and special education are high-needs areas.
- The largest gains in the completion of high-needs fields were in world languages, while slight decreases were seen in culturally and linguistically diverse education, special education generalist, and art.
- Candidates of color continue to be underrepresented in educator preparation programs, given the makeup of Colorado students and compared to overall representation in four-year colleges and universities in the state.
- State initiatives have been implemented to aid in both the recruitment of future educators and the retention of in-service teachers.
- Future reports by the Colorado Department of Education and Colorado Department of Higher Education will provide a more in-depth look at the effectiveness of educator preparation programs.



Introduction

Pursuant to §23-1-121(6) Colorado Revised Statutes, the Colorado Commission on Higher Education (CCHE) 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.

The second pathway is through designated agencies approved by the state as alternative certification educator preparation programs, referenced throughout 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 the Colorado Department of Education (CDE). This option exists for those individuals who already hold at least a bachelor's 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 as the 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 20 public and private institutions authorized to offer preparation programs for initial licensure, add-on endorsements, and advanced studies for licensed teachers, principals, and administrators for academic years 2013-14 through 2017-18. A complete list of these authorized institutions of higher education (IHEs) is found in Appendix A of this report.

Colorado Department of Education (CDE) staff collected data on designated agencies authorized by the State Board of Education (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. The 2017-18 academic year represents the third year of the DADC. 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, the commission would like to see an increase in the number of students completing educator preparation programs. The state master plan also expresses the need to eliminate equity gaps, improve student success, and invest in affordability and innovation.

Enrollment

Educator preparation programs experienced a significant increase in enrollment from the 2016-17 academic school year. Increases were seen in male and female students across both IHE-based and alternative preparation. Growth was also reported for both Hispanic or Latino and white students.

Demographics

GENDER

In Colorado, more than three-quarters of all education candidates are female, comparable to what one would see in the teaching profession². At Colorado IHEs, 2016-17 marked the fifth consecutive year that the number of males enrolled in education programs had declined: a 15% drop in traditional programs since 2012-13. However, the 2017-18 results show an uptick in the number of males enrolled in both types of programs. Though promising, it is too early to tell whether this might indicate a new trend in the data. Table 1 shows the gender of candidates enrolled at IHEs.

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

Gender	2013-14	2014-15	2015-16	2016-17	2017-18
Female	7,946	7,464	7,609	7,562	7,994
	75.65%	75.45%	76.89%	77.25%	77.01%
Male	2,523	2,410	2,279	2,219	2,376
	24.02%	24.36%	23.02%	22.67%	22.99%
Unspecified	35	17	8	10	12
	<1%	<1%	<1%	<1%	<1%
Totals	10,504	9,891	9,896	9,789	10,380

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

Males are represented much more in alternative educator preparation programs, where their numbers have increased since 2015-16. Table 2 shows the breakdown by gender at designated agencies.

Gender	2015-16	2016-17	2017-18
Famala	719	773	783
Female	64.83%	65.79%	64.23%
Mala	390	401	435
Male	35.17%	34.13%	35.68%
	0	1	1
Unspecified	-	<1%	<1%
Total	1,109	1,175	1,219

AGE

The majority (81%) of education candidates enrolled in IHEs are under the age of 35 at the time of enrollment. The largest age group of education candidates at IHE-based EPPs are 24 years or younger, typical of traditional undergraduates. Table 3 provides detail regarding the age of candidates enrolled in IHEs.

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

Age	2013-14	2014-15	2015-16	2016-17	2017-18
24 years or younger	4,989	4,868	4,876	5,095	5,426
	47.5%	49.22%	49.27%	52.05%	52.29%
25-34 years	3,269	3,075	2,973	2,841	2,959
	31.12%	31.09%	30.04%	29.02%	28.51%
35+ years	2,246	2,095	2,047	1,999	2,114
	21.38%	21.18%	20.69%	20.42%	20.37%
Totals	10,504	9,891	9,896	9,789	10,380

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	2017-18
24 years or younger	163	118	87
	14.70%	10.04%	7.14%
25-34 years	520	573	604
	46.89%	48.77%	49.55%
35+ years	426	484	528
	38.41%	41.19%	43.14%
Total	1,109	1,175	1,219

RACE AND ETHNICITY

The year 2014 marked the first period in Colorado when most K-12 students were black or African American, Hispanic or Latino, Asian, or other non-white ethnicity, yet teachers are still overwhelmingly white³. Most educator preparation candidates in Colorado are non-Hispanic whites, despite efforts of education preparation provider attempts to actively recruit and prepare more diverse candidates. A diverse education workforce matters. Studies show that students learn more from teachers who are the same race as they are.⁴ Additionally, students surveyed say they feel more cared for and motivated by their same race teachers.⁵ 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	2013-14	2014-15	2015-16	2016-17	2017-18
A	160	133	147	153	187
Asian	1.52%	1.34%	1.49%	1.56%	1.80%
Diagle or African American	204	193	222	233	239
Black or African American	1.94%	1.95%	2.24%	2.38%	2.30%
Native Hausian or Other Pacific Islander	12	13	11	10	14
Native Hawaiian or Other Pacific Islander	<1%	<1%	<1%	<1%	<1%
Historia au Latina	1,218	1,226	1,375	1,449	1,590
Hispanic or Latino	11.60%	12.40%	13.89%	14.80%	15.32%
American Indian or Alaska Native	74	76	76	52	60
American Indian or Alaska Native	<1%	<1%	<1%	<1%	<1%
Haanaaifia d	1,001	862	735	624	444
Unspecified	9.53%	8.71%	7.43%	6.37%	4.28%
NA/I-24 -	7,575	7,145	7,064	7,020	7464
White	72.12%	72.24%	71.38%	71.71%	71.87%
More than one race	227	213	257	283	330
(non-Hispanic)	2.16%	2.15%	2.60%	2.89%	3.18%
New Desident Alien	33	40	41	44	59
Non-Resident Alien	<1%	<1%	<1%	<1%	<1%
Totals	10,504	9,891	9,896	9,789	10,380

In alternative educator preparation programs, the majority of candidates are also white, 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	2017-18
Asian	25	25	24
ASIGII	2.25%	2.13%	1.97%
Black or African American	45	63	61
black of Affical Afficiencal	4.06%	5.36%	5%
Native Hawaiian or Other Pacific Islander	0	4	4
native Hawaiian of Other Facility Istalide	-	<1%	<1%
Hispanic or Latino	117	136	161
Thispanic of Latino	10.55%	11.58%	13.21%
American Indian or Alaska Native	3	3	8
American indian of Ataska Native	<1%	<1%	<1%
White	830	918	945
Wille	74.84%	78.13%	77.52%
More than one race	16	26	14
(non-Hispanic)	1.44%	2.21%	1.15%
Unspecified	73	0	2
onspectifica	6.58%	-	<1%
Total	1,109	1,175	1, 219

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, 10,380 students were enrolled in approved educator preparation programs at these 20 public and private institutions in Colorado during the 2017-18 academic year. The University of Northern Colorado led all public institutions in total enrollment in educator preparation programs with 2,796 students, followed by Metropolitan State University of Denver (1,771) and the University of Colorado, Colorado Springs (986). Among private colleges and universities, Regis University enrolled 713 educator preparation candidates followed by Colorado Christian University (311).

TABLE 7: IHE-Based Preparation Program Enrollments by Institution

Institution	2013-14	2014-15	2015-16	2016-17	2017-18
Adams State University ¹	246	175	188	316	225
Argosy University	-	-	51	56	111
Colorado Christian University	195	165	201	246	311
Colorado College	43	37	26	24	23
Colorado Mesa University	200	217	228	217	213
Colorado Mountain College	-	-	92	118	173
Colorado State University	868	892	792	518	756
Colorado State University - Global Campus	-	-	40	62	110
Colorado State University - Pueblo	280	282	334	307	270
Fort Lewis College	180	171	157	130	122
Metropolitan State University of Denver	1,770	1,448	1,687	1,740	1,771
Regis University	706	545	509	512	713
Relay Graduate School of Education	-	-	-	70	70
Rocky Mountain College Art and Design	20	39	35	40	37
University of Colorado Boulder	712	803	708	617	544
University of Colorado - Colorado Springs	655	778	757	849	986
University of Colorado Denver	864	774	725	682	680
University of Denver	239	289	255	263	375
University of Northern Colorado	3,222	2,900	2,822	2,786	2,796
Western State Colorado University	98	97	71	123	123
Totals	10,537	9,891	9,896	9,789	10,380

Denver Seminary prepares only school counselors and Denver College of Nursing prepares only school nurses and are, therefore, not included in this table. ¹Adams State University enrollment increase is due to previous PEBC: Boettcher Teacher Residency students the university admitted.

ALTERNATIVE PREPARATION

Table 8 lists enrollment for teacher and principal candidates at all CSBE-approved alternative certification educator preparation programs. The Alternative School Professionals in Real-world Experience (ASPIRE) program at the University of Colorado Denver continues to enroll the largest number of alternative preparation teacher candidates. The Principal Institute prepares the largest number of principal candidates (36). Total alternative preparation enrollment increased by 2.16% for teachers and by 32.26% for principals from the 2016-17 to the 2017-18 academic years.

 TABLE 8: Educator Preparation Program Enrollments by Designated Agency

Designated Agency	2015-16		201	6-17	201	7-18
	Teacher	Principal	Teacher	Principal	Teacher	Principal
The Archdiocese of Denver	24	-	30	-	27	-
University of Colorado Denver: ASPIRE	193	-	231	-	232	-
Boulder Journey School	37	-	34	-	26	-
Catapult Leadership	-	12	-	1	-	3
Centennial BOCES	33	-	41	-	61	-
Colorado Christian University	20	-	34	-	45	-
Colorado River BOCES					4	-
Colorado State University, Global Campus	3	-	4	-	3	-
Colorado State University, Pueblo	33	-	40	-	59	-
Denver Public Schools: Denver Teacher Residency	54	-	41	-	38	-
Denver Public Schools: Lead in Denver	-	14	-	11	-	18
Douglas County School District			12		36	
Eagle Rock School and Professional Development Center	4	-	3	-	6	-
East Central BOCES	9	2	22	3	10	4
Friends' School	31	-	34	-	30	-
Metropolitan State University	175	-	163	-	137	-
Mountain BOCES	38	5	35	7	50	7
Northeast BOCES	11	-	1	-	-	-
Northwest BOCES	10	-	3	-	14	-
Pikes Peak BOCES	131	-	126	-	165	-
Pinnacle Charter School	-	-	4		6	-
Principal Institute, LLC		20	-	26	-	36
Public Education and Business Coalition: Boettcher Teacher Residency	75	-	104	-	109	-
Relay	-	-	2	-	12	-
San Luis Valley BOCES	10	-	7	-	13	-
School Leaders for America	5	20	3	13	4	14
Southeast BOCES	10	-	5	-	4	-
Uncompangre BOCES: West Central Licensing Program	15	-	10	-	10	-
University of Colorado: Boulder	-	-	3	-	-	-
University of Colorado, Colorado Springs	15	-	10	-	18	-
University of Northern Colorado	2	-	2	-	-	-
Western State Colorado University	16	1	26	1	18	-
Totals	1,035	74	1,113	62	1,137	82

Completion

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 post high school credentials. As a result of several years of decline in the enrollment and completion rates of EPPs in the state, the Commission identified increasing educator credential completion as a high priority. Specifically, the target number of education credentials obtained in 2025 is set at 3,280.

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, such as a BA or MA in elementary education. Others do not end in an academic degree but are post-baccalaureate certification 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.

Overall, completion in Colorado educator programs dropped slightly (4%) from the 2016-17 academic year. During the 2017-18 academic year, a total of 3,320 students completed educator preparation programs versus 3,456 completers in 2016-2017. The number of candidates eligible to work with students in highneeds areas such as science, math, and world languages increased slightly; however, the number of candidates who completed programs in art, special education, and culturally and linguistically diverse education dropped – all high-needs areas.

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	2013-14	2014-15	2015-16	2016-17	2017-18	Percent Change 2016-17 to 2017-18
Administrator	10	11	20	10	26	160%
Agriculture, Food and Natural Resources	9	5	6	5	12	140%
Business	6	4	4	0	0	0%
Business/Marketing Education	2	2	1	2	7	250%
Culturally and Linguistically Diverse Bilingual Education Specialist	1	1	0	2	0	-100%
Culturally and Linguistically Diverse Education	213	279	240	468	450	-3.85%
Drama Theatre Arts	9	15	9	17	7	-58.82
Early Childhood Education (ECE)	103	81	101	113	107	-5.31%
ECE Special Education	18	23	25	34	28	-17.65
ECE Special Education: Specialist	35	41	47	66	49	-25.76%
Elementary Education	905	856	751	711	663	-6.75%
English Language Arts	191	178	157	132	144	9.09%
Family and Consumer Sciences	3	6	6	8	7	-12.5%
Gifted Education, Core	10	4	6	0	0	0%
Gifted Education, Specialist ¹	-	-	-	7	4	-42.86%

Health Education	0	0	0	0	0	0%
Instructional Technology Specialist	8	6	10	10	4	-60%
Instructional Technology Teacher	5	1	1	0	2	200%
Librarian, Teacher	5	9	1	20	11	-45%
Mathematics	105	105	84	83	81	-2.41%
Music (K-12)	118	92	85	73	68	-6.85%
Physical Education	71	61	57	60	52	-13.33%
Principal	277	302	396	432	391	-9.49%
Reading Specialist	27	10	8	9	10	11.11%
Reading Teacher	39	43	31	47	26	-44.68%
Science	124	129	108	115	121	5.22%
Social Studies	193	167	158	170	160	-5.88
Special Ed. Specialist: Visually Impaired	2	2	0	0	0	0%
Special Ed. Specialist: Deaf/Hard of Hearing	4	2	8	5	8	60%
Special Education Director	8	2	8	4	2	-50%
Special Education: Generalist	203	229	153	192	162	-15.63%
Speech	2	1	1	0	2	200%
Technology Education	5	3	2	3	0	-100%
Undeclared or Unknown	2	5	10	4	1	-75%
Visual Arts	83	68	73	69	55	-20.29%
World Language	36	29	31	26	49	88.46%
Totals	2,704	2,563	2,472	2,674	2,553	-4.53

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 (206), special education generalist (92), and science (92). 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	2017-18	Percent Change 2016-17 to 2017-18
Agriculture, Food, and Natural Resources	5	7	2	-71.43%
Business	8	12	11	-8.33
Business/Marketing Education	4	2	5	150%
Drama Theatre Arts	7	5	7	40%
Early Childhood Education (ECE)	58	60	44	-26.66
Elementary Education	230	236	206	-12.71
English Language Arts	75	81	60	-25.93
Family and Consumer Sciences	1	3	3	0%
Health Education	1	3	1	-66.67%
Instructional Technology Teacher	4	2	5	150%
School Librarian ¹	0	5	1	-80%
Marketing	0	0	1	

Total	774	782	767	-1.92%
World Language	30	26	28	7.69%
Visual Arts	14	17	20	17.65%
Technology Education	3	3	8	166.67%
Speech	1	0	0	0%
Special Education Generalist	69	89	92	3.37%
Social Studies	28	37	35	-5.41%
Science	88	69	92	33.33%
Principal	39	11	18	63.64%
Physical Education	24	22	24	9.09%
Music (K-12)	9	11	16	45.45%
Mathematics	75	81	88	8.64%

¹The School Librarian endorsement has been discontinued. Only students who were already enrolled are eligible to complete this program.

Enrollment Versus Completion

There is some evidence to suggest that drastic drops in IHE enrollment and completion observed during previous years may be stabilizing. However, a smaller proportion of enrollees are finishing their preparation programs. Unfortunately, these results are well below what will be required to meet the Commission's target of 3,280 educator credentials to be completed by the year 2025. Educator preparation programs must ensure that candidates enrolled are receiving the support, coaching, and resources necessary in order for excellent candidates to persist and become excellent teachers.

Figure 1 depicts the difference between the enrollment and completion of educator preparation programs at IHEs.

Enrollment vs Completion 12000 10000 8000 6000 4000 2704 **25**53 2000 0 2015 2017 2014 2016 2018 - Enrollment Completion

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

Figure 2 depicts the difference between the enrollment and completion of educator preparation programs at DAs.



FIGURE 2: Three-year Enrollment vs. Completion at DAs

Effectiveness

Reauthorization and Programmatic Approval

To examine effectiveness, CDHE and CDE monitor traditional 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 traditional educator preparation providers no more frequently than once every five years to ensure the programs meet the statutory requirements for reauthorization. Review teams consist 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. Following review by CDE and CDHE staff, new program proposals are approved or denied by both the CSBE and CCHE.

Alternative program providers also undergo a rigorous initial authorization and reauthorization process by the CDE that mirrors the traditional education preparation program process; however, this falls fully under the purview of CSBE.

REAUTHORIZATION

During the 2017-18 academic year, the following educator preparation programs underwent reauthorization reviews and were reapproved by both CSBE and CCHE (traditional programs) or CSBE (alternative programs):

- ASPIRE University of Colorado Denver alternative program
- Colorado Christian University traditional program
- East Central BOCES alternative program
- Public Education and Business Coalition (PEBC) alternative programs

PROGRAM APPROVAL

During the 2017-18 academic year, the following new programs were approved by the CSBE and the CCHE:

- Culturally and Linguistically Diverse Bilingual Education Colorado Mountain College
- Culturally and Linguistically Diverse Education University of Colorado Denver
- Gifted Core, Gifted Specialist, and Director of Gifted Education University of Denver
- Gifted Core, Gifted Specialist, and Director of Gifted Education University of Northern Colorado
- Special Education Generalist Fort Lewis College
- Special Education Generalist Relay Graduate School of Education
- Special Education Generalist University of Denver



CSBE approved the following new designated agencies and programs:

- Special Education Generalist Fort Lewis College (add-on endorsement)
- Special Education Generalist Colorado River BOCES (add-on endorsement)

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

Special Education Generalist – East Central BOCES

FUTURE EDUCATOR PREPARATION REPORTS

Pursuant to C.R.S. 22-2-112(1)(q), beginning in the fall of 2019, this report, produced by CDE and CDHE, will be able to provide a more comprehensive picture of the educator pipeline. In addition to providing educator preparation enrollment and completer details, the new joint-agency report will include information regarding new educators' outcomes by combining completer data with that collected by CDE from educators in their first three years of placement. The agencies will be able to answer questions about educator employment, classroom performance, and teacher retention and mobility, allowing for a more in-depth examination of the effectiveness of educator preparation programs.

Legislation Addressing Teacher Shortages

As previously mentioned, the enrollment and completion patterns 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, CO 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 a subsequent action plan to address it. The findings are consistent with what has been reported herein⁶.

In response to the action plan developed by the CDHE and CDE, several initiatives were legislated to recruit and retain educators, largely in rural areas. Table 11 lists 2018 legislation implemented by CDHE and CDE to attract, prepare, support, and retain Colorado educators.

TABLE 11: 2018 Legislation Passed to Address Teacher Shortages

Bill	Description	Status
SB 18-085 Rural Financial Incentives (expanded SB16-104)	Expands an existing program in order to provide sixty (60) \$6,000 stipends for concurrent enrollment certification, national board certification, or rural alternative licensure programs and forty (40) \$2,800 stipends for rural student teachers annually.	Since 2016, the department has awarded the following stipends: 31 Concurrent enrollment certifications 30 National Board Certifications 40 Rural Alternative Licensure 94 Rural Student Teacher In 2018, the program received 228 applicants and awarded 100 stipends.
HB 18-1002 Rural School Fellowship Program	Creates a \$10,000 stipend for a Rural School District Teaching Fellowship of which \$5,000 comes from state funds and \$5,000 comes from institutional funds.	In fall 2018, CCHE awarded 12 stipends to rural teacher candidates. CCHE is working with institutions to identify students who would qualify in the spring semester and to create more robust mechanisms to identify students for the 2019-20 school year.
HB 18-1332 Collaborative Educator Preparation	Creates grants for education preparation provider and school district partnerships to address local issues of recruitment and retention for which \$2 million was appropriated.	CDHE received 37 proposals and funded 17. The total amount requested was \$4,218,913. The total funded was \$1,952,963. This work will build significant capacity for recruitment and retention of educators in 44 districts and BOCES.
HB 18-1189 Expanding Effective Residency Programs	Creates \$600,000 in funding for contracts with education preparation providers to expand effective teacher residency programs across the state.	CDE received 6 proposals requesting \$2,030,983. Two programs were partially funded and one was fully funded. A total of \$598,447 has been awarded to implement programs over 3 years.
HB 18-1309 Programs Addressing Teacher Shortages	Creates a license type and accompanying program in which candidates enrolled in a traditional educator preparation program can complete up to the final 36 hours of their program as the Teacher of Record.	CDE is undergoing rule-making to create a Teacher of Record License and Program. CDE and CDHE are working to create a framework, application, and timeline for this program once the license is approved.
HB 18-1412 Retaining Teachers	Creates a \$3 million Retaining Teachers Fund to support Local Education Agencies' requests to improve teacher retention.	Proposals were due January 11, 2019, and CDE received 27 applications. Final award decisions will be made mid-February.

End Notes

- *Colorado Rises: Advancing Education and Talent Development,* (2016) Colorado Department of Higher Education.
- 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.
- Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A. & Hwang, Y. (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.
- Egalite, A., Kisida, B., & Winters, M.A., (2015, April). Representation in the classroom: The effect of own-race teachers on student achievement. *Economics of Education Review, 45, 44-52*.
- Egalite, A., & Kisida, B. (2017, June). The Effects of Teacher Match on Students' Academic Perceptions and Attitudes. Educational *Evaluation and Policy Analysis*, 40(1), 59-81.
- 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	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	Western State Colorado University
Administrator	•															7	44	•	13	•
Agriculture, Food & Natural Resources							51													•
Business & Marketing Education	1						14					•								1
Culturally & Linguistically Diverse Education	127				•	173			42	53	43	222			105	276	88		388	2
Culturally & Linguistically Diverse Bilingual Education Specialist										6					•				3	
Dance Education																			3	

Approved Programs	ASU	AU	ccu	СС	CMU	СМС	CSU	csug	CSUP	FLC	MSUD	RU	RGSE	RMCAD	UCB	UCCS	UCD	DU	UNC	wscu
Drama Theatre Arts	•						•			•									85	1
Early Childhood Education	1		4				129			11	271	20				97	•		231	
ECE Special Education Specialist																	87	22	75	
ECE Special Education					8							20				88			107	
Elementary Education	43		148	12	88	173			148	53	551	152	35		152	360	103	37	983	33
English Lang Arts	4		20	4	19		128		11	10	140	7	1		58	89	54	11	131	11
Family and Consumer Sciences							44													•
Gifted Ed, Core																				
Gifted Education, Specialist																				
Gifted Education, Director																				
Health											•	•				•	•			•
Instructional Technology Specialist									•								19			



Approved Programs	ASU	AU	ccu	СС	CMU	СМС	csu	CSUG	CSUP	FLC	MSUD	RU	RGSE	RMCAD	UCB	uccs	UCD	DU	UNC	wscu
Instructional Technology Teacher							•		2			•					1			•
Librarian, Teacher																	23	7		
Mathematics	•		•	1	4		59	4	8	7	62	5	18		33	57	8	4	91	3
Music	6		10	•	6		69		9	11	140	1			96			•	160	5
Physical Education	5				13				16	6	70								96	6
Principal	28	111	16		20		22	97				168				104	146	170	190	31
Reading Specialist				•								49				14				5
Reading Teacher	3			•								8			14	17	54		4	•
Science	2		10	2	12		83	9	9	7	42	4	11		46	75	19	11	99	8
Social Studies	5		16	1	19		80		10	10	156	41	5		31	96	40	17	184	7
Special Education, Director																6		•	45	
Special Education, Generalist	•		89		10				18		197	84			8	322	48		254	8

Approved Programs	ASU	AU	CCU	сс	CMU	СМС	CSU	CSUG	CSUP	FLC	MSUD	RU	RGSE	RMCAD	UCB	UCCS	UCD	DU	UNC	wscu
Special Education, Specialist															•				•	
Special Education Specialist-Visually Impaired																			1	
Special Education Specialist-Deaf/Hard of Hearing																			13	
Speech							6					•								
Technology Education							8													•
Trade and Industry Education																				•
Visual Arts	1			2	12		44		11	4	104	•		37				6	85	2
World Language	•			1	2		19		3	3	35	2			10	8	3	•	100	•

[•] Denotes a preparation program with an approved program, but no candidates enrolled during the 2017-18 academic year.

Appendix B: Designated Agency-Based Enrollment and Endorsement/Licensure Area

APPROVED ALTERNATIVE PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	Colorado River BOCES	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	Central BOCES	Friends' School	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	ı Luis Valley BOCES	School Leaders for America	Southeast BOCES	Uncompahgre BOCES: West Central Licensing	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University
Agriculture, Food & Natural Resources	Th	• Ur	Вс	CS	1	1	3	CS	CS	De	De	Do	Ea	East	Fri	M	N	•	1	Pil	Piı	Pr	• PE	Re	San	Sc	So	Ü	Ur	Ur	Ur	M
Business Education		2			٠	1								1			1		1	3			2		1	1	1					
Business & Marketing Education		1			3	1			1			2		•		•	•	•	•	•			•									
Dance Education																				2												
Drama Theatre Arts		3			•							1				2				2												
Early Childhood Education	٠	3	24		1	4									1	2	1	•		•			8									
Elementary Education	5	32	•		17	7			11	22		7		2	29	25	9		2	36	2		44	6	2		2	2				4

APPROVED ALTERNATIVE PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	Colorado River BOCES	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	East Central BOCES	Friends' School	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	Southeast BOCES	Uncompahgre BOCES: West Central Licensing	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University
English Lang Arts	6	24			5	3			8			2	2			7	8		3	11	2		8	1	3			•		3		1
Family and Consumer Science		2				٠						1		•		1			•				1									2
Health		•										5				•	•															
Instructional Technology Teacher		1			1				2								1			2					1	1		•				
School Librarian																				1												
Marketing												1								1												
Mathematics	1	33		•	11	7		3	8	6		4	2	•		14	11		2	15			10	1	1			4	•	3		2
Music	2	5				1						2				4	2		1	5			1					1				
Physical Education	6	6			1				1			•	1	4		3	2			14	•		4			1						•

APPROVED ALTERNATIVE PREPARATION PROGRAMS	The Archdiocese of Denver	University of CO: ASPIRE	Boulder Journey School	Catapult Leadership	Centennial BOCES	Colorado Christian University	Colorado River BOCES	CSU: Global	CSU: Pueblo	Denver Public Schools: Denver Teacher	Denver Public Schools: Lead in Denver	Douglas County School District	Eagle Rock School & Professional Dev. Center	East Central BOCES	Friends' School	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	Southeast BOCES	Uncompahgre BOCES: West Central Licensing	University of CO: Boulder	University of CO: Colorado Springs	University of Northern Colorado	Western State Colorado University
Principal			٠	3							18			4		٠	7					36				14						•
Science	2	21			12	4			7	5		2	1	3		18	6		1	17	1		18	4	2		1	1		3		5
Social Studies	3	8			3	3			5			4		•		5	2			7	1		7		2	1		1		6		1
Special Education, Generalist	•	71				11	4		4	5						39				37			•									3
Technology Education		3			2	•						2				1	•			1												
Visual Arts	1	5			1	1			8			1				2	2		2	2			3					1				
World Language	1	10			3	1			4			2				10	5		1	9			3		1	•				3		

[•] Denotes a preparation program with an approved program, but no candidates enrolled during the 2017-18 academic year.