

**TOPIC: TEACHER EDUCATION LEGISLATIVE REPORT (2003)**

**PREPARED BY: CAROL FUTHEY**

**I. SUMMARY**

Pursuant to Colorado Revised Statute 23-1-121(6) the Colorado Commission on Higher Education (CCHE) reports annually to the Education Committees of the General Assembly on the implementation of the SB 99-154, including:

- Overview of the number of approved teacher education programs, including programs newly-approved by CCHE. Enrollment data are provided by institution and licensure areas based on two years of teacher education data collection.
- Efforts to improve the reliability and validity of the primary performance indicators of the teacher education performance model. This has involved two on-going efforts: 1) activities leading to use of the Praxis II exam, from Educational Testing Service, as an alternative to the PLACE content area assessment, and 2) on-going development of the first-year teacher survey to align with the statutory performance measures.
- A summary of the findings from the follow-up site visits as part of program reauthorization at two universities.
- An overview of establishing program requirements for principal preparation offered by institutions of higher education.

In accordance with statute, all pre-existing teacher education programs sunset on June 30, 2001, and programs preparing prospective teachers in Colorado met the criteria specified in the performance model. The Commission approved more than 400 initial teacher licensure preparation programs by June 2001. Since that time, additional institutions and programs have received CCHE approval. A list of approved programs is included (Attachment A).

**II. TEACHER PREPARATION AND ENROLLMENTS**

With adoption of SB99-154, the Colorado legislature posed several questions that included how many teacher candidates are being prepared in different licensure areas, and how do these teacher candidates perform while enrolled in the teacher preparation program and in the K-12 classroom following graduation? This section responds to the first of these issues.

The first point—the number of students competing teacher preparation programs—is addressed in Tables 1 and 2. Because students began enrolling in redesigned teacher preparation programs in 2000, it is too early to gauge the number of undergraduates completing for initial licensure. Table 1 summarizes the number of post-baccalaureate completers who pursued initial licensure for FY 2002 and 2003 by institution. With programs in transition, note that the data reflect a combination of students completing under the old and new standards. The University of Colorado-Denver recommended one in four post-baccalaureates for the past two fiscal years, followed by the University of Northern Colorado with another 20% and Colorado Christian University at 13%.

**Table 1. TEACHER EDUCATION PROGRAM POST-BACCALAUREATE COMPLETERS BY INSTITUTION**

Institution	Number of Post-Baccalaureate Completers in --			% of Total
	FY 2002	FY 2003	Total	
UCD	192	202	<b>394</b>	26.8
UNC	168	125	<b>293</b>	19.9
CCU	78	118	<b>196</b>	13.3
METRO	29	86	<b>115</b>	7.8
CSU	58	52	<b>110</b>	7.5
FLC	52	32	<b>84</b>	5.7
DU	30	28	<b>58</b>	3.9
MESA	24	28	<b>52</b>	3.5
CC	18	28	<b>46</b>	3.1
UCB	18	19	<b>37</b>	2.5
WSC	11	17	<b>28</b>	1.9
CSU-P	12	9	<b>21</b>	1.4
UCCS	29	2	<b>31</b>	2.1
ASC	3	1	<b>4</b>	0.3
REGIS	n/a	n/a	<b>0</b>	0.0
<b>TOTAL</b>	<b>722</b>	<b>747</b>	<b>1,469</b>	

Note: Headcount includes students admitted to the teacher preparation program prior to redesign.

Source: FY2001- SURDS Teacher Education File. FY2002 and 2003-institutional files; data from Regis University not available.

By licensure area, elementary education is by far the most popular area, representing half of post-baccalaureate licensure completers (Table 2). The state's priority licensure areas—special education, mathematics, and science—supported by the Loan Incentive for Teachers (LIFT) program, accounted for 22.2% of these licensure recommendations.

**Table 2. TEACHER EDUCATION PROGRAM POST-BACCALAUREATE COMPLETERS BY LICENSURE AREA**

Licensure Aea	Number of Post-Baccalaureate Completers in --			% of Total
	FY 2002	FY 2003	Total	
Elementary	382	359	<b>741</b>	50.4
Special Education*	70	91	<b>161</b>	11.0
Secondary - Science*	70	65	<b>135</b>	9.2
Secondary - Social Studies	46	45	<b>91</b>	6.2
Secondary - Language Arts	46	33	<b>79</b>	5.4
Early Childhood	26	39	<b>65</b>	4.4
K-12: Art	11	24	<b>35</b>	2.4
Secondary - Mathematics*	12	17	<b>29</b>	2.0
ESL	0	20	<b>20</b>	1.4
School Library Media	12	13	<b>25</b>	1.7
K-12: Physical Education	7	11	<b>18</b>	1.2
K-12: Music	2	8	<b>10</b>	0.7
Secondary - Foreign Language	7	6	<b>13</b>	0.9
Secondary - Business	2	4	<b>6</b>	0.4
Middle School	4	3	<b>7</b>	0.5
Reading Teacher	2	3	<b>5</b>	0.3
Speech	1	3	<b>4</b>	0.3
Secondary - Family and Consumer Studies	2	1	<b>3</b>	0.2
Secondary - Technical	2	1	<b>3</b>	0.2
Secondary - Drama	1	1	<b>2</b>	0.1
Secondary - Marketing	9	0	<b>9</b>	0.6
Bilingual Bicultural	6	0	<b>6</b>	0.4
Secondary - Agriculture	2	0	<b>2</b>	0.1
<b>TOTAL</b>	<b>722</b>	<b>747</b>	<b>1,469</b>	

\*Identified as shortage area in LIFT.

Note: Data not available from Regis University for FY2002 or 2003.

The second indicator—the number of students in teacher preparation programs—is answered by tracking enrollments in the teacher preparation programs. Students were formally admitted into the redesigned teacher education programs beginning July 1, 2000, with the first graduates from this cohort completing one-year post-baccalaureate programs during FY 2001 and applying for licensure in spring 2001. Students in the first year of redesigned programs were reported in a CCHE’s teacher education file, designed to include indicators for a performance model. The data file allows tracking of student enrollments and completions, as well as reporting on performance aspects of teacher education programs and students. Data collected since FY 2001 enabled CCHE to establish a baseline for enrollment in the Commission-approved teacher education programs and is summarized below. Prior to this time, only self-reported aggregate data from institutions were available which limited the analyses that could be generated about students in teacher preparation.

The institutions preparing the largest number of teacher candidates are the University of Northern Colorado (UNC), University of Colorado-Denver (UCD), and Metropolitan State College of Denver (Metro). These three institutions enrolled approximately 48% of all students enrolled in professional educator programs. Table 3 summarizes the FY 2002 unduplicated enrollment in the redesigned teacher education programs for each of the 15 institutions at all levels: undergraduate, post-baccalaureate (leading to licensure recommendation only), and graduate. The numbers reflect students enrolled in teacher education programs during at least one term in FY 2002 but do not include students completing teacher preparation under the old standards.

**Table 3. TEACHER EDUCATION REDESIGNED PROGRAM ENROLLMENT\*\* FOR INITIAL LICENSURE BY INSTITUTION, FY2002**

Institution	Number of Enrolled Students					Total	% of Total
	Undergraduate	Post-baccalaureate	Graduate	No Level reported	Total		
UNC	884	41	108	1	<b>1,034</b>	21.1	
UCD	0	105	597	0	<b>702</b>	14.3	
METRO	431	181	0	2	<b>614</b>	12.5	
CSU	341	92	42	0	<b>475</b>	9.7	
UCB	175	68	69	0	<b>312</b>	6.4	
REGIS	141	27	106	0	<b>274</b>	5.6	
UCCS	49	77	120	0	<b>246</b>	5.0	
ASC	207	2	0	0	<b>209</b>	4.3	
MESA	179	21	0	0	<b>200</b>	4.1	
CSU-P	148	27	0	0	<b>175</b>	3.6	
FLC	84	88	0	0	<b>172</b>	3.5	
DU	11	67	85	0	<b>163</b>	3.3	
WSC	130	4	0	0	<b>134</b>	2.7	
CCU	123	3	0	0	<b>126</b>	2.6	
CC	15	0	46	0	<b>61</b>	1.2	
<b>TOTAL</b>	<b>2,918</b>	<b>803</b>	<b>1,173</b>	<b>3</b>	<b>4,897</b>	100.0	

\*\*Headcount based on enrollment during at least one term in FY 2002

Colorado's institutions with the highest undergraduate enrollment in redesigned teacher preparation programs continue to be the same as last year: UNC (30%), Metro (15%), and Colorado State University (CSU) (12%), while the largest post-baccalaureate enrollment in new teacher preparation programs is offered by Metro (23%), followed by UCD (13%), and CSU (12%). UCD enrolled 51% of graduate enrollments, with the University of Colorado at Colorado Springs (UCCS), UNC, and Regis University (RU) representing an additional 28%. The data indicate that program access, as indicated by the number of students able to enter the teaching field, has not diminished with implementation of SB 99-154.

Colorado’s teacher education reform initiative is driven by the goal of producing quality teachers. While confident in the quality of the approved programs, the Commission expressed interest in knowing if the approved degree programs provided sufficient opportunities for training teachers in all licensure areas. An analysis of the initial licensure candidates in the teacher preparation programs indicates that elementary education teachers comprise nearly 45% of the students in the pipeline (Table 4). From the perspective of the state’s shortage areas, high numbers of students are pursuing special education (558), with secondary science licensure reported for 296 students, and 158 students are projected to complete a secondary mathematics licensure. The number of students pursuing licensure in these three areas may, in part, be attributable to the LIFT program.

**Table 4. NUMBER OF ENROLLED STUDENTS\*\* BY LICENSURE AREA FOR INITIAL LICENSURE, FY2002**

Licensure Area	Undergraduate	Post-baccalaureate	Graduate	No level reported	Number of Students	% of Total
Elementary	1,414	326	453	1	<b>2,194</b>	44.9
Special Education*	46	108	404	0	<b>558</b>	11.4
Secondary - Language Arts	260	56	90	1	<b>407</b>	8.3
Secondary - Social Studies	264	79	58	0	<b>401</b>	8.2
Secondary - Science*	116	87	93	0	<b>296</b>	6.1
K-12: Physical Education	182	15	0	0	<b>197</b>	4.0
Secondary - Mathematics*	117	18	23	0	<b>158</b>	3.2
K-12: Art	105	34	8	0	<b>147</b>	3.0
K-12: Music	127	9	5	0	<b>141</b>	2.9
Early Childhood	113	19	0	0	<b>132</b>	2.7
Secondary - Foreign Language	55	14	12	0	<b>81</b>	1.7
Middle School	26	6	7	0	<b>39</b>	0.8
No licensure area/Invalid area reported	13	10	12	1	<b>36</b>	0.7
Secondary - Business	14	8	1	0	<b>23</b>	0.5
Secondary - Agriculture	14	1	3	0	<b>18</b>	0.4
Secondary - Drama	13	3	0	0	<b>16</b>	0.3
Secondary - Family and Consumer Studies	13	2	1	0	<b>16</b>	0.3
Secondary - Technical	13	2	1	0	<b>16</b>	0.3
Speech	5	3	1	0	<b>9</b>	0.2
ESL	0	0	2	0	<b>2</b>	0.0
Secondary - Marketing	1	1	0	0	<b>2</b>	0.0
<b>TOTAL</b>	<b>2,911</b>	<b>801</b>	<b>1,174</b>	<b>3</b>	<b>4,889</b>	

\*Identified as shortage area in LIFT.

\*\*Based on enrollment during at least one term in FY 2002

### **III. THE PERFORMANCE MODEL**

The second question posed by the legislature—how do the teacher candidates perform while enrolled in the teacher preparation program and subsequently in the K-12 classroom following graduation—is the focus of the performance model in development by CCHE. A content assessment (i.e., the PLACE or PRAXIS) measures teacher candidate content knowledge from preparation in college, and the first-year survey acts as

a measure of teacher performance in the K-12 classroom (i.e., quality of degree program and quality of field experience).

**A. Performance in the College Classroom: The PLACE**

The preliminary design of the performance model depends on a valid measure of content knowledge. The state of Colorado currently uses the Professional Licensing Assessment for Colorado Educators (PLACE) from National Evaluation Systems (NES). In 2000, the General Assembly eliminated three PLACE assessments (i.e., basic skills, general education, and pedagogy) since alternative assessment tests provided more valid performance data. The elimination of an examination in these areas reduced the testing burden on students since often they needed to take duplicative tests measuring the same knowledge areas. The legislature maintained a content test because the legislative vision of a strong teacher education program is based on content knowledge.

Unfortunately, the initial review of the PLACE exam indicated that some critical content tests, (including Elementary Education, English, and Early Childhood) measure knowledge of pedagogy, and the content may not align with the state's content standards. This fact is supported by sample questions, training manuals that are vague in their description of the purpose of the test, and feedback from students. The material itself does not contend that the PLACE content exams measure content only. For example, sample questions available for the elementary education content test are 20% content and 80% pedagogy. NES representatives acknowledged in meetings with CCHE staff that the elementary licensure test commingles pedagogical knowledge with content items. The deans of education indicated that this weakness is found in other content tests in addition to the three listed above.

CCHE requested validity and reliability information on the test in May 2001. NES indicated its intent to publish a technical report addressing questions regarding validity and reliability and to cooperate in furnishing required information to CCHE staff. The inability of NES to confirm PLACE test item validity, coupled with the slow response time with this vendor, delayed implementation of the performance model. As a result, CCHE has identified a viable, valid alternative – Educational Testing Service's PRAXIS II – the content examinations that are used by most other states to measure of student content knowledge.

Other issues that affected using the PLACE test scores as a performance indicator included: 1) infrequent administration and lengthy turn-around for results inhibit institutions in implementing the new performance model that stipulates content assessment before student teaching; 2) little study material available to teacher candidates resulting in the need for several retakes and high expenses to candidates; 3) reciprocity with other states sacrificed when using an assessment

only recognized in Colorado. Because K-12 content standards among states are similar, it is possible to use a nationally recognized test for the majority of the Colorado Model Content standards; 4) validity of PLACE for low demand exams, such as agriculture; and 5) other testing organizations have affiliated with the national accrediting organizations – National Council for the Accreditation of Teacher Education (NCATE) and Teacher Education Accreditation Council (TEAC) – that require performance-based standards. NES has not indicated any motion in this direction. While the Colorado Department of Education has negotiated some improvements with NES, CCHE has indicated a preference for use of the PRAXIS II exam over PLACE as the accepted content exam, and PRAXIS cut scores have been set through a collaborative effort by ETS, CDE, and CCHE staff for the five most popular licensure areas.

Nonetheless, Colorado has used the PLACE exam to measure content preparation for three years, and Table 5 summarizes pass rates for all content areas for students seeking initial licensure. While one must recognize that the exams vary in emphasis, test results from students at Colorado College show a consistent pass rate of 100% for all three years, closely followed by test-takers at the University of Colorado-Colorado Springs, and the University of Colorado-Denver.

**Table 5. PASS RATES FOR SELECTED ALL CONTENT AREAS ON THE PROGRAM FOR LICENSING ASSESSMENTS FOR COLORADO EDUCATORS (PLACE) EXAM**

Institution	All Academic Content Areas					
	1999 - 2000		2000 - 01		2001 - 02	
	# Tested	% Passed	# Tested	% Passed	# Tested	% Passed
<b>Public Inst</b>						
Adams S C	95	89%	76	88%	63	86%
CO State U	115	94%	128	98%	111	95%
CO State U - Pueblo (was USC)	90	83%	77	86%	67	91%
Fort Lewis C	87	95%	84	90%	76	100%
Mesa S C	80	95%	43	91%	75	91%
Metro S C of Denver	273	90%	285	92%	247	96%
U of CO - Boulder	201	97%	175	97%	153	100%
U of CO - CO Springs	30	100%	38	97%	29	100%
U of CO - Denver	125	98%	123	99%	149	100%
U of Northern CO	370	91%	402	86%	382	90%
Western S C	36	89%	41	98%	30	97%
<b>Private Inst</b>						
CO Christian U	67	93%	45	91%	30	90%
CO College	37	100%	27	100%	22	100%
Regis U	183	95%	133	94%	132	90%
U of Denver	69	90%	90	94%	54	93%
<b>Statewide Totals**</b>	--	<b>93%</b>	--	<b>93%</b>	--	<b>97%</b>

\*\*Totals based on all tested students including test-takers at institutions with fewer than 10 examinees per year and alternative certification.

Sources: PLACE Annual Institutional Reports and State-level Single-Assessment Pass-Rate Data for Regular Teacher Preparation, selected years.

Institution concentrations in various aspects of teacher education make comparisons across campuses difficult, but preparation leading to licensure in elementary education is one area that all but one institution offer, thereby masking the impact on the overall average by that one institution (CSU). Three programs produced 100% pass rates in each of the three years documented in Table 6: Colorado College, University of Colorado-Colorado Springs, and the University of Colorado-Denver, with the University of Colorado-Boulder narrowly missing the same level of student success.

**Table 6. PASS RATES FOR SELECTED ELEMENTARY EDUCATION ON THE PROGRAM FOR LICENSING ASSESSMENTS FOR COLORADO EDUCATORS (PLACE) EXAM**

Institution	Elementary Education					
	1999 - 2000		2000 - 01		2001 - 02	
	# Tested	% Passed	# Tested	% Passed	# Tested	% Passed
<b>Public Inst</b>						
Adams S C	68	93%	43	95%	45	87%
CO State U	--	--	--	--	--	--
CO State U - Pueblo (was USC)	44	95%	44	91%	50	92%
Fort Lewis C	49	98%	51	92%	35	100%
Mesa S C	34	97%	22	95%	24	100%
Metro S C of Denver	130	95%	154	95%	149	98%
U of CO - Boulder	97	100%	101	99%	92	100%
U of CO - CO Springs	20	100%	25	100%	19	100%
U of CO - Denver	87	100%	90	100%	102	100%
U of Northern CO	207	94%	208	94%	195	96%
Western S C	18	94%	15	100%	15	100%
<b>Private Inst</b>						
CO Christian U	63	92%	39	95%	24	96%
CO College	21	100%	19	100%	17	100%
Regis U	126	96%	87	97%	88	95%
U of Denver	44	93%	64	97%	34	100%
<b>Statewide Totals**</b>	<b>1,008</b>	<b>96%</b>	<b>1,056</b>	<b>96%</b>	<b>889</b>	<b>97%</b>

\*\*Totals based on all tested students including test-takers at institutions with fewer than 10 examinees per year and alternative certification.  
 Sources: PLACE Annual Institutional Reports and State-level Single-Assessment Pass-Rate Data for Regular Teacher Preparation, selected years.

**B. Performance in the K-12 Classroom: The First Year Teacher Survey**

The Colorado First-Year Teacher Survey is a measure used to evaluate the quality of Colorado teacher education programs in the areas of content preparation and teaching skills preparation, as outlined in CCHE's Teacher Education Policy 4.00 (content preparation) and CDE Performance-Based Standards for Colorado Teachers (teaching skills preparation). The legislative intent of the survey is to measure content knowledge and mastery of teaching skills once a teacher has taught a full year in a K-12 classroom and includes sections on teaching and



licensure areas, teacher education background, student teaching experience, subject matter content preparation and teaching skills preparation of the respondents. Based on research findings, the CCHE survey is guided by the following research questions:

- What is the overall level of content area preparation among first-year teachers and the training and background that explain differences in content area preparation?
- What is the overall level of teaching skill preparation among first-year teachers as well as the training and background that explain differences in teaching skills preparation?

Survey results support the original assumptions of the teacher education reform movement. Students in secondary education programs were better prepared in subject matter than elementary and special education teachers. With the redesign of teacher preparation in 2000-01, elementary and special education programs were aligned only with degree programs whose curriculum corresponded with content standards in subject areas. Formerly, a student majoring in any undergraduate degree program could be admitted into a teacher education program. Since the survey measured students who graduated from the “old” teacher education programs, the actual results are of less interest than serving as a benchmark for measuring change as future first-year teachers complete under the new standards.

**1. Survey Background**

The spring 2001 pilot survey served a valuable function by highlighting some significant methodological issues. The survey established a legitimate response rate (49%) using telephone interviews. During the analysis, it became apparent that bias may be introduced with phrasing questions certain ways. Other findings from the pilot survey included: 1) the need for multiple consecutive years of data to measure performance at the institution and program level; 2) ambiguity in the vocabulary, ambiguity in phrasing within questions, and non-comparable scales need to be addressed; 3) the necessity to connect questions to performance indicators and teachers to the institutions they attended; 4) the limited number of questions related to content preparation. During 2001-02, CCHE staff convened a technical committee to focus the questions for the 2002 survey administration.

**2. The 2002 Survey**

The specific goals of the 2002 survey included replicating or surpassing the 49% response rate of the 2001 survey and testing the questions for ambiguity, bias, and value in a performance model. Accordingly,

excluding demographic information, 50% of the survey addressed content preparation and 50% of the survey measured teaching skills preparation.

Survey results will be used in combination with other indicators, such as cumulative college GPA, general education assessment, content assessment (currently the PLACE) results, and rates of job placement in the licensure area trained, as evidence for reauthorization of teacher preparation programs in Colorado. Because of its use in the performance model for each institution, a confidence level of 95% with +/- 15% accuracy on each item is the goal. This accuracy range is reasonable and achievable, but requires a well-defined sampling frame with a high response rate and appropriate survey methodology.

The reader is cautioned about drawing conclusions or implications from the survey responses. Staff continue to have concerns about the validity and reliability of the survey at this stage of its development and will continue efforts to improve both.

**3. Survey Demographics**

Usable survey responses were received from 633 first-year Colorado teachers, the majority of whom were female (73.9%) and white (91.9%) with an average age of 30. Approximately 39% of respondents were licensed as elementary teachers while only 3.3% were licensed special education teachers. In contrast, 7.4% of the first-year teachers were teaching as special education teachers. Fifty percent of first-year teachers (316) were trained at a Colorado college or university while the other 317 first-year teachers received their training out-of-state.

**4. Content Area Preparation of Respondents**

Perceptions of first-year teachers' content area preparation were assessed through three different sets of questions depending upon whether a respondent was in early childhood/elementary, secondary, or special education. Direct comparisons of perceived content area preparation among the three groups of teachers was possible on only two items common to all three groups. These items asked respondents to rate the extent to which the degree or major provided them with the depth and breadth of knowledge needed as a teacher. The results are summarized in Tables 7 and 8; means of the scales were computed so that scores ranged between 1 and 7. Both elementary/early childhood and secondary respondents reported significantly higher mean ratings on these two items than special education respondents.

**Table 7. MEAN LEVEL TO WHICH UNDERGRADUATE DEGREE PROVIDED SUFFICIENT BREADTH OF KNOWLEDGE BY LICENSURE AREA**

Licensure Area	N	Mean	Standard Deviation
Elementary	244	5.53	1.64
Secondary	224	5.35	1.56
Special Education	42	4.17	2.25
<b>TOTAL</b>	<b>510</b>	5.34	1.70

**Table 8. MEAN LEVEL TO WHICH UNDERGRADUATE DEGREE PROVIDED SUFFICIENT DEPTH OF KNOWLEDGE BY LICENSURE AREA**

Licensure Area	N	Mean	Standard Deviation
Elementary	252	5.29	1.67
Secondary	229	5.11	1.64
Special Education	44	3.95	2.22
<b>TOTAL</b>	<b>525</b>	5.10	1.74

Because mean scores can camouflage quality, both positively and negatively, it is interesting to look beyond the mean. To investigate whether preparation background was related to perceived subject area preparation, a composite score of the sum of the two items which asked respondents directly if their undergraduate programs provided the breadth and depth of knowledge necessary to teach was made for all respondents answering these two questions. Comparisons were made among three teacher preparation groups. One group consisted of all respondents who indicated that they either completed an undergraduate degree in teacher education or a post-baccalaureate teacher preparation program at a Colorado university or institution, a second group consisted of those who indicated they completed a similar training program out of state, and a final group consisted of those who indicated they were participating in an alternative licensing program including emergency or substitute certification or teacher-in-residence programs.

The results indicate that those prepared for teaching in a Colorado university or institution differed significantly from those who were prepared out-of-state, with out-of-state trained teachers reporting more positive perceptions of preparation than Colorado trained teachers. These results should be interpreted with caution and should not be interpreted as evidence for inferior in-state teacher programs. The group sample sizes were quite small (approximately 10 in each group), and the composite score was based on only two items, which may or may not have been an accurate

measure of preparation. Additionally, some districts may have identified these teachers as first year teachers, although these individuals may have taught prior to earning licensure in Colorado. Lastly, there are other possible explanations as to why out-of-state trained respondents might feel more prepared as a group.

**a. Elementary and Early Childhood Teachers**

Usable surveys were received from 254 respondents indicating they were teaching in either elementary or early childhood education. Of these, most (88.2%) were licensed in elementary education with only 7.5% not yet licensed. When comparing licensure rates of elementary/early childhood respondents with those of secondary and special education respondents, proportionally more of the elementary/early childhood respondents had licensure than either of the other two groups. Elementary/early childhood respondents also differed from the secondary and special education respondents by representing a greater relative proportion that completed either a baccalaureate (33.1%) or post-baccalaureate (28.0%) teacher preparation program in Colorado. The Colorado institutions from which most respondents received their baccalaureate teacher training included University of Northern Colorado (27.4%), Metropolitan State (21.4%), and University of Colorado at Boulder (9.5%). Most respondents who completed post-baccalaureate training in Colorado attended University of Colorado at Denver (16.9%), University of Denver (15.5%), Metropolitan State (15.5%), or University of Colorado at Boulder (11.3%). As was the case with the complete sample, elementary/early childhood respondents were primarily female (86.6%), white (92.9%), and close to 30 years of age ( $M = 29.72$ ).

No notable differences were found among the Colorado teacher preparation institutions on the four content areas. A significant difference was found on the general content preparation scale when comparing respondents who received their teacher training in Colorado ( $M = 5.08$ ) versus those who received their teacher training outside of Colorado ( $M = 5.59$ ) with non-Colorado trained teachers rating their preparation more favorably than Colorado-trained teachers. Despite the differences between the two groups, the mean for Colorado-trained teachers still reflected an overall positive perception. No differences were found based on whether or not respondents spent their entire undergraduate experience at the same institution. No relationships were found between perceived content preparation and quality of induction, average class size, school district size, school setting, number of first year teaching supports, or number of extracurricular duties.

Because of the high percentage of elementary education teachers, several elements were examined in greater depth. Elementary and early childhood teachers were asked 17 questions pertaining to their perceived content area preparation. These items fell into four distinct categories as follows: math and language, science, social science, and general depth/breadth of knowledge. On all 17 items, the majority of respondents (> 50%) agreed that they felt prepared during their first few weeks as teachers, though there were considerable differences among the various content areas. With respect to the six math and language items, the percent of respondents agreeing exceeded 70% on all items with the highest level of agreement to the items asking about use of conventional grammar, punctuation, etc. (85.5%) and ability to identify purpose, perspective, and cultural influence of the speaker (86.0%). Agreement was lowest on items asking about use of algebra to solve problems (71.8%) and use of geometry to solve problems (71.9%). Perceived content preparation was substantially lower in the science area. While 74.4% did feel their understanding of biology was good, only 57.7% and 50.1% reported having a good understanding of chemistry and physics, respectively.

For some of these items, there were differences in perceived preparation between first-year teachers who had received their teacher training at a Colorado institution versus those who received their training elsewhere. For example, a greater percent of non-Colorado teachers felt experienced in scientific investigation (80.8% versus 71.9%) and believed their understanding of chemistry was good (63.2% versus 54.3%). Most respondents (74% and higher) felt prepared in understanding political institutions such as the U.S. government, identifying and remembering events and people in U.S. history, and in using world geography to study regions. However, far fewer respondents (only 53.5%) believed they were prepared in identifying and remembering events and people in Colorado history. The majority of respondents indicated their undergraduate major provided both the breadth (77.7%) and depth (69.8%) of knowledge needed as a teacher. And when asked about their overall perception of the education and training they received, 80% reported they had strong preparation for teaching students at the start of the school year.

**b. Secondary Teachers**

Usable survey responses were received from 338 first-year Secondary teachers. Almost half of the respondents received their teacher preparation in Colorado 42.3%. Of these, 23.4% completed an undergraduate degree in a teacher preparation program at a

Colorado college or university, and 18.9% already had an undergraduate degree before entering a teacher preparation program at a Colorado college or university. Of the remaining respondents, 23.3% completed a teacher preparation program outside of Colorado, and 33.5% participated in some type of alternative teacher preparation program or received emergency certification. Of the respondents who completed their undergraduate teacher preparation in Colorado, most attended University of Northern Colorado (35.4%), Colorado State University (20.3%), or Metropolitan State (15.2%). For respondents completing a post-baccalaureate teacher preparation program in Colorado, the greatest number did so at Colorado State University (20.3%), Metropolitan State (12.5%), University of Colorado at Denver (12.5%), University of Denver (9.4%), or University of Colorado at Colorado Springs (9.4%). Most respondents (74.3%) required more than four years to complete their undergraduate training, and just over one-fourth of the respondents (26.6%) transferred between institutions at some point during their undergraduate experience.

Secondary teachers were asked five questions pertaining to their perceived content area preparation. Teachers felt least prepared concerning the depth of knowledge needed to teach with 73.2% feeling prepared and 14% feeling unprepared to teach in their content area. Seventy-eight percent of the respondents felt prepared regarding their breadth of knowledge; 10.1% did not. The majority of teachers felt prepared in the remaining three categories of content knowledge: understanding of subject area (84.3%), analyzing information within subject area (90.3%), and solving problems within subject area (91.4%).

There are significant differences in mean perceived preparation for content when comparing “regular” teacher education program graduates ( $M = 5.98$ ) and emergency/alternative certifications ( $M = 5.42$ ). Viewed another way, a greater percent of secondary teachers with emergency certifications felt unprepared in understanding their subject area when compared to teachers who completed a bachelor degree in teacher preparation in Colorado (34.5% versus 2%).

**c. Special Education Teachers**

Forty-seven, or 7%, of the respondents to the First-Year Teacher Survey indicated they were special education teachers. Of the 47, more than three-fourths were female (78.7%). Twenty respondents were licensed to teach in special education, 15 indicated that they were “not yet licensed,” and 14 of these 15 said they would pursue licensure in special education. Twenty-five percent indicated they

are licensed in areas other than special education. Therefore, less than half of the special education teachers are licensed in special education. Almost 30% of respondents did not provide information on the level of students they were teaching or on the setting within which they provided services. However, of those who provided information on level of students, 27% taught mild/moderate needs, 24% moderate needs, 27% severe needs, 6% severe/profound needs, and 15% indicated that they taught all of the above. Of those respondents who provided information on setting, 33% indicated classroom inclusion as the setting for services, 30% indicated resource rooms, 21% indicated self-contained services, 3% indicated segregated services, and 12% indicated other.

As with many of the other items on the survey, the special education content items were in many cases left blank or identified as "not applicable" to large portions of the survey respondents; anywhere from one-third to one-half of the data were missing. Some missing data, whether due to respondents' not giving a response or because the question was not applicable, would be expected given that 57% of the sample is teaching in special education classrooms but is not licensed in special education. However, it is peculiar that portions exceeding 25% of the sample have not answered these questions. Thus, these results must be viewed with caution.

Because of the small sample size, limited analyses could be conducted to determine if any meaningful scales could be created from the content preparation items. Consequently, only item level analyses were performed. Based on a descriptive analysis of those who did respond to the special education content questions, there appear to be mixed results on feelings of preparation. Those questions that asked respondents to agree with the statements "my undergraduate major provided me with the breadth of knowledge needed as a teacher" and "my undergraduate major provided me with the depth of knowledge needed as a teacher" demonstrate that less than half of the respondents agreed with these two questions. This would suggest that of the first year special education teachers answering these two questions (approximately 30 respondents to each), overall quality of preparation was perceived as quite low. Since these teachers are not licensed, they are reflecting on content, not pedagogy. As stated earlier, ratings on these two items for special education respondents were significantly lower than they were for elementary/early childhood and secondary respondents.

**5. Teaching Skill Preparation of Respondents**

First-year teachers were also asked 10 questions regarding how well their education coursework prepared them in their teaching skills. The 10 items fell into two distinct categories: teaching skills and interpersonal/classroom management skills (Table 9). On 5 of the 6 teaching skills items, more than 80 percent of respondents agreed that that were good at incorporating math and literacy in their instruction, practicing a variety of instructional methods, and using assessment to improve students' achievement. They were somewhat less confident about their ability to use technology to enhance student achievement (73.6%). Regarding interpersonal and classroom management skills, respondents generally reported having the skills necessary to manage a classroom (79.6%), talk to parents about either a student's performance (82.5%) or student's emotional problems (77.5%), and prepare lesson plans (87.1%).

**Table 9. MEAN RATINGS FOR TEACHING SKILLS AND INTERPERSONAL AND CLASSROOM MANAGEMENT FOR COLORADO INSTITUTIONS**

Institution	Teaching Skills Ratings			Interpersonal & Classroom Management Ratings		
	N*	Mean	Standard Deviation	N*	Mean	Standard Deviation
<b>Public Inst</b>						
Adams S C	10	5.37	1.14	9	5.28	0.53
CO State U	30	5.71	1.07	27	5.84	0.75
CO State U - Pueblo (was USC)	11	4.94	1.13	11	5.07	1.26
Fort Lewis C	8	--	--	8	--	--
Mesa S C	16	5.58	1.16	16	5.86	1.17
Metro S C of Denver	52	5.62	0.99	50	5.80	1.11
U of CO - Boulder	24	5.29	1.33	24	5.33	1.42
U of CO - CO Springs	15	5.58	1.30	14	5.57	1.62
U of CO - Denver	19	6.03	0.70	18	6.06	0.95
U of Northern CO	62	5.37	1.10	59	5.62	1.06
Western S C	7	--	--	7	--	--
<b>Private Inst</b>						
CO Christian U	6	--	--	7	--	--
CO College	9	--	--	9	--	--
Regis U	15	5.65	1.31	15	6.12	1.15
U of Denver	17	5.89	0.79	17	6.00	1.18
<b>All Respondents</b>	303	5.59	1.11	293	5.73	1.15

Source: First-year teacher survey.

\*Means not reported for institutions with fewer than 10 respondents; two respondents did not report an institution.

Respondents provided generally favorable ratings of both their teaching skills (M 5.59) and their interpersonal and classroom management skills (M = 5.78), though ratings of interpersonal and classroom management skills were significantly more favorable than ratings of teaching skills.



Ratings on the global teaching preparation item were also positive with 78.8% agreeing that their training had prepared them to teach at the beginning of the school year ( $M = 5.61$ ). No differences in ratings of teaching skills were found based on gender, ethnicity, or age. When comparing elementary/early childhood, secondary, and special education respondents, a significant difference was found on perceptions of teaching skills with elementary/early childhood respondents reporting better preparation ( $M = 5.83$ ) than secondary respondents ( $M = 5.44$ ). No differences were found among these three groups on interpersonal and classroom management skills or on the global teacher preparation item.

Ratings of perceived teaching skills preparation differed among some Colorado teacher training institutions. Highest mean ratings of teaching skills were given by respondents from Colorado College ( $M = 6.4$ ), University of Colorado at Denver ( $M = 6.03$ ), and Western State College ( $M = 6.01$ ). Lowest average ratings were reported by respondents trained at the University of Southern Colorado ( $M = 4.94$ ), University of Colorado at Boulder ( $M = 5.29$ ), and Adams State College ( $M = 5.37$ ). The only statistically significant differences were between Colorado College and both University of Northern Colorado and University of Southern Colorado. Caution should be exercised in interpreting these mean differences given the small number of respondents for some institutions. Further, even the lowest mean rating of teaching skills, provided by graduates from University of Southern Colorado, was not significantly lower than 5.0, indicating respondents from that institution felt generally prepared in their teaching skills. No significant differences in ratings of interpersonal and classroom management skills were found among the Colorado institutions. Perceptions of teaching skills preparation also did not differ based on whether or not respondents received their training at a Colorado institution nor on whether or not they had spent their entire undergraduate experience at the same institution.

Relationships between perceived teaching skills preparation and factors associated with the first year teaching experience were also examined. Similar to what was found in terms of content area preparation, no relationships were found between perceived teaching skills preparation and average class size, school district size, school setting, number of first year teaching supports, or number of extracurricular duties.

**a. Elementary and Early Childhood Teachers**

Means on both dimensions of classroom and teaching skills were greater than 5.0 indicating overall agreement with the classroom and teaching skills preparation items within each scale. Elementary and early childhood respondents reported satisfactory preparation in both their interpersonal and classroom management skills ( $M =$

5.83) and in their teaching skills ( $M = 5.87$ ). In addition, the majority of respondents (80%) expressed confidence in the quality of their education and training by agreeing to the item asking them to rate their overall preparation for teaching students at the beginning of the school year ( $M = 5.72$ ).

**b. Secondary Teachers**

Means on both dimensions of classroom and teaching skills were greater than 5.0 indicating overall agreement with the classroom and teaching skills preparation items within each scale. Secondary respondents reported satisfactory preparation in teaching skills ( $M = 5.44$ ) and in their parent contact skills ( $M = 5.66$ ). In addition, the majority of respondents (79.6%) expressed confidence in the quality of their education and training by agreeing to the item asking them to rate their overall preparation for teaching students at the beginning of the school year ( $M = 5.6$ ).

There are significant differences in mean perceived preparation for teaching skills when comparing “regular” teacher education program graduates ( $M = 5.62$ ) and emergency/alternative certifications ( $M = 5.09$ ). Significant differences were found between “received emergency or substitute certification” ( $M = 4.81$ ) and “had bachelor degree before entering a Colorado teacher preparation program” ( $M = 5.64$ ) as well as for “completed teacher preparation program outside Colorado” ( $M = 5.88$ ). Also, “participated in an alternative teacher licensure program” ( $M = 5.18$ ) had a mean response significantly different than that of “completed teacher preparation program outside Colorado ( $M = 5.88$ ).”

Statistical analyses were conducted to determine if other training and background variables might help explain differences in perceived teaching skills preparation. No significant relationships were found between respondents' demographic characteristics (i.e., gender, ethnicity, and age) and perceived preparation in teaching skills. No statistically significant differences were found among the Colorado teacher preparation institutions for teaching skills. No significant difference was found on the teaching skills preparation scale when comparing respondents who received their teacher training in Colorado versus those who received their teacher training outside of Colorado. No differences were found based on whether or not respondents spent their entire undergraduate experience at the same institution. Nor were there any differences in perceived teaching skill preparation depending on whether or not respondents had previous experience as a teacher's aid or

paraprofessional. Student teaching experiences, induction, and prior paraprofessional classroom experience were also unrelated to perceived teaching skills preparation.

**c. Special Education Teachers**

In general, respondents rated their preparedness for a variety of classroom and teaching skills highly. In particular, more than half indicated that they felt prepared for incorporating literacy and math into their instruction, for practicing different instructional methods, for managing a classroom, for using assessments to improve achievement, for talking with parents about academics and emotional problems, for preparing lesson plans and prepared for using technology. Sixty-five percent agreed that their education and training overall prepared them for teaching students at the beginning of the year. There were no significant group differences in feelings of overall preparation, as measured by the one item which asked about overall preparation, by preparation background (i.e., in-state versus out-of-state, etc.)

**6. First Year Teaching Experiences**

Nearly half (45.6%) of all respondents were teaching in the Denver metro area, with another 30.4% teaching in outlying cities or in outlying towns (10.9%). Respondents were working in school districts ranging in size from 301 students to over 25,000 students with the single largest group of respondents (38.4%) from districts with between 6,001 and 25,000 students. Another 28.5% were from the largest districts (over 25,000 students) and an additional 27.4% were working in districts with between 1,201 and 6,000 students. In addition, 44.8% of the respondents did their student teaching in schools similar in size to where they were teaching during their first year. Average class size for respondents ranged between 10 and fewer (7.3%) to over 35 (2 respondents) with most respondents (63.4%) teaching classes of between 21 and 30 students. These proportions differed significantly among respondents in elementary/early childhood, secondary, and special education as would be expected. Class size was smallest for special educators and largest for secondary teachers.

Other first-year experiences included additional duties respondents were required to perform including extracurricular assignments (such as coaching, Odyssey of the Mind, etc.) (47.6%), traveling to more than one school to teach (3.7%), and other non-teaching duties (including lunchroom, hall, and recess duties) (75.7%). Relative involvement in these duties differed among elementary/early childhood, secondary, and special education respondents. Secondary teachers were most likely to be engaged in extracurricular duties (61.7%) compared with either elementary educators (29.8%) or special educators (40.4%) whereas special education respondents were more frequently required to travel to multiple schools (14.9%) than either secondary (4.3%) or elementary respondents (.8%).

In terms of support teachers received during their first year, relatively few were granted a reduced teaching load (7.8%), extra prep time (9.4%), or extra classroom assistance (28.6%). The majority of respondents did receive support in the form of common planning time with teachers in their subject area or grade level (62.1%), seminars or classes for beginning teachers (77.8%), or regular, supportive communication with their principal or with other administrators (76.7%). Level of support differed among elementary/early childhood, secondary, and special education respondents. Fewer special education respondents (3.7%) received reduced teaching schedules than either secondary (10.4%) or elementary/early childhood respondents (10.6%). Similarly, only about a third of special education respondents (34%) were provided common planning time with other teachers in their area and grade level compared with the majority of both secondary (54.6%) and elementary/early childhood respondents (77.6%) who received this type of support. In contrast, special education respondents received more classroom assistance (40.4%) than did secondary (22.1%) or elementary/early childhood respondents (35.2%).

Regarding the quality of induction, only about half of the respondents reported having a mentor. Of these, the majority rated the mentoring during their induction as generally positive with 62.5% of respondents agreeing they had adequate contact with their mentor and 62.2% agreeing they were able to rely upon their mentor to provide good advice. Despite the majority reporting positive experiences with their mentors, approximately one-third of the respondents did not report having positive experiences. In addition, it is noteworthy that nearly half (49.8%) of the respondents indicated that having adequate contact with a mentor as part of their induction program was "not applicable" and that even more (53.7%) of the respondents marked "not applicable" on the item asking them to rate the extent to which they can rely on their mentor to give good advice. No differences were found in quality of mentoring among elementary/early childhood, secondary, and special education respondents.

## **7. Future Teaching Plans**

The majority of respondents planned to teach next year (95.4%) with 85.5% intending to teach at the same school. These percentages were comparable for elementary/early childhood, secondary, and special education respondents. Although only 29 respondents did not plan to teach the next year, 161 respondents provided reasons they might consider for leaving teaching. The most frequently cited reason was financial (39.1%) followed by insufficient support from the school or administration (13.7%), personal reasons (12.4%), and too much time involved (11.2%). The relative frequencies of reasons for leaving teaching differed somewhat among elementary/early childhood, secondary, and special education respondents. Special education respondents cited lack of school/administrative support as their primary reason for leaving teaching (28.6%) whereas only 15% and 6.4% of secondary and elementary/early childhood respondents, respectively, indicated this as their primary reason for leaving.

Special education respondents were also more likely to consider leaving based on the time involved (21.4%) compared with either secondary (8%) or elementary/early childhood respondents (14.9%).

#### **IV. HIGHER EDUCATION INSTITUTION REAUTHORIZATION SITE VISITS (2002-03)**

The CCHE/CDE reviewed Teacher Education Program Reviews for 2002-2003 at the University of Northern Colorado and Colorado State University. These reviews were only two years after the initial reauthorization of all Colorado teacher education programs in 2000-2001, wherein all programs statewide were required to demonstrate revised policies and curricula responding to the performance-based standards for teacher preparation to align with the Colorado Model Content Standards. Many changes were dictated as a result of both Colorado S.B. 99-154 as well as the No Child Left Behind legislation. Both these institutions volunteered to participate as the first institutions to pilot the new performance review process. The programs were evaluated using the newly developed Performance Model, which evaluates teacher education candidates on how they are able to assist student learning, rather than the former model which evaluated how much student teacher candidates “knew.” Both programs successfully met all the legislatively mandated performance standards. As with all successful programs, there are elements of design that the site team identifies for special attention either because they can serve as examples of excellence for other programs or could benefit by modeling other programs’ innovative design.

The site review team concluded that CSU teaching candidates are coming through the redesigned program with effective initial screening procedures; are competent in their content area; counseled appropriately to lead to success in teaching; have strong student teaching field experiences; and, are prepared for licensure requirements. The assessment aspect of the performance model for undergraduate teacher candidates is still being developed at CSU to coordinate with CCHE’s specific data requirements. The university has hired an assessment coordinator indicating a commitment to addressing this need. The graduate assessment process is effective at this time. Overall, the CCHE site review found the CSU teacher education program able to produce teachers ready to teach in their content area who are valued as an asset by state school districts.

The UNC teacher education program met the state standards for admissions, content, mastery of skills required for state licensure, counseling, field experience, and assessment. The team did suggest areas for improvement in elementary education advising, identification of cooperating teachers for student teacher candidates, and stronger content curriculum for social science majors. Like CSU and all schools during this initial period of accumulating performance data, UNC will be continuing to develop its assessment data collection. The site review team did single out the overall assessment strategy at UNC as a model to other programs with its ability to enhance the quality of programs based on its own data analysis.

**V. PRINCIPAL LICENSURE AND PREPARATION PROGRAMS**

Senate Bill 02-152 requires CCHE to adopt a plan for establishing program requirements for principal preparations offered by institutions of higher education. It also requires the Commission to work in collaboration with the State Board of Education to ensure that principal preparation programs align with performance-based standards for licensure. On or before January 1, 2004, the State Board of Education (SBE) and CDE, along with the CCHE, are directed by the bill to submit a joint report to the Education Committees of the Senate and House. The report will analyze current state licensing and principal preparation program practices, identify the performance-based principal licensure standards adopted by the SBE and the CCHE, and identify the proposed program requirements for institutions of higher education, assessment plans to be used for evaluating the skills of principal candidates seeking licensure and evaluation plans for performance-based principal preparation programs.

In January 2003, SBE adopted performance-based standards that will serve for the development of principal and administrator professional education programs in higher education institutions. The eleven standards are found on the CDE website at:

[www.cde.state.co.us/cdeprof/download/pdf/APRULES.pdf](http://www.cde.state.co.us/cdeprof/download/pdf/APRULES.pdf).

Currently, CCHE and CDE are working to revise the preparation rules for principals/administrators. These preparation rules will be presented to SBE in September 2003 for approval.

**Appendix A**

**STATUTORY AUTHORITY**

**Commission directive – approval of teacher preparation programs**

"Beginning January 2002, the commission shall annually, submit to the education committees of the senate and the house of representatives a report concerning the effectiveness of the review of teacher preparation programs conducted pursuant to 23-1-121. The report shall state the percentage of teacher candidates graduating from each teacher preparation program during the preceding twelve months that applied for and received a provisional teacher license pursuant to section 22-60-201 and percentage of said graduates who passed the assessments administered pursuant to section 22-60.5-203."

Attachment A.

**TEACHER PREPARATION PROGRAMS APPROVED BY CCHE**

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
<b>Adams State College</b>	Post-bacc.	Business Secondary	
		Counselor	
		Education: Elem. & Sec.	
		Elementary	
		Elementary/Early Childhood	
		For. Lang. Sec.-Spanish	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts (Speech)	
		Language Arts Secondary	
		Mathematics Secondary	
		Reading/Literacy	
		School Principal	
		Science Secondary	
	Social Studies Secondary		
	Special Education		
	Undergrad	Linguistically Diverse	English as a Second Language
		Business Secondary	Business
		Early Childhood	Interdisciplinary Studies
		Elementary	Interdisciplinary Studies
		Foreign Language Secondary	Spanish
		K-12: Art	Art
K-12: Music		Music Education	
K-12: Physical Education		Exercise, Physiology & Leisure Studies	
Language Arts Secondary		English	
		Speech and Theatre	
Mathematics Secondary	Mathematics		
Science Secondary	Biology		
	Chemistry		
	Geology		
Social Studies Secondary	History and Government		
<b>Colorado College</b>	Post-bacc.	Art Secondary	
		Elementary	
		Foreign Language Secondary: Spanish, German, French, Japanese, Classics	
		K-12: Art	



CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
		Language Arts Secondary	
		Mathematics Secondary	
		Music Secondary	
		Science Secondary: Biology, Geology, Physics, Chemistry	
		Social Studies Secondary	
	Undergrad	Elementary	Liberal Arts & Sciences
		Foreign Language Secondary	Classics
			French
			German
			Japanese
			Spanish
		Language Arts Secondary	English
		K-12: Art	Art
		K-12: Music	Music
		Mathematics Secondary	Mathematics
		Music Secondary	Music
		Science Secondary	Biology
Chemistry			
Geology			
Physics			
Social Studies Secondary	History		
Colorado Christian University	Post-bacc.	Elementary	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		K-12: Music	
	Undergrad	Elementary	Liberal Arts
		K-12: Music	Music
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	General Biology
		Social Studies Secondary	Social Sciences
Colorado State University	Post-bacc.	Agriculture Secondary	
		Business Secondary	
		Counselor	
		Elementary/Early Childhood	
		Family & Consumer Secondary	
		Foreign Language Secondary: German, French, Spanish	
		K-12: Art	

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
		K-12: Music	
		Language Arts Secondary	
		Linguistically Diverse: English as a Second Language	
		Mathematics Secondary	
		Science Secondary	
		School Administrator	
		School Principal	
		School Social Worker	
		Social Studies Secondary	
		Technical Secondary	
	Undergrad	Agriculture Secondary	Agricultural Education
		Business Secondary	Business Administration
		Early Childhood	Human Development & Family Studies
		Consumer & Family Secondary	Consumer and Family Studies
		Foreign Language Secondary	French
			German
			Spanish
		K-12: Art	Art
		K-12: Music	Music
		Language Arts Secondary	English
			Speech Communication
		Marketing Secondary	Business Administration
		Mathematics Secondary	Mathematics
		Occupational Therapist	Occupational Therapy
		Science Secondary	Biology
			Chemistry
			Geology
			Natural Sciences
		Social Studies Secondary	Physics
			History
			Liberal Arts
			Technology Education and Training
Technical Secondary	Technology Education and Training		
Trades & Industry Secondary	Technology Education and Training		
<b>Colorado State University-Pueblo (formerly University of Southern Colorado)</b>	Post-bacc.	Elementary	
		Foreign Language Secondary: Spanish	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
Mathematics Secondary			

CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
		School Nurse	
		Science Secondary	
		Social Studies Secondary	
	Undergrad	Elementary	Liberal Studies
		Foreign Language Secondary	Spanish
		K-12: Art	Art
		K-12: Music	Music
		K-12: Physical Education	Physical Education
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
			Chemistry
			Physics
		Social Studies Secondary	History
Political Science			
University of Denver	Post-bacc.	Counselor	
		Director, Special Education	
		Elementary	
		Foreign Language Secondary, German, Russian, Spanish, French	
		K-12: Art	
		K-12: Music	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		School Principal	
		School Psychologist	
		School Social Worker	
		Social Studies Secondary	
		Special Education	
		Special Education: Moderate Needs	
		Special Education: Early Childhood	
	Undergrad	Elementary	Liberal Arts
		Foreign Language Secondary	German
			French
			Russian
Spanish			
K-12: Art	Art		
Mathematics Secondary	Mathematics		
Science Secondary	General Science		

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
		Social Studies Secondary	History
		Special Education	Special Education
<b>Fort Lewis College</b>	Post-bacc.	Elementary	
		Early Childhood	
		Elementary	
		Foreign Language Secondary: Spanish	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
	Social Studies Secondary		
	Undergrad	Elementary	Interdisciplinary Studies
		Elementary/Early Childhood	Interdisciplinary Studies
		Foreign Language	Spanish
		Linguistically Diverse	Bilingual
			English as a Second Language
		K-12: Art	Art
		K-12: Music	Music Education
		K-12: Physical Education	Exercise Science
		Language Arts Secondary	English
Mathematics Secondary		Mathematics	
Science Secondary	Biology		
	Chemistry		
	Geology		
	Physics		
	History		
Social Studies Secondary	Humanities		
	History		
<b>Johnson &amp; Wales University</b>	Undergrad.	Business Secondary	Business & Marketing Education
		Consumer & Family Secondary	Consumer & Family Studies
		Marketing	Business & Marketing Education
<b>Mesa State College</b>	Post-bacc.	Language Arts Secondary	
		Mathematics Secondary	
		Science Secondary	
		Social Studies Secondary	
		Elementary	
		Elementary/Early Childhood	
		K-12: Art	
		K-12: Music	

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>				
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>	
	Undergrad	K-12: Physical Education		
		Early Childhood	Liberal Arts	
		Elementary	Liberal Arts	
		K-12: Art		
		K-12: Music		
		K-12: Physical Education		
		Language Arts Secondary	English	
		Mathematics Secondary	Mathematics	
		Science Secondary	Biological Sciences	
			Environmental Science and Technology	
			Physical Science Geology with Earth Science	
			Physical Sciences: Physics	
		Social Studies Secondary	History	
<b>Metropolitan State College of Denver</b>	Post-bacc.	Early Childhood Education		
		Elementary		
		Foreign Language Secondary		
		K-12: Art		
		K-12: Music		
		K-12: Physical Education		
		Language Arts Secondary		
		Mathematics Secondary		
		Science Secondary		
		Social Studies Secondary		
		Special Education		
	Undergrad	Early Childhood		Behavioral Science
				English
				History
				Human Development
				Speech Communications
		Elementary		Behavioral Science
				Biology
				English
History				
Modern Languages: Spanish				
Speech Communications				
Foreign Language Secondary		Modern Languages		
K-12: Art		Art		
K-12: Music		Music Education		
K-12: Physical Education		Human Performance & Sport		
Language Arts Secondary		English		

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
		Linguistically Diverse	Bilingual
		Mathematics Secondary	Mathematics
		School Nurse	Nursing
		Science Secondary	Biology
			Chemistry
			Environmental Science
		Social Studies Secondary	Behavioral Sciences
			Chicano Studies
			Economics
			History
			Political Science
		Special Education: Moderate Needs	Special Education

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
<b>Regis College</b>	Undergrad	Elementary Education	Biology
			Chemistry
			Communications
			Computer Science
			Economics
			English
			Environmental Studies & Human Ecology
			Fine Arts: Visual Arts
			French
			History
			Mathematics
			Philosophy
			Psychology
			Religious Studies
			Sociology
		Spanish	
		Business Secondary	Business
		English Secondary	English
		Foreign Language Secondary	French
			Spanish
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
			Chemistry
Interdivisional Studies			
Social Studies Secondary	Economics		
	History		
	Interdivisional (History, Political Science, Economics)		
	Political Science		
<b>Regis University</b>	Post-bacc.	Early Childhood	
		Elementary	
		Foreign Language Secondary: French, German, Spanish	
		K-12: Art	
		K-12: Music	
		Language Arts Secondary	
		Linguistically Diverse: Bilingual; English as a Second Language	
		Mathematics Secondary	
		Middle School: Language Arts, Foreign Language, Mathematics, Science, Social Studies	
		School Nurse	

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>				
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>	
		Science Secondary		
		Social Studies Secondary		
		Special Education		
		Special Education: Early Childhood		
		Special Education: Moderate Needs		
	Undergrad		Early Childhood	Liberal Studies
			Elementary	Biology
				Chemistry
				Communications
				Computer Science
				Economics
				English
				Environmental Studies & Human Ecology
				Fine Arts: Visual Arts
				French
History				
Liberal Studies				
Mathematics				
Philosophy				
Psychology				
Religious Studies				
		Foreign Language: Secondary	Spanish	
		Foreign Language: Middle	French	
			German	
		K-12: Art		Fine Arts: Art
				Fine Arts: Music
		Language Arts: Secondary Language Arts: Middle		Communication (Speech)
				English
				Theater Arts
		Mathematics: Secondary Mathematics: Middle		Mathematics
		Science: Secondary Science: Middle		Biological Sciences
				Chemistry
				Earth Sciences
				Physics
		Social Studies: Secondary Social Studies: Middle		Geography
History				
Social Sciences				
Special Education		Interdisciplinary Studies		



CCHE APPROVED TEACHER EDUCATION PROGRAMS				
Institution	Level	Licensure Area	Program	
Rocky Mountain College of Art	Undergrad	K-12: Art	Fine Art	
University of Colorado-Boulder	Post-bacc.	Audiologist		
		Linguistically Diverse: Bilingual		
		Linguistically Diverse: English as a Second Language		
		Elementary		
		Foreign Language Secondary: Japanese, Russian Studies, Italian, Germanic Studies, Spanish, French, Classics: Latin,		
		K-12: Music		
		K-12: Music Education		
		Language Arts Secondary		
		Mathematics Secondary		
		Reading Teacher		
		Science Secondary		
		Social Studies, Secondary		
		Special Education: Moderate Needs		
		Speech: Language Pathologist		
	Undergrad	Elementary		American Studies
				Anthropology
				Astronomy
				Biology: Distributive Studies
				Communication
				Chemistry: Distributive Studies
				Economics
				English
				Geography
				Geology: Distributive Studies
				History
				Humanities
				Linguistics
Mathematics				
Physics				
Political Science				
Psychology				
Spanish				
Foreign Language Secondary			Classics (Latin)	
			French	
			German	
			Italian	

CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
			Japanese
			Russian
			Spanish
		K-12: Music	Music
			Music Education
		Language Arts Secondary	Communications
			English
			Humanities
			Linguistics
		Mathematics Secondary	Mathematics
		Science Secondary	Astronomy
			Biology EPO
			Chemistry
			Physics
			Distributed Studies: Chemistry
		Social Studies Secondary	American Studies
			Anthropology
			Economics
			Geography
			History
			International Affairs
Political Science			
University of Colorado-Colorado Springs	Post-bacc.	Counselor	
		Elementary	
		Foreign Language Secondary: Spanish	
		Language Arts Secondary	
		Linguistically Diverse: English as a Second Language	
		Mathematics Secondary	
		Reading Teacher	
		School Administrator	
		School Principal	
		Science Secondary: Biology, Chemistry, Physics	
		Social Studies Secondary	
		Special Education: Moderate Needs	
		Special Education: Severe Needs Cognitive	
		Special Education: Severe Needs Affective	
	Undergrad	Elementary	

CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
			English
			Geography & Environmental Studies
			History
			Mathematics
			Spanish
		Foreign Language Secondary	Spanish
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Science Secondary	Biology
			Chemistry
			Physics
		Social Studies Secondary	History
		Special Education	Biology
			English
			Geography & Environmental Studies
			History
			Mathematics
		Special Education: Moderate Needs	Special Education
		Special Education: Severe Cognitive	
		Special Education: Severe Affective	
<b>University of Colorado at Denver</b>	Post-bacc.	Elementary	
		Foreign Language Secondary	
		Language Arts Secondary	
		Linguistically Diverse: Bilingual & English as a Second Language	
		Mathematics Secondary	
		Reading Teacher	
		School Administrator	
		School Library Media	
		School Principal	
		School Psychologist	
		Science Secondary	
		Social Studies Secondary	
		Special Education: Moderate Needs	
		Special Education: Severe Cognitive	
		Special Education: Severe Affective	

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
		Special Education: Severe Communication	
		Special Education: Early Childhood	
		Special Education: Profound	
		Special Education: Early Childhood	
	Undergrad	Elementary	Individually Structured Major
		Language Arts Secondary	English
		Mathematics Secondary	Mathematics
		Social Studies Secondary	History Political Science
<b>University of Colorado Health Science Center</b>	Post-bacc.	School Nurse	Nursing
	Undergrad	School Nurse	Nursing
		Physical Therapy	Physical Therapy
<b>University of Northern Colorado</b>	Post-bacc.	Audiologist	
		Counselor	
		Drama Secondary	
		Early Childhood	
		Elementary	
		Foreign Language Secondary: Spanish, French, German	
		K-12: Art	
		K-12: Music	
		K-12: Physical Education	
		Language Arts Secondary	
		Linguistically Diverse: Bilingual & English as a Second Language	
		Mathematics Secondary	
		Middle School	
		Reading/Literacy	
		Reading Specialist	
		School Administrator	
		School Library Media	
		School Nurse	
		School Principal	
		School Psychologist	
		Science Secondary	
		Social Studies Secondary	
		Special Education	
Special Education: Affective			
Special Education: Cognitive			

CCHE APPROVED TEACHER EDUCATION PROGRAMS			
Institution	Level	Licensure Area	Program
		Special Education: Communication	
		Special Education, Director	
		Special Education: Early Childhood	
		Special Education: Hearing	
		Special Education: Orientation	
		Special Education: Profound	
		Special Education: Vision	
		Speech Pathologist	
	Undergrad	Early Childhood	Interdisciplinary Studies
		Elementary	Interdisciplinary Studies
		Foreign Language Secondary	French
			German
			Spanish
		K-12: Art	Visual Arts
		K-12: Music	Music Education
		K-12: Physical Education	Exercise & Sports Science
		Language Arts Secondary	Communication Speech
			English
			Theater Arts
		Mathematics Secondary	Mathematics
		Middle School	Biological Sciences
			Chemistry
			Communication Speech
			Earth Sciences
			English
			French
			Geography
			German
History			
Mathematics			
Physics			
Social Sciences			
Spanish			
Theatre Arts			
Science Secondary		Biological Sciences	
		Chemistry	
	Earth Sciences		
	Physics		
Social Studies Secondary	Geography		
	History		

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>										
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>							
			Social Science							
		Special Education	Interdisciplinary Studies							
<b>University of Phoenix</b>	Post-bacc.	Business Secondary								
		Counselor								
		Elementary								
		Language Arts Secondary								
		Linguistically Diverse: English as a Second Language								
		Marketing Secondary								
		Mathematics Secondary								
		School Principal								
		Social Studies Secondary								
		Technology Secondary								
<b>Western State College</b>	Post-bacc.	Counselor								
		Elementary								
		Foreign Language Secondary: Spanish								
		K-12: Art								
		K-12: Music								
		K-12: Physical Education								
		Language Arts Secondary								
		Linguistically Diverse: English as a Second Language								
		Mathematics Secondary								
		School Principal								
		Science Secondary								
		Social Studies Secondary								
		Special Education								
		Undergrad	Elementary		Biology					
				English						
				Geology						
				Interdisciplinary Studies						
				Mathematics						
	Undergrad	Foreign Language Secondary		Spanish						
K-12: Art			Art							
			K-12: Music	Music						
				K-12: Physical Education	Kinesiology					
					Language Arts Secondary	English				
						Mathematics Secondary	Mathematics			
							Music Secondary	Music		
								Science Secondary	Biology	
										Chemistry

<b>CCHE APPROVED TEACHER EDUCATION PROGRAMS</b>			
<b>Institution</b>	<b>Level</b>	<b>Licensure Area</b>	<b>Program</b>
			Geology
			Physics
		Social Studies Secondary	Economics
			History
			Political Science
		Special Education	Interdisciplinary Studies
		Special Education: Moderate Needs	Special Education