COLORADO COMMISSION ON

HIGHER EDUCATION

ACCESS TO HIGH-QUALITY, AFFORDABLE EDUCATION FOR ALL COLORADANS

REPORT TO GOVERNOR AND GENERAL ASSEMBLY ON TEACHER EDUCATION

DECEMBER 2004

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I. EXECUTIVE SUMMARY

Pursuant to Colorado Revised Statutes 23-1-121(6), the Colorado Commission on Higher Education (CCHE) reports annually to the Governor and the Education Committees of the General Assembly on the implementation of the S.B. 99-154, including:

- An overview of the applications to and enrollments in approved teacher education preparation programs. (Enrollment data are reported by institution, licensure areas, and gender and ethnicity);
- Performance on PLACE assessments, by institution;
- The results of the 2004 statewide survey of first-year teachers;
- Summaries of the findings from the follow-up site visits at four universities as part of the joint Colorado Department of Education and Colorado Commission on Higher Education program reauthorization process, pursuant to 23-1-121 Colorado Revised Statutes;
- A list of approved educator preparation programs, by institution.

The following represents the major findings reported in each of the four above-mentioned sections. Comprehensive examinations of these major topics are found in the balance of this report.

Teacher Preparation Enrollments

1. Seven thousand four-hundred forty-six students (7,446) were enrolled in traditional (i.e., not alternative or teacher in residence) teacher education programs in the State of Colorado in 2003-04.

2. Undergraduates comprised the largest population of students enrolled in teacher education programs at 4,351, followed by students enrolled in graduate programs (2,108), and post-baccalaureate programs (987).

3. The largest undergraduate enrollment was at the University of Northern Colorado (1,340 students). The largest graduate population was at the University of Colorado at Denver (718). The largest post-baccalaureate population was at Metropolitan State College of Denver (457).

4. The three largest licensure areas for students enrolled in teacher education programs were Elementary (45% of total), Secondary – Social Studies (10%), and

Special Education (9%). Secondary Mathematics and Secondary Science comprised 4% and 5% of the total enrolled students, respectively.

5. Eighty-six percent of all students enrolled in teacher education programs were Caucasian. Seventy-six percent of all enrolled students were female.

Results of the 2004 PLACE Assessments

1. Ninety-seven percent of all students who took the PLACE assessment in 2003-04 passed. This figure represents an increase over 2000-01, when 93% of all students passed the assessment.

2. In 2003-04, 2,046 students took the PLACE assessment. This figure represents a much larger population than in 2000-01 (1,767).

First-year Teacher Survey

1. Teachers trained in traditional undergraduate and post-baccalaureate programs in the State of Colorado reported being better prepared than those trained in other states or via alternative programs. Teachers trained in Colorado's teacher in residence (TIR) programs reported being significantly less well prepared as compared to students trained in other types programs.

2. Teachers reported that the most valuable preparation tools tended to focus on work and feedback done with cooperating teachers and principals in the schools. Teachers also valued exposure to a variety of teaching situations. The tool that was least often reported as "very valuable" was seminars for beginning teachers.

3. In open-ended questions, 49% of respondents reported that the least beneficial aspect of their teacher education program was the redundancy and irrelevance of coursework. These results were found across all sectors and institutions. Teachers also reported a desire to have had more instruction in classroom management in place of these courses. Several teachers reported tenuous connections between theoretical coursework and real work environments in the classroom.

CCHE/CDE Teacher Preparation Reauthorization Site Visits

1. Pursuant to 23-1-121 (C.R.S.), the Colorado Commission on Higher Education and the Colorado Department of Education administered joint site visits at four postsecondary institutions in Colorado during the 2002-03 academic year: Colorado State University – Pueblo, University of Colorado at Boulder, Mesa State College, and Metropolitan State College of Denver.

2. At the time of the writing of this report, the State Board of Education and the Colorado Commission on Higher Education had reauthorized Colorado State University-Pueblo and the University of Colorado at Boulder.

3. Metropolitan State College of Denver was reauthorized by the State Board of Education in October 2004, and will be reviewed formally by the Colorado Commission on Higher Education in 2005. The Colorado Department of Education is continuing to review the teacher education program at Mesa State College; the CCHE will not take action until after the State Board of Education completes its review.

II. TEACHER PREPARATION AND ENROLLMENTS

Total Enrollment With the adoption of S.B. 99-154, the Colorado legislature posed several questions, including, "How many teacher candidates are being prepared in different licensure areas?" This section responds to that question. Importantly, because teacher education is not reported as an academic major or degree program in CCHE SURDS (Student Unit Record Data System) data files, data reported herein were submitted to CCHE by the various institutions authorized to offer teacher preparation programs. Consequently, these data should be treated as self-reported institutional statistics not verified by CCHE's division of research and information management.

In total, **7,446** students were enrolled in approved teacher education preparation programs at 15 colleges and universities in Colorado. Table 1 summarizes the enrollments of initial licensure program students, by degree level (undergraduate, post-baccalaureate, and graduate).

The University of Northern Colorado leads all public institutions in the enrollment of students in initial teacher licensure programs with 1,631, followed by Metropolitan State College of Denver (1,275), the University of Colorado at Denver (725), and the University of Colorado at Boulder (555). Among private colleges and universities, Regis University enrolled the most initial teacher licensure students with 917, followed by the University of Phoenix (144) and the University of Denver (74).

Importantly, the enrollments of students in post-baccalaureate and graduate programs leading to initial licensure varied greatly. Though without graduate programs, Metropolitan State College of Denver led the state in the enrollment of post-baccalaureate students. Metro's 457 post-baccalaureate students represented 46 percent of the state's total enrollment of such students. The University of Colorado at Boulder's 177 post-baccalaureate students represented 32 percent of that institution's total enrollment in initial licensure programs. In other words, more than 75% of all post-baccalaureate students were enrolled at either Metropolitan State College of Denver or the University of Colorado at Boulder.

With regard to graduate students, the University of Colorado at Denver led the state with 718 enrolled students, or 34 percent of the state's total. Similarly, Regis University (519), University of Colorado at Colorado Springs (177), the University of Denver (57), and the University of Phoenix' (144) graduate enrollments eclipsed significantly their undergraduate enrollments, suggesting these colleges accommodate and provide niche programs for urban, adult students, presumably those making career changes.

TABLE 1: TEACHER EDUCATION PROGRAM ENROLLMENTS FOR INITIAL LICENSURE BY LEVEL BY INSTITUTION, FY 2003 - 2004**

	Unduplicated Headcount			
	Undergraduate	Post-Baccalaureate	Graduate	TOTAL
Institution	FY 2004	FY 2004	FY 2004	FY 2004
ASC	274	6	44	**324**
CC	0	0	40	**40**
CCU	93	6	0	**99**
CSU	389	70	37	**496**
CSU-P	279	47	0	**326**
DU	8	9	57	**74**
FLC	129	47	0	**176**
JWU	9	0	0	**9**
MSC	267	25	0	**292**
METRO	818	457	NA	**1,275**
REGIS	319	79	519	**917**
RMCAD	9	1	0	**10**
UCB	254	177	124	**555**
UCCS	20	1	177	**198**
UCD	4	3	718	**725**
UNC	1,340	43	248	**1,631**
UP	0	0	144	**144**
WSC	139	16	0	**155**
TOTAL	**4,351**	**987**	**2,108**	**7,446**

**Based on enrollment during at least one term in the specified year.

Note: This table limited to students enrolled under the performance-based standards and seeking initial licensure. Total program enrollments are greater than those indicated above.

Licensure Area Aggregated 2004 data on the enrollment of students in teacher education preparation programs leading to various licenses are presented in Table 2[1]. The largest enrollment was in programs leading to endorsement in elementary education. The total number of enrolled students in programs leading to elementary education endorsement, 3,320, represented 45 percent of all students in teacher education preparation programs. Of special note, students enrolled in programs leading to endorsement in Special Education represented nine percent of the total.

[1] The total number of enrolled students in Table 2 does not equal that presented in Table 1 as a result of incomplete data reported to the Colorado Commission on Higher Education.

The number of students enrolled in programs leading to licensure in secondary mathematics and science was relatively low. Though these areas were identified as shortage areas by the state through the LIFT (Loan Incentive for Teachers) program, only five percent and four percent of all initial licenses were awarded in secondary mathematics and science, respectively. Further, only two percent of all students were enrolled in programs leading to licensure in secondary foreign languages.

The total enrollment of students in teacher education preparation programs leading to licensure in English as a Second Language (ESL, now referred to as Linguistically Diverse Education [LDE]) was 136, or two percent of the total. It is unknown how this figure compares to market demand for LDE instructors, but recent Colorado Department of Education reports suggest that it may be below the need.

In its 2003 report, Hispanic Pupil Membership Counts[2], the CDE indicated that the enrollment of Hispanic students in public schools in Colorado grew 30.2 percent between 1999 and 2003. Moreover, the Western Interstate Commission on Higher Education (WICHE)[3] estimates that, by 2015, the proportion of high school graduates in Colorado who are of Hispanic decent will grow from 6,676 in 2003-04 to 18,807 by 2017-18, or from 15 percent to 33 percent of the total. These trends hint that the demand for teachers with endorsements in LDE may grow in the coming years.

Admission Demographics and Grade Point Averages Demographic information of students enrolled in undergraduate and post-baccalaureate programs leading to initial licensure is presented in Table 3. Approximately four percent of all applicants to teacher education preparation programs were denied admission, while 85 percent of all accepted students enrolled. Eighty-two percent of males accepted into licensure programs enrolled compared to 86 percent of females. Overall, males comprised 24 percent of all students enrolled in teacher education programs, which was nearly equivalent to the overall proportion of males who are licensed teachers in Colorado according to CDE data.

Eighty-six percent of all students enrolled in teacher education preparation programs were white/Caucasian. Hispanics comprise nine percent of all enrolled students, followed by Asian American/Pacific Islanders (2%), Black, Non-Hispanics (2%), and American Indian/Alaskan Natives (1%). Only nine non-resident aliens were enrolled in teacher education programs.

[2] Available at: http://www.cde.state.co.us/cdereval/download/pdf/2003PM/2003HispPM5YrTrnd.xls

[3] Western Interstate Commission on Higher Education. (2003). Knocking at the college door 1988 to 2018: Projections of graduates by state, income, and race/ethnicity. Boulder, CO: WICHE.

TABLE 2: NUMBER OF ENROLLED STUDENTS BY LICENSURE AREA FOR INITIAL LICENSURE, FY2004**

Licensure Area	Undergraduate	Post-baccalaureate	Graduate	Total	% of Total
Elementary	2,109	385	826	3,320	45%
Special Education*	96	71	537	704	9%
Secondary - Language Arts	349	84	157	590	8%
Secondary - Social Studies	472	138	140	750	10%
Secondary - Science*	167	106	132	405	5%
K-12: Physical Education	241	35	6	282	4%
Secondary - Mathematics*	205	40	67	312	4%
K-12: Art	157	51	19	227	3%
K-12: Music	186	13	4	203	3%
Early Childhood	169	21	16	206	3%
Secondary - Foreign Language	79	25	19	123	2%
Middle School	23	5	2	30	<1%
Secondary - Business	10	4	31	45	1%
Secondary - Agriculture	14	1	0	15	<1%
Secondary - Drama	25	1	1	27	<1%
Secondary - Family and Consumer Studies	30	1	0	31	<1%
Secondary - Technical	4	2	0	6	<1%
Speech	15	2	1	18	<1%
ESL	0	0	136	136	2%
Secondary - Marketing	4	1	0	5	<1%
Undeclared	2	1	0	3	<1%
Secondary - Art	1	0	0	1	<1%
TOTAL	**4,358**	**987**	**2,094**	**7,439**	

*Identified as shortage area in LIFT.

**Based on enrollment during at least one term in FY 2004

Note: This table was limited to students enrolled under the performance-based standards and seeking initial licensure. Total program enrollments are greater than those above.

Of all students enrolled in undergraduate and post-secondary teacher education programs, only 29 percent were between the ages of 18 and 22. Twenty percent were between the ages of 23 and 25 years, 29 percent were between 26 and 35 years, and 22 percent were older than 35 years. In other words, 71 percent of all students who enrolled in undergraduate and post-baccalaureate teacher education preparation programs were 23 years of age or older.

TABLE 4: DEMOGRAPHICS OF UNDERGRADUATES AND POST-BACCALAUREATES PURSUING INITIAL LICENSURE BY TEACHER EDUCATION PROGRAM STATUS, FY 2004

Demographic Characteristic		Teacher Education Program Status			TOTAL APPLICANTS
		Applied, not Accepted	Accepted. Did not Enroll	Accepted and Enrolled*	
Race/Ethnicity					
American Indian/Alaska Native	#	5	26	62	93
Asian Amer/Pacific Islander	#	5	8	117	130
Black, Non-Hispanic	#	6	10	94	110
Hispanic	#	30	101	479	610
White, Non-Hispanic	#	201	686	4,686	5,573
Nonresident Alien	#	1	0	9	10
TOTAL	#	**248**	**831**	**5,447**	**6,526**
Gender					
Female	#	210	699	4,347	5,256
Male	#	92	307	1,385	1,784
TOTAL	#	**302**	**1,006**	**5,732**	**7,040**
Age					
18 - 22 Years	#	149	249	1,638	2,036
23 - 25 Years	#	40	227	1,169	1436
26 - 35 Years	#	62	301	1,661	2,024
Older than 35 Years	#	51	229	1,264	1,544
TOTAL	#	**302**	**1,006**	**5,732**	**7,040**

*Totals for enrolled students include those who completed during fiscal year.

**Based on enrollment during at least one term in specified year.
Note 1: This table limited to students enrolled under the performance-based standards and seeking initial licensure. Total program enrollments are greater than that shown above.

Note 2: University of Phoenix does not collect ethnicity data.

Tables 4 and 5 show the weighted mean grade point averages and mean grade point average ranges of students who applied, were accepted, and enrolled in undergraduate and post-baccalaureate programs leading to initial teacher licensure in FY 2004. Overall (Table 4), the mean weighted grade point averages of students who were accepted (3.27) and enrolled (3.29) in initial licensure programs exceeded that of students who were denied admission (2.88). The ranges of mean grade point averages for accepted (3.14 – 3.61) and enrolled (3.04 – 3.88) students were generally stronger and than the range of denied students (2.47 – 3.91).

TABLE 4: MEAN WEIGHTED GRADE POINT AVERAGES AND MEAN INSTITUTIONAL GRADE POINT AVERAGE RANGES FOR UNDERGRADUATES AND POST-BACCALAUREATES PURSUING INITIAL LICENSURE BY TEACHER EDUCATION PROGRAM STATUS, FY 2004

Application Status	Unduplicated Headcount	Mean Weighted GPA	Mean GPA Range (Low Mean – High Mean)
Applied, not Accepted	388	2.88	2.47 - 3.91
Accepted	872	3.27	3.14 - 3.61
Enrolled*	5,875	3.29	3.04 - 3.88

*Totals for enrolled students include those who completed during fiscal year.
Note: This table limited to students enrolled under the performance-based standards and seeking initial licensure. Total program enrollments are greater than that shown above.

The mean weighted grade point averages by licensure area (Table 5) reveal a trend similar to that found in the previous table. Based upon reported mean weighted grade point averages only, the highest mean weighted grade point averages was among students enrolled in early childhood education (3.41 gpa; ECE), followed by students in elementary education (3.33), K-12 music, art or physical education (3.31), secondary education (3.28), and special education (3.28). Nonetheless, the real differences among the weighted mean grade point averages are marginal.

TABLE 5: MEAN WEIGHTED GRADE POINT AVERAGES AND MEAN INSTITUTIONAL GRADE POINT AVERAGE RANGES FOR ENROLLED* UNDERGRADUATES AND POST-BACCALAUREATES PURSUING INITIAL LICENSURE IN TEACHER EDUCATION BY LICENSURE AREA, FY 2004

Licensure Area	Unduplicated Headcount	Mean Weighted GPA	Mean GPA Range (Low Mean – High Mean)
Elementary	3,031	3.33	2.91 - 3.89
ECE	140	3.41	3.44
Secondary	1,669[4]	3.28	3.13 - 3.97
Music, PE, or Art (K - 12)	745	3.31	3.09 - 3.63
Special Education	685	3.28	2.86 - 3.69

*Totals for enrolled students include those who completed during fiscal year.
Note: This table limited to students enrolled under the performance-based standards and seeking initial licensure. Total program enrollments are greater than that shown above.

[4] Figure excludes 385 students from Metropolitan State College of Denver for which grade point average data were not provided.

III. COMPARATIVE ANALYSIS OF PERFORMANCE ON PLACE ASSESSMENTS: 2001 - 2004

The State of Colorado currently uses the Program for the Licensing Assessments for Colorado Educators (PLACE) from National Evaluation Systems (NES) and the PRAXIS assessment from the Educational Testing Service (ETS). Though teacher candidates have recently been granted the option to take the PLACE or the PRAXIS assessments in five endorsement content areas, for the purposes of comparative longitudinal analyses, data from the 2000-01 and 2003-04 PLACE assessment are presented only.

Data in Table 6 present the total number of examinees and pass rates on all PLACE assessments taken in 2000-01 and 2003-04[5], by college. Applying a comparative longitudinal approach, the state's overall pass rate increased during the research period from 93 percent to 97 percent. In addition, several institutions increased their pass rates during the study period. Colorado State University at Pueblo's overall pass rate increased from 86 percent to 98 percent during the study period. Likewise, Mesa State College's pass rate increased from 91 percent to 98 percent passing, Metropolitan State College of Denver's increased from 92 percent to 100 percent passing, and the University of Northern Colorado's increased from 86 percent to 93 percent passing. Smaller improvements were realized at Colorado State University (+2 percentage points), University of Colorado at Boulder (+2 percentage points), University of Colorado at Colorado Springs (+3 percentage points), and Western State College (+2 percentage points). Among privates, increases were realized at Colorado Christian University (+4 percentage points) and Regis University (+3 percentage points).

Though subject to normal year-to-year vacillations in student ability, enrollment trends, and changes in the mix of subject area assessments taken by students, decreasing overall pass rates were found at Adams State College (88% down to 85%), Fort Lewis College (90% down to 86%), and the University of Colorado at Denver (99% down to 98%). The only private university to realize a decrease in the overall pass rate was the University of Denver (94% down to 88%), which was the largest overall decrease among all institutions reported.

Comparing the total number of assessments taken in 2000-01 and 2003-04, noteworthy increases were realized overall and at several institutions. Overall, the total number of assessments taken increased 16 percent between 2000-01 and 2003-04, a real increase of 279 assessments. At the campus level, the largest increases were found at the University of Northern Colorado and Regis University (+77 assessments each), the University of Colorado at Denver (+76), the University of Colorado at Colorado Springs (+68). The largest decreases were realized at Metropolitan State College of Denver (-27), the

[5] 2003-04 data appearing in Tables 6 & 7 were provided to the CCHE by the Colorado Department of Education. 2000-01 data were found in the PLACE Annual Institution Reports and State-level Single-Assessment Pass-Rate Data for Regular Teacher Preparation, as appearing in the CCHE 2003 Legislative Report on Teacher Education.

University of Colorado at Boulder (-23), the University of Denver (-21), and Colorado State University at Pueblo (-15).

TABLE 6: PASS RATES FOR SELECTED ALL CONTENT AREAS ON THE PROGRAM FOR LICENSING ASSESSMENTS FOR COLORADO EDUCATORS (PLACE) EXAM, 2000-01 AND 2003-04

Institution	All Academic Content Areas			
	2000-01		2003-04	
	# Tested	% Passed	# Tested	% Passed
PUBLIC INST				
Adams S C	76	88%	100	85%
CO State U	128	98%	161	100%
Co State U – Pueblo (was USC)	77	86%	62	98%
Fort Lewis C	84	90%	84	86%
Mesa S C	43	91%	48	98%
Metro S C of Denver	285	92%	258	100%
U of CO – Boulder	175	97%	152	99%
U of CO – CO Springs	38	97%	106	100%
U of CO - Denver	123	99%	199	98%
U of Northern CO	402	86%	479	93%
Western S C	41	98%	42	100%
PRIVATE INST				
CO Christian U	45	91%	42	95%
CO College	27	100%	34	100%
Regis U	133	94%	210	97%
U of Denver	90	94%	69	88%
STATEWIDE TOTALS**	**1,767**	**93%**	**2,046**	**97%**

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

Data in Table 7 reflect the total number of test takers and overall pass rates for the Elementary Education PLACE assessment only, disaggregated by college or university, for years 2000-01 and 2003-04. Similar to the data presented in Table 6, the State's overall pass rate for students taking the Elementary Education assessment increased during the research period from 96 percent passing to 99 percent passing. Students from each institution in the sample performed consistently or increased their overall pass rate except at Fort Lewis College, the pass rate on the Elementary Education PLACE assessment decreased nominally from 92 percent to 91 percent. Importantly, the total number of assessments completed in 2003-04 compared to 2000-01 decreased by 5 percent, or from 1,056 to 1,002.

TABLE 7: PASS RATES FOR SELECTED ELEMENTARY EDUCATION ON THE PROGRAM FOR LICENSING ASSESSMENTS FOR COLORADO EDUCATORS (PLACE) EXAM, 2000-01 AND 2003-04.

Institution	Elementary Education			
	2000-01		2003-04	
	# Tested	% Passed	# Tested	% Passed
PUBLIC INST				
Adams S C	43	95%	61	95%
CO State U	--	--	--	--
CO State U – Pueblo (was USC)	44	91%	42	98%
Fort Lewis C	51	92%	32	91%
Mesa S C	22	95%	13	100%
Metro S C of Denver	154	95%	128	100%
U of CO – Boulder	101	99%	85	100%
U of CO – CO Springs	25	100%	38	100%
U of CO - Denver	90	100%	108	100%
U of Northern CO	208	94%	254	96%
Western S C	15	100%	8	100%
PRIVATE INST				
CO Christian U	39	95%	36	97%
CO College	19	100%	20	100%
Regis U	87	97%	143	100%
U of Denver	64	97%	34	100%
STATEWIDE TOTALS**	**1,056**	**96%**	**1,002**	**99%**

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

IV. RESULTS OF THE 2004 FIRST-YEAR TEACHER SURVEY

Pursuant to 23-1-121 Colorado Revised Statutes, the Colorado First-year Teacher Survey supplements statistical reports from the CDE and CCHE and provides attitudinal data from first-year teachers, which is used in evaluating the quality of Colorado teacher education preparation programs in the areas of content and teaching skills preparation. The 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. The survey (Appendix B) includes sections on teaching and licensure areas, teacher education background, student teaching experience, subject matter content preparation, and teaching skills preparation. Based on a review of previous research and upon the results of previous surveys, 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 explains differences in content area preparation?

- What are the overall levels of teaching skill preparation among first-year teachers as well as the training and background that can explain differences in teaching skills preparation?

A. General Information About the Survey

Survey Construction

In January 2004, a technical committee (Appendix C) of subject matter and psychometric experts was convened to construct and revise a new version of the first-year survey, to make the instrument more focused on the Colorado teacher preparation standards, easier for respondents to use online, and more amenable to analyses. The committee met several times throughout January, February, and March in order to produce the survey used in the field.

Population

In early March 2004, names and other contact information such as email addresses of first-year teachers were requested from all public school district induction coordinators throughout the state. Two follow-up requests for these names were subsequently made. Once received, the district information was compiled into a master file. A total of 3,229 teachers were identified statewide as being first-year teachers by district induction coordinators. Eight-hundred-thirty-nine teachers completed the survey for a total response rate of 25.98%. Analysis of the response rates by district and by type of district revealed that the teachers who did not respond appeared to be randomly distributed throughout the state, that is to say, no district biases appeared in the data.

In addition, many of the teachers who had been identified by their induction coordinators as first-year teachers were misidentified. These teachers were screened out of the survey with the first question, "How many years have you been teaching, excluding student teaching or paraprofessional work?" Students who answered "more than one year" were thanked for their time and informed that they were finished with the survey. Of the 839 respondents, 488 were determined to be first-year teachers. Further analysis of this issue revealed that the misidentification of first-year teachers did not appear to be a clustered phenomenon, but distributed throughout the districts and the state.

Survey Administration

Teachers identified by school district induction coordinators were invited by email to participate in the survey beginning April 18, 2004. The hosting of the survey website and technical services were provided by Blue Frog Surveys of Boulder, CO. Respondents needing technical assistance during the administration period were contacted within 24-hours of their request. One follow-up reminder was sent, again via email, to teachers who, by May 4, 2004, had not participated in the survey.

Demographics of Respondents

488[6] surveys were completed by first-year teachers. Of these, 385 (81%) were completed by teachers holding provisional teacher licenses, 36 (8%) by teachers participating in alternative license programs, 35 (7%) holding emergency licenses, and 22 (5%) enrolled in teacher in residence programs. Moreover, 302 (62%) of the respondents graduated from in-state teacher preparation programs, either at the undergraduate or post-baccalaureate levels; 186 (38%) graduated from colleges outside of Colorado.

Data in Table 8 show the differences in types of licenses held by survey participants, by location of undergraduate and/or post-baccalaureate college. Importantly, among participants in this sample, graduates from in-state colleges were more likely than graduates from out-of-state colleges to hold a provisional (standard) teacher license (86.4% compared to 70.5%). Conversely, graduates from out-of-state colleges were more likely than graduates from in-state colleges to hold an emergency license or participate in a Teacher in Residence or alternative licensure program.

TABLE 8: 2003-04 FIRST YEAR TEACHER SURVEY RESPONDENTS, BY TYPE OF LICENSE (PERCENTAGES)

	OUT-OF-STATE COLLEGE	IN-STATE COLLEGE
PROVISIONAL	124 (70.5%)	261 (86.4%)
ALTERNATIVE	18 (10.2%)	18 (6.0%)
TEACHER IN RESIDENCE	14 (8.0%)	8 (2.6%)
EMERGENCY	20 (11.4%)	15 (5.0%)
TOTAL RESPONDENTS	176 (100.0%)	302 (100.0%)

Generally speaking, compared to data on current teachers provided in the Fall 2002 Teacher Count by Gender and Race/Ethnicity report by the Colorado Department of Education, the personal demographics of the research sample are representative of most teachers in the state of Colorado. Among survey completers (Table 9), 75 percent are female (74.5% of all teachers according to the CDE report) and 25 percent are male (25.5%, CDE). Regarding ethnicity, 86 percent are white/Caucasian (93%, CDE), 6.4 percent are Hispanic (6.6%, CDE), .7 percent are African-American (1.6%, CDE), .5 percent Native American (<1%, CDE), and 1.2 percent Asian/Pacific Islander (<1%, CDE). These figures are somewhat different when data are disaggregated by location of college. Among out-of-state college graduates, 93.6 percent are white/Caucasian or chose not to answer the question, compared to 88.7 of in-state college graduates.

[6] Figures presented in Tables 8 – 11 may not total 488 as a result of non-responses by some survey participants.

TABLE 9: 2003-04 FIRST YEAR TEACHER SURVEY RESPONDENTS, BY ETHNICITY (PERCENTAGES)

	OUT-OF-STATE COLLEGE	IN-STATE COLLEGE
AFRICAN AMERICAN	2 (1.4%)	1 (0.4%)
ASIAN	0 (0.0%)	5 (1.8%)
HISPANIC	7 (5.0%)	20 (7.1%)
NATIVE AMERICAN	0 (0.0%)	2 (0.7%)
OTHER	0 (0.0%)	4 (1.4%)
WHITE	123 (87.9%)	239 (84.5%)
I PREFER NOT TO ANSWER	8 (5.7%)	12 (4.2%)
TOTAL REPONDENTS	140 (100.0%)	283 (100.0%)

The participants in the 2004 first-year teacher survey represented a variety of age ranges. In the main, out-of-state college graduates were more often younger than in-state college graduates (Table 10).

TABLE 10: 2003-04 FIRST YEAR TEACHER SURVEY RESPONDENTS, BY AGE (PERCENTAGES)

	OUT-OF-STATE COLLEGE	IN-STATE COLLEGE
UNDER 24 YEARS	51.1	35.1
25-29 YEARS	23.2	30.0
30-34 YEARS	7.0	10.9
35-39 YEARS	3.8	9.2
40 OR MORE YEARS	14.9	14.6
TOTAL RESPONDENTS	100.0	100.0

The majority of participants in the first-year teacher survey (54.8%, Table 11) taught at the secondary level. Thirty-six percent taught in elementary schools, and ten percent taught in multilevel schools. When disaggregated by location of college, more graduates from Colorado colleges held positions in elementary schools, while graduates from out-of-state colleges more often taught at the secondary level.

TABLE 11: 2003-04 FIRST YEAR TEACHER SURVEY RESPONDENTS, BY TYPE OF SCHOOL (PERCENTAGES)

	OUT-OF-STATE COLLEGE	IN-STATE COLLEGE
PRESCHOOL OR ELEM ONLY	51 (29.0%)	119 (39.4%)
SECONDARY ONLY	108 (61.4%)	154 (51.0%)
MULTILEVEL	17 (9.7%)	29 (9.6%)
TOTAL RESPONDENTS	176 (100.0%)	302 (100.0%)

Tables 12 and 13 identify the institutions from which in-state participants in the 2004 first-year teacher survey graduated. Importantly, data in these tables are not independent. That is, some of the survey participants may have received their undergraduate degree and completed their post-baccalaureate teacher education program at the same institution, and thus are counted in Tables 12 and 13; others may have received their undergraduate degree out-of-state and completed their post-baccalaureate teacher education in Colorado, and thus are counted in Table 13 only; and others still may have completed their undergraduate degree at one college in-state, and then completed a post-baccalaureate teacher education preparation program at a different in-state college, and thus are counted in both tables, but at different institutions.

TABLE 12: UNDERGRADUATE INSTITUTION OF IN-STATE COLLEGE GRADUATES, 2003-04 FIRST-YEAR TEACHERS SURVEY

	Number	Percent
Adams State College	13	4.9
Colorado College	1	0.4
Colorado Christian University	6	2.2
Colorado State University	48	17.9
Colorado State University-Pueblo	11	4.1
University of Denver	7	2.6
Fort Lewis College	5	1.9
Mesa State College	10	3.7
Metro State College of Denver	40	14.9
Regis University	12	4.5
University of Colorado at Boulder	23	8.6
University of Colorado at Colorado Springs	12	4.5
University of Colorado at Denver	9	3.4
University of Northern Colorado	67	25
Western State College	4	1.5
TOTAL RESPONDENTS	268	100.0

TABLE 13: POSTBACCALAURATE INSTITUTION OF IN-STATE COLLEGE GRADUATES, 2003-04 FIRST-YEAR TEACHERS SURVEY		
	Number	Percent
Adams State College	2	1.9
Colorado College	1	0.9
Colorado Christian University	1	0.9
Colorado State University	7	6.5
University of Denver	14	13.1
Mesa State College	1	0.9
Metro State College of Denver	5	4.7
Regis University	9	8.4
University of Colorado at Boulder	12	11.2
University of Colorado at Colorado Springs	10	9.3
University of Colorado at Denver	24	22.4
University of Northern Colorado	19	17.8
Western State College	1	0.9
On-Line Program	1	0.9
TOTAL RESPONDENTS	107	100.0

B. *Multivariate Analysis*[7]

Confirmatory Factor Analysis and Tests of Reliability

In order to determine the preparedness of first-year teachers regarding the Performance-Based Standards for Colorado Teachers, confirmatory factor analyses[8] and reliabilities were run to insure that specific questions tailored to each standard were actually measuring it. Two notable exceptions to this were Standard One (Knowledge of Literacy) and Standard Two (Knowledge of Mathematics) in which case the questions asked of primary teachers differed from those asked of secondary teachers. One question for each of these two standards was asked differently of primary and secondary teachers.

The technical committee decided to do this after struggling with the issue of how to get to this standard for students whose content areas were vastly different from the standard. Therefore, for elementary teacher literacy, the question was asked, "When you began this school year in your classroom, how well prepared were you to provide literacy instruction?" On the other hand, for secondary teachers, the question was revised to ask, "When you began this school year in your classroom, how well prepared were you to incorporate literacy in your content area, where appropriate?" That questions on these standards were not asked in the same manner for elementary

[7] Sonia Schaible-Brandon, former CCHE research analyst, prepared survey analyses presented in Section B and information found in appendixes A & B on July 6, 2004.

[8] Factor analysis is a method used in statistical analyses to "group" variables according to their significance or common association. A factor is a clustered set of variables, such as items on a survey, that can be conceptually related or grouped together and are highly intercorrelated. Factor analysis reveals common patterns among variables, such as survey responses.

teachers as they were for secondary teachers provides an analytical challenge that perhaps should be examined by future survey administrations.

However, for Standards 3 – 8, where multiple questions were asked within each standard, the results of the confirmatory factor analyses were strong, with no item loading on a factor with a value less than .549 and most at a .80 or greater, indicating that the questions addressed the standards appropriately (Tables 14 - 19). Overall reliability supported strong consistency with a Cronbach's alpha[9] = .930 (Table 20). Results supported compilation of standards-based questions into standards variables.

In order to compute the latent standard variables, each variable within a standard was summed and divided by the number of variables within the construct in order that each standard had its own comparable mean and standard deviation (Table 21). Scales are based on the following 4-point scale:

1 = Not at all prepared

2 = Somewhat prepared

3 = Adequately prepared

4 = Well prepared

Averages for preparation in content were the highest overall, with a mean of more than 3. The lowest average was for preparation in individualized instruction with a mean of 2.43.

Analysis of Variance[10]

In order to determine how well prepared teachers trained in Colorado through various methods considered themselves to be, as compared to teachers trained in other states, the sample was divided into six categories: (1) teachers trained through a Colorado undergraduate program, (2) teachers trained through an out-of-state undergraduate program, (3) teachers trained in a Colorado post-baccalaureate program, (4) teachers trained in an out-of-state post-baccalaureate program, (5) teachers trained through Colorado's teacher in residence (TIR) program, and (6) teachers trained in Colorado's alternative licensure programs. Ratings on each standard were analyzed to determine if differences existed across these different groups (Table 22). With alpha set at .05,

[9] Cronbach's Alpha is a measure of internal reliability (accuracy) of items in an index or survey. Cronbach's Alpha ranges from 0.0 (no reliability) to 1.0 (absolute reliability). Scores toward the high end suggest that the items in the index are measuring the same thing.

[10] Analysis of variance (ANOVA) is a multivariate method used to assess differences in continuous data (e.g. answers to a survey question) separated by functional categories (e.g., males versus females). This method tests for differences in responses between groups (e.g. males and females) and within groups (e.g. high school graduates and college graduates). ANOVA tests by themselves do not reveal the actual differences, by group, however. Post hoc comparisons, tests that demonstrate the differences between group means calculated after ("post") having done an ANOVA, are used for this purpose.

significant differences in the perception of preparedness among groups were found across all standards with the exception of Standard 1 for elementary teachers, Standard 2 for all teachers, and Standard 8 for all teachers. Tukey's test of Honestly Significant Differences (HSD)[11] was used to determine where the significant differences existed.

I. Results of Post Hoc Test for Standard One: Knowledge of Literacy

In analyzing Standard One, Knowledge of Literacy, elementary teachers reported no significant difference in level of preparedness based on whether they were trained in- or out-of-state, regardless of methodology (Table 23). However, for secondary teachers, those trained as teachers in the Teachers in Residence (TIR) program felt significantly less well prepared than all other groups. Alternative licensure graduates expressed perceptions of adequacy of training that were significantly lower than teachers trained in Colorado undergraduate or post-baccalaureate programs for Standard One. These teachers' perceptions did not differ significantly from teachers trained out-of-state. Secondary teachers trained in Colorado undergraduate and post-baccalaureate programs expressed the highest level of preparedness in the ability to incorporate literacy into instruction (Table 24).

II. Results of Post Hoc Test for Standard Two: Knowledge of Mathematics

The first-year teachers who completed the survey showed no significant differences in how prepared they felt regarding Standard Two, Knowledge of Mathematics, based on the method of teacher preparation they received. Neither the secondary nor the primary teachers showed any differences. For this standard, the manner of training does not appear to have affected perceptions of preparedness (Tables 25 & 26).

III. Results of Post Hoc Test for Standard Three: Knowledge of Standards and Assessment

Significant differences appeared in the analysis of variance for Standard Three. Teachers trained in Colorado undergraduate programs felt the best prepared, significantly more than both the TIR teachers and teachers trained in alternative licensure programs (Table 27). Again the teachers prepared in Colorado's Teacher in Residence programs felt significantly less prepared in regards to Standard Three, Knowledge of Standards and Assessment than students prepared in other programs, excepting the alternative licensure program.

IV. Results of Post Hoc Test for Standard Four: Knowledge of Content

Teachers who received preparation through Colorado undergraduate programs felt the most prepared in Standard Four, Knowledge of Content, significantly more

[11] Analysis of Variance (ANOVA) tests determine whether some difference between groups exists. Tukey's Honestly Significant Difference (HSD) test determines which group means are different and whether the differences are statistically significant.

than TIR, alternative licensure, and students trained in undergraduate programs in other states. No other significant differences existed in this standard regarding the type of training students received (Table 28).

V. Results of Post Hoc Test for Standard Five: Classroom and Instructional Management

In Standard Five, Knowledge of Classroom and Instructional Management, first-year teachers prepared by Colorado's Teacher in Residence programs felt the least prepared of any of the other programs. The results for the TIR teachers were significantly lower than teachers prepared in every other program, including alternative licensure programs and teachers prepared in other states. No other significant differences were apparent in this standard (Table 29).

VI. Results of Post Hoc Test for Standard Six: Knowledge of Individualization of Instruction

Once again, teachers prepared in the TIR programs in Colorado felt the least prepared in the standard. For Standard Six, Knowledge of Individualization of Instruction, TIR teachers felt significantly less prepared than teachers prepared in Colorado undergraduate, Colorado post-baccalaureate, and other states' undergraduate programs. Significant differences were not seen in other combinations (Table 30).

VII. Results of Post Hoc Test for Standard Seven: Knowledge of Technology

For Standard Seven, Knowledge of Technology, it is interesting to note that the teachers trained in other states' post-baccalaureate programs are those who felt the least prepared in this area, while Colorado post-baccalaureate teachers perceived themselves to be the most prepared, followed very closely by teachers trained in Colorado undergraduate programs. Out-of-state post-baccalaureate teachers felt significantly less prepared in technology than teachers trained in Colorado post-baccalaureate and undergraduate programs. In this area, TIR teachers showed no significant differences when compared to other teachers (Table 31).

VIII. Results of Post Hoc Test for Standard Eight: Democracy, Educational Governance and Teaching

Examining Standard Eight, Democracy, Educational Governance and Teaching Careers, no significant differences in the level of preparedness were found among any of the different preparation programs (Table 32).

Ranking of Preparation Methods by Level of Teaching

In addition to the questions that focused on the Performance-Based Standards for Colorado Teachers, several informational questions were asked in the survey in hopes that the responses would better inform institutions of those program aspects that first-year teachers find most helpful once they have entered the profession. Teachers were asked how valuable the following tools were in their teacher preparation program:

1. *Regular evaluation from your faculty supervisor*
2. *Constructive feedback from your faculty supervisor*
3. *Regular evaluation from your cooperating teacher*
4. *Constructive feedback from your cooperating teacher*
5. *Extra preparation time*
6. *Common planning time with other teachers*
7. *Seminars for beginning teachers*
8. *Extra classroom assistance*
9. *Exposure to a variety of teaching situations*
10. *Regular communication with your principal*
11. *Regular meetings with your mentor teacher*
12. *Coaching by regular observing teacher*
13. *Observation of model lessons by a teacher leader*

Teacher preparation tools that teachers reported as most valuable tended to focus on work and feedback done with cooperating teachers and principals in the schools themselves. Teachers also valued exposure to a variety of teaching situations, as well. The tool that was least reported as "very valuable" was seminars for beginning teachers (Table 33).

Open-ended Questions

Of particular interest in the survey were the open-ended questions that asked teachers to identify both the least and the most beneficial aspects of their teacher education preparation programs (Tables 34 & 35). Content analysis was done in order to aggregate responses into topical categories. Nearly 36% of the respondents agreed that the most beneficial aspect of their teacher education program was the classroom experience. An additional 12% added that classroom management tips learned while in the field were the most beneficial

Importantly, more than 49% of respondents stated that the least beneficial part of their teacher education preparation program was the redundant and irrelevant nature of many of their pedagogy courses. Several went on to say they had only been exposed to one model of planning or one method of running a classroom, and these did them little good in their current position. Exposure to a variety of methods and materials was often offered as a suggestion for improvement.

Discussion and Implications

Results of the survey have several possible implications. Further examination of the Teacher in Residence program may be warranted because, among those in the sample population, graduates of this program type felt least prepared in many of the Performance-Based Standards for Colorado Teachers[12]. The finding that these teachers may be less prepared in Colorado standards than teachers prepared in other states is of particular note. These results should not be surprising in light of the fact that substantial research exists noting that recruits from alternative paths often report dissatisfaction with training, finding many aspects of teaching more difficult than students trained in more traditional programs.[13]

Additional findings suggest that teacher preparation programs may want to examine their pedagogy and educational theory coursework for redundancy and irrelevance. Several students complained that their courses were not aligned with district needs and their programs did not expose them to multiple methodologies in areas like lesson planning. Recent case study research[14] has found that the best teacher education preparation programs require the integration of theory and practice, thereby maximizing the relevance of theory in practice.

Unfortunately, because the individual institutional sample sizes are small, no valid inferences can be made at an institutional level. Institutions are encouraged to follow-up on findings within this study and evaluate the extent to which theory is integrated into current practice and experience in order to address student concern of redundancy and irrelevance of coursework.

One point of interest is the fact that teachers trained in traditional Colorado post-baccalaureate and undergraduate programs feel significantly more prepared than teachers who were trained out-of-state in post-baccalaureate programs regarding technology. More information would need to be gathered in order to determine why this would occur when no other standard shows this type of relationship.

Colorado education, K-12 and higher education need to improve the pipeline of ethnically diverse students for teacher education programs in order that districts have a representative pool of candidates from which to draw teachers. The sample in this survey suggests that the population of new teachers in Colorado is still far from its goal of ethnic representation. Programs that are having successful impacts on this phenomenon need to be highlighted by institutions in order that efforts can be recognized and replicated where they exist. All of the performance contracts negotiated between the Colorado Commission on Higher Education and the state's public colleges and universities, which will go into effect in 2005, require improvements in this area.

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[12] All current Teacher in Residence programs were approved under old teacher education preparation standards. H.B. 04-1104 now allows TIR programs to be re-approved based upon the more recently adopted teacher education preparation standards. The CDE is beginning these reviews.

[13] Darling-Hammond, 1998; Scannell, 1999.

[14] Darling-Hammond and Snyder, 1999.

V. SUMMARIES OF THE FINDINGS FROM THE REAUTHORIZATION SITE VISITS AT FOUR TEACHER PREPARATION PROGRAMS IN COLORADO.

The Colorado Commission on Higher Education and Colorado Department of Education conducted on-site teacher education program reviews in 2003-2004 at Colorado State University at Pueblo (February 2004), University of Colorado at Boulder (February 2004), Mesa State College (March 2004), and the Metropolitan State College of Denver (April 2004). All programs were required to demonstrate compliance with the State's statutory performance measures for teacher education. Within this performance model are criteria by which to evaluate each program's implementation of the state's performance based teacher education standards, the state's rules for the content preparedness of teacher education candidates, and the alignment with the state's K-12 Model Content Standards.

Colorado State University at Pueblo and the University of Colorado at Boulder successfully met the mandated performance measures and were reauthorized by the Colorado Department of Education and the Colorado Commission on Higher Education. As with all successful programs, there are elements within each program that the state site visitation teams identified for special consideration, either because these elements can serve as examples of excellence for other programs or because the programs could benefit by adopting aspects from other programs. The findings for Mesa State College and the Metropolitan State College of Denver were still being processed by the Colorado Department of Education or the Commission on Higher Education or both at the time of the writing of this report. Current policy prescribes that the State Board of Education first approve the content of the teacher preparation program. Once this has occurred, the Commission has the authority to formally review and reauthorize teacher preparation programs.

Colorado State University-Pueblo In its reauthorization of the teacher education program, the site visit team concluded that the teacher education program at Colorado State University at Pueblo demonstrated quality and met the state standards, including four-year degree completion, comprehensive admissions system, advising and screening of candidates, content knowledge aligned to standards, skills required for licensing by the Colorado Department of Education, 800 hours (minimum) of field experience, and the assessment of student progress. The Commission provided a special acknowledgement to CSU-P for integrating and aligning coursework and field work with the Colorado Model Content and Performance Standards.

Since the teacher education preparation program presently relies heavily on external grant funding, the site visit team asked the institution to develop a plan for transitioning the program from grant monies to university support, thus ensuring long-term sustainability for the program. The Commission also asked the institution to establish a well-defined plan for ensuring consistent and quality advising of teacher education candidates. Finally, the Commission encouraged the institution's administration to develop specific memoranda of understanding between the teacher

education preparation program and its cooperating local school districts that define expectations and responsibilities for student field experiences.

University of Colorado at Boulder The site visit team found that the University of Colorado at Boulder successfully met the mandated performance measures, including four-year completion, comprehensive admissions system, advising and screening candidates, content knowledge aligned to standards, skills required for licensing by the Colorado Department of Education, 800 hours (minimum) of field experiences, and assessment of student progress. A special acknowledgment was given to the teacher education program for the efforts of science and math faculties to promote teaching as a profession to their best students.

The site visit team recommended that the program develop a renewed commitment to diversity in both the student body and faculty. The site visit team encouraged the institution to develop specific memoranda of understanding between the teacher education program and the local school districts to ensure all parties are fully informed of the field experience goals, requirements, and school responsibilities. The site visit team further requested that the School of Education establish a formal structure for engaging its cooperating local school districts and two-year community colleges in encouraging greater numbers of students to enter the teaching profession, with specific focus on increasing minority student enrollment and retention.

Mesa State College In its review of the teacher education program at Mesa State College, the site visit team commended the institution on the recent stability of leadership in its teacher education program, on the depth of understanding of the state's Model Content Standards possessed by the content faculty (e.g., science faculty), and on the program's full implementation of the Colorado Performance-based Teacher Education Standards. The site visit team encouraged the teacher education program to develop consistency across all program offerings, including both the undergraduate and post-bachelor programs; to enhance the contact and communication between the Center for Teacher Education and other units within the college; to improve its use of technology; and to increase diversity within the program.

As mentioned previously, the State Board of Education and the Commission on Higher Education continue to process the site team's findings for reauthorization of the teacher education program.

Metropolitan State College of Denver In its review of the Metropolitan State College of Denver, the site visit team commended the ability of the teacher education program to successfully attract a wide variety of candidates as transfer students from two-year institutions and from within the institution's student body. Local district administrators reported to the visitation team that graduates of this program often become building experts on the topic of the state's Model Content Standards. The areas of literacy instruction and technology were noted as particular strengths of the Metropolitan State College of Denver's teacher education program.

The site visitation team encouraged the teacher education program to address strategies to strengthen student advising, to increase collaboration among all faculty working with teacher education candidates, to explore avenues for the field placement of all candidates in professional development schools, and to promote opportunities for enhancing writing instruction within the program.

In October 2004, the State Board of Education determined that the content of the teacher education preparation program at MSCD meets its standards. Pursuant to protocol established by statute, the Commission on Higher Education will formally consider re-authorization of the overall teacher education preparation program at MSCD in early 2005.

VI. APPROVED EDUCATOR PREPARTION PROGRAMS

Data presented in the table on the following pages represent the approved educator preparation programs in Colorado by institution and program area. These programs are not differentiated by degree level (graduate, post bachelor, or undergraduate).

Following policy changes adopted by the State Board of Education, the Linguistically Diverse (bilingual and ESL) and Special Education (areas 1 - 4) programs were phased out in 2003 (the rows for these endorsement areas are shaded in the following table). The SBE adopted new preparation content standards for the Linguistically Diverse, Linguistically Diverse Education Specialist, Special Education Generalist, and Special Education Specialist programs in 2003. All programs in these areas must be reviewed and approved by the CDE. Some institutions have already completed restructuring their programs to correspond with the new state requirements. Others are in the process of doing so.

Of particular note, all but three of the nineteen institutions listed currently offer approved programs in mathematics, science, and English.

COLORADO INSTITUTIONS of HIGHER EDUCATION
APPROVED EDUCATOR PREPARATION PROGRAMS

The following table reflects the approved educator licensing program by Colorado Institutions of Higher Education. This table does not differentiate between graduate, post bachelor, or undergraduate programs.

APPROVED PROGRAMS	Adams State College	CO Christian University	Colorado College	Colorado State University	Fort Lewis College	Johnson and Wales University	Mesa State College	Metro State College of Denver	Regis College	Regis University	Univ. of CO at Boulder	Univ. of CO at CO Springs	Univ. of CO at Denver	Univ. of CO Health Science	University of Denver	University of Northern Colorado	University of Phoenix	Colorado State University-Pueblo	Western State College
Administrator												♦	♦		♦	♦			
Agriculture and Renewable Natural Resources				♦															
Art	♦		♦	♦	♦		♦	♦		♦					♦	♦		♦	♦
Audiologist, School											♦					♦			
Business & Marketing Ed																			
Business Education	♦			♦		♦			♦	♦									
Counselor, School	♦			♦								♦	♦		♦	♦	♦		
Drama										♦						♦			
Early Childhood Education	♦	♦		♦	♦			♦		♦						♦			
Elementary Education	♦	♦	♦		♦		♦	♦	♦	♦	♦	♦	♦		♦	♦		♦	♦
English Language Arts	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦		♦	♦		♦	♦
Family & Consumer Stds				♦		♦													
Foreign Language	♦		♦	♦	♦			♦	♦	♦	♦	♦	♦		♦	♦		♦	♦
Health																			
Instructional Technology Specialist																			
Instructional Technology Teacher																			
Library Media , School													♦		♦	♦			
Linguistically Diverse																			♦
Linguistically Diverse Education Specialist: Bilingual Ed																			
Linguistically Diverse: Bilingual	♦				♦			♦	♦	♦	♦		♦			♦			
Linguistically Diverse: ESL	♦			♦	♦				♦	♦	♦	♦	♦			♦	♦		
Marketing Education				♦		♦													
Mathematics	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦		♦	♦		♦	♦
Music	♦	♦	♦	♦	♦		♦	♦		♦	♦				♦	♦		♦	♦
Nurse , School								♦		♦				♦		♦			
Occupational Therapist, School				♦															
Orientation and Mobility Specialist , School																♦			
Physical Education	♦				♦		♦	♦								♦		♦	♦
Physical Therapist , School														♦					
Principal	♦			♦								♦	♦		♦	♦	♦		
Psychologist , School													♦		♦	♦			
Reading Specialist																♦			
Reading Teacher	♦										♦	♦	♦			♦			
Science	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦		♦	♦		♦	♦

APPROVED PROGRAMS	Adams State College	CO Christian University	Colorado College	Colorado State University	Fort Lewis College	Johnson and Wales University	Mesa State College	Metro State College of Denver	Regis College	Regis University	Univ. of CO at Boulder	Univ. of CO at CO Springs	Univ. of CO at Denver	Univ. of CO Health Science	University of Denver	University of Northern Colorado	University of Phoenix	Colorado State University-Pueblo	Western State College
Social Studies	♦	♦	♦	♦	♦		♦	♦	♦	♦	♦	♦	♦		♦	♦		♦	♦
Social Worker , School				♦											♦				
Speech				♦				♦		♦						♦			
Speech/Language Pathologist, School											♦					♦			
Technical Education (Tech Ed)				♦															
Trade and Industry Education				♦															
Special Education Director															♦	♦			
Special Education Generalist								♦											♦
Special Education Specialist																			
Special Education Specialist- Visually Impaired																♦			
Special Education Specialist- Deaf/Hard of Hearing																♦			
ECE Special Education Specialist																			
ECE Special Education																			
Gifted Education Specialist																			
Special Education Teacher 1*	♦							♦		♦	♦	♦	♦		♦	♦			
Special Education Teacher 2-Cognitive												♦	♦			♦			
Special Education Teacher 2-Affective												♦	♦			♦			
Special Education Teacher 2-Vision																♦			
Special Education Teacher 2-Hearing																♦			
Special Education Teacher 2-Communication													♦						
Special Education Teacher 3* **													♦			♦			
Special Education Teacher 4** **										♦			♦		♦	♦			

* Moderate Needs ** Severe Needs *** Profound Needs **** Early Childhood Special Education

Appendix A: Results of Multivariate Statistical Analyses on the First-year Teachers Survey

Table 14 — Standard Three – Knowledge of Standards and Assessment

Item	Factor loading
How prepared – design standards based instructional plans	.814
How prepared – develop reliable and valid assessment tools	.872
How prepared – use assessment data for instruction	.898
How prepared – use assessment data for feedback tool	.841

Table 15 — Standard Four – Knowledge of Content

Item	Factor loading
How prepared – utilize content knowledge	.864
How prepared – enhance content by utilizing model content standards	.864

Table 16 — Standard Five – Knowledge of Classroom and Instructional Management

Item	Factor loading
How prepared – differentiate intervention strategies	.827
How prepared – utilize knowledge of cognitive processes	.821
How prepared – work with parents as partners	.740
How prepared – maintain appropriate student records	.697

Table 17 — Standard Six – Knowledge of Individualization of Instruction

Item	Factor loading
How prepared - employ a wide range of techniques	.820
How prepared – design/modify instruction as needed	.849
How prepared – develop and implement an IEP	.780
How prepared – consider student medical condition	.795

Table 18 — Standard Seven – Knowledge of Technology

Item	Factor loading
How prepared – use technology in the classroom	.857
How prepared – utilize technology to communicate information	.845
How prepared – use technology to utilize assessment data	.815
How prepared – instruct students in technology	.877

Table 19 — Standard Eight – Democracy, Educational Governance and Teaching Careers

Item	Factor loading
How prepared – contribute to developing productive students	.565
How prepared – respond to influences on educational practice	.647
How prepared – promote teaching as a worthy career	.650
How prepared – take control of my professional development	.549

Table 20 — Results of Reliability Analysis – Chronbach's alpha = .930

Questions	Alpha if item deleted
How prepared – design standards based instructional plans	.925
How prepared – develop reliable and valid assessment tools	.924
How prepared – use assessment data for instruction	.924
How prepared – use assessment data for feedback tool	.925
How prepared – utilize content knowledge	.925
How prepared – enhance content by utilizing model content standards	.925
How prepared – differentiate intervention strategies	.925
How prepared – utilize knowledge of cognitive processes	.925
How prepared – work with parents as partners	.927
How prepared – maintain appropriate student records	.927
How prepared - employ a wide range of techniques	.924
How prepared – design/modify instruction as needed	.926
How prepared – develop and implement an IEP	.927
How prepared – consider student medical condition	.929
How prepared – use technology in the classroom	.926

How prepared – utilize technology to communicate information	.927
How prepared – use technology to utilize assessment data	.929
How prepared – instruct students in technology	.927
How prepared – contribute to developing productive students	.927
How prepared – respond to influences on educational practice	.926
How prepared – promote teaching as a worthy career	.928
How prepared – take control of my professional development	.927

Table 21 — Standard Descriptives

Variable	Mean	Standard Deviation
Standard 1: Literacy in elementary*	2.909	0.861
Standard 1: Literacy in secondary**	3.027	0.881
Standard 2: Mathematics in elementary*	2.893	0.831
Standard 2: Mathematics in secondary**	2.897	0.906
Standard 3: Standards and Assessment	2.816	1.160
Standard 4: Content	3.029	1.140
Standard 5: Classroom Management	2.761	0.903
Standard 6: Individualized Instruction	2.437	1.203
Standard 7: Technology	2.753	1.308
Standard 8: Teaching Careers	2.854	1.223

* Only asked of elementary teachers, n = 170, ** Only asked of secondary/multilevel teachers, n = 308.

Table 22 — Analysis of Variance; Level of preparedness by training

Variable	SS	MS_b	MS_w	F	p
Standard 1**	6.9	1.382	0.722	1.915	.095
Standard 1***	33.5	6.692	0.636	10.528	.000*
Standard 2**	0.8	0.164	0.714	0.230	.949
Standard 2***	4.2	0.848	0.806	1.053	.387
Standard 3	35.5	7.103	1.138	6.242	.000*
Standard 4	34.7	6.942	1.083	6.410	.000*
Standard 5	16.3	3.266	0.539	6.060	.000*
Standard 6	15.5	3.102	1.018	3.048	.010*
Standard 7	15.1	3.027	1.347	2.247	.049*
Standard 8	12.5	2.495	1.145	2.180	.055

* $p < .05$, ** Only asked of elementary teachers, n = 170, *** Only asked of secondary/multilevel teachers, n = 308.

Table 23 — Post-Hoc Test for Standard One – Knowledge of Literacy, elementary teachers

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.0752
	CO Post- Baccalaureate	0.0019
	Other Post- Baccalaureate	-0.5185
	TIR	0.8386
	Alternative	0.3148
Other Undergraduate	CO Undergrad	-0.0752
	CO Post- Baccalaureate	-0.0733
	Other Post- Baccalaureate	-0.5937
	TIR	0.7634
	Alternative	0.2396
CO Post-Baccalaureate	CO Undergrad	-0.0019
	Other Undergrad	0.0733
	Other Post- Baccalaureate	-0.5204
	TIR	0.8367
	Alternative	0.3127
Other Post-Baccalaureate	CO Undergrad	0.5185
	Other Undergrad	0.5937
	CO Post- Baccalaureate	0.5204
	TIR	1.3571
	Alternative	0.8333
TIR	CO Undergrad	-0.8386
	Other Undergrad	-0.7634
	CO Post- Baccalaureate	-0.8367
	Other Post- Baccalaureate	-1.3571
	Alternative	-0.5238
Alternative	CO Undergrad	-0.3148
	Other Undergrad	-0.2396
	CO Post- Baccalaureate	-0.3129
	Other Post- Baccalaureate	-0.8333
	TIR	0.5238

* $p < .05$

Table 24 — Post-Hoc Test for Standard One – Knowledge of Literacy, secondary/multi-level teachers

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.2574
	CO Post- Baccalaureate	-0.0759
	Other Post- Baccalaureate	0.0267
	TIR	1.2574*
	Alternative	0.5908*
Other Undergraduate	CO Undergrad	-0.2574
	CO Post- Baccalaureate	-0.3333
	Other Post- Baccalaureate	-0.2308
	TIR	1.0000*
	Alternative	0.3333
CO Post-Baccalaureate	CO Undergrad	0.0757
	Other Undergrad	0.3333
	Other Post- Baccalaureate	0.1026
	TIR	1.3333*
	Alternative	0.6667*
Other Post-Baccalaureate	CO Undergrad	-0.0267
	Other Undergrad	0.2308
	CO Post- Baccalaureate	-0.1026
	TIR	1.2308*
	Alternative	0.5641
TIR	CO Undergrad	-1.2574*
	Other Undergrad	-1.0000*
	CO Post- Baccalaureate	-1.3333*
	Other Post- Baccalaureate	-1.2308*
	Alternative	-0.6667*
Alternative	CO Undergrad	-0.5908
	Other Undergrad	-0.3333
	CO Post- Baccalaureate	-0.6667*
	Other Post- Baccalaureate	-0.5641
	TIR	0.6667*

* $p < .05$

Table 25 — Post-Hoc Test for Standard Two Knowledge of Mathematics, elementary teachers

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	-0.0316
	CO Post- Baccalaureate	-0.0110
	Other Post- Baccalaureate	-0.0962
	TIR	0.2372
	Alternative	0.1705
Other Undergraduate	CO Undergrad	0.0316
	CO Post- Baccalaureate	0.0206
	Other Post- Baccalaureate	-0.0645
	TIR	0.2688
	Alternative	0.2022
CO Post-Baccalaureate	CO Undergrad	0.0110
	Other Undergrad	-0.0206
	Other Post- Baccalaureate	-0.0851
	TIR	0.2482
	Alternative	0.1816
Other Post-Baccalaureate	CO Undergrad	0.0962
	Other Undergrad	0.0645
	CO Post- Baccalaureate	0.0851
	TIR	0.3333
	Alternative	0.2667
TIR	CO Undergrad	-0.2372
	Other Undergrad	-0.2688
	CO Post- Baccalaureate	-0.2488
	Other Post- Baccalaureate	-0.3333
	Alternative	-0.0667
Alternative	CO Undergrad	-0.1705
	Other Undergrad	-0.2022
	CO Post- Baccalaureate	-0.1816
	Other Post- Baccalaureate	-0.2667
	TIR	0.0667

* $p < .05$

Table 26 — Post-Hoc Test for Standard Two – Knowledge of Mathematics, secondary/multi-level teachers

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	-0.0301
	CO Post- Baccalaureate	-0.0292
	Other Post- Baccalaureate	-0.1505
	TIR	0.4828
	Alternative	0.1337
Other Undergraduate	CO Undergrad	0.0301
	CO Post- Baccalaureate	0.0009
	Other Post- Baccalaureate	-0.1204
	TIR	0.5129
	Alternative	0.1638
CO Post-Baccalaureate	CO Undergrad	0.0292
	Other Undergrad	-0.0009
	Other Post- Baccalaureate	-0.1213
	TIR	0.5121
	Alternative	0.1629
Other Post-Baccalaureate	CO Undergrad	0.1505
	Other Undergrad	0.1204
	CO Post- Baccalaureate	0.1213
	TIR	0.6333
	Alternative	0.2842
TIR	CO Undergrad	-0.4828
	Other Undergrad	-0.5129
	CO Post- Baccalaureate	-0.5121
	Other Post- Baccalaureate	-0.6333
	Alternative	-0.3491
Alternative	CO Undergrad	-0.1337
	Other Undergrad	-0.1638
	CO Post- Baccalaureate	-0.1629
	Other Post- Baccalaureate	-0.2842
	TIR	0.3491

* $p < .05$

Table 27 — Post-Hoc Test for Standard Three – Knowledge of Standards and Assessment

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.2950
	CO Post- Baccalaureate	0.2099
	Other Post- Baccalaureate	0.1630
	TIR	1.1539*
	Alternative	0.5968*
Other Undergraduate	CO Undergrad	-0.2950
	CO Post- Baccalaureate	-0.0851
	Other Post- Baccalaureate	-0.1320
	TIR	0.8588*
	Alternative	0.3017
CO Post-Baccalaureate	CO Undergrad	-0.2099
	Other Undergrad	0.0851
	Other Post- Baccalaureate	-0.0469
	TIR	0.9440*
	Alternative	0.3868
Other Post-Baccalaureate	CO Undergrad	-0.1630
	Other Undergrad	0.1320
	CO Post- Baccalaureate	0.0469
	TIR	0.9908*
	Alternative	0.4337
TIR	CO Undergrad	-1.1539*
	Other Undergrad	-0.8588*
	CO Post- Baccalaureate	-0.9440*
	Other Post- Baccalaureate	-0.9908*
	Alternative	-0.5571
Alternative	CO Undergrad	-0.5968*
	Other Undergrad	-0.3017
	CO Post- Baccalaureate	-0.3868
	Other Post- Baccalaureate	-0.4337
	TIR	0.5571

* $p < .05$

Table 28 — Post-Hoc Test for Standard Four – Knowledge of Content

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.6096*
	CO Post- Baccalaureate	0.2828
	Other Post- Baccalaureate	0.4520
	TIR	0.9211*
	Alternative	0.5448*
Other Undergraduate	CO Undergrad	-0.6096*
	CO Post- Baccalaureate	-0.3267
	Other Post- Baccalaureate	-0.1576
	TIR	0.3115
	Alternative	-0.0648
CO Post-Baccalaureate	CO Undergrad	-0.2828
	Other Undergrad	0.3267
	Other Post- Baccalaureate	0.1691
	TIR	0.6382
	Alternative	0.2620
Other Post-Baccalaureate	CO Undergrad	-0.4520
	Other Undergrad	0.1576
	CO Post- Baccalaureate	-0.1691
	TIR	0.4691
	Alternative	0.0928
TIR	CO Undergrad	-0.9211*
	Other Undergrad	-0.3115
	CO Post- Baccalaureate	-0.6382
	Other Post- Baccalaureate	-0.4691
	Alternative	-0.3763
Alternative	CO Undergrad	-0.5448*
	Other Undergrad	0.0648
	CO Post- Baccalaureate	-0.2620
	Other Post- Baccalaureate	-0.0928
	TIR	0.3763

* $p < .05$

Table 29 — Post-Hoc Test for Standard Five – Knowledge of Classroom and Instructional Management

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.0410
	CO Post- Baccalaureate	-0.0206
	Other Post- Baccalaureate	-0.0889
	TIR	0.8195*
	Alternative	0.2211
Other Undergraduate	CO Undergrad	-0.0410
	CO Post- Baccalaureate	-0.0616
	Other Post- Baccalaureate	-0.1299
	TIR	0.7785*
	Alternative	0.1801
CO Post-Baccalaureate	CO Undergrad	0.0206
	Other Undergrad	0.0616
	Other Post- Baccalaureate	-0.0683
	TIR	0.8401*
	Alternative	0.2417
Other Post-Baccalaureate	CO Undergrad	0.0889
	Other Undergrad	0.1299
	CO Post- Baccalaureate	0.0683
	TIR	0.9085*
	Alternative	0.3100
TIR	CO Undergrad	-0.8195*
	Other Undergrad	-0.7785*
	CO Post- Baccalaureate	-0.8401*
	Other Post- Baccalaureate	-0.9085*
	Alternative	-0.5984*
Alternative	CO Undergrad	-0.2211
	Other Undergrad	-0.1801
	CO Post- Baccalaureate	-0.2417
	Other Post- Baccalaureate	-0.3100
	TIR	0.5984*

* $p < .05$

Table 30 — Post-Hoc Test for Standard Six – Knowledge of Individualized Instruction

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.0588
	CO Post- Baccalaureate	-0.0620
	Other Post- Baccalaureate	-0.1016
	TIR	0.7371*
	Alternative	0.2685
Other Undergraduate	CO Undergrad	-0.0588
	CO Post- Baccalaureate	-0.1208
	Other Post- Baccalaureate	-0.1604
	TIR	0.6782*
	Alternative	0.2097
CO Post-Baccalaureate	CO Undergrad	0.0620
	Other Undergrad	0.1208
	Other Post- Baccalaureate	-0.0396
	TIR	0.7991*
	Alternative	0.3305
Other Post-Baccalaureate	CO Undergrad	0.1016
	Other Undergrad	0.1604
	CO Post- Baccalaureate	0.0396
	TIR	0.8387*
	Alternative	0.3701
TIR	CO Undergrad	-0.7371*
	Other Undergrad	-0.6782*
	CO Post- Baccalaureate	-0.7991*
	Other Post- Baccalaureate	-0.8387
	Alternative	-0.4686
Alternative	CO Undergrad	-0.2685
	Other Undergrad	-0.2097
	CO Post- Baccalaureate	-0.3305
	Other Post- Baccalaureate	-0.3701
	TIR	0.4686

* $p < .05$

Table 31 — Post-Hoc Test for Standard Seven – Knowledge of Technology

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.0670
	CO Post- Baccalaureate	-0.0189
	Other Post- Baccalaureate	0.8318*
	TIR	0.3020
	Alternative	0.2334
Other Undergraduate	CO Undergrad	-0.0670
	CO Post- Baccalaureate	-0.0859
	Other Post- Baccalaureate	0.7648
	TIR	0.2351
	Alternative	0.1665
CO Post-Baccalaureate	CO Undergrad	0.0189
	Other Undergrad	0.0859
	Other Post- Baccalaureate	0.8507*
	TIR	0.3209
	Alternative	0.2523
Other Post-Baccalaureate	CO Undergrad	-0.8318*
	Other Undergrad	-0.7648
	CO Post- Baccalaureate	-0.8507*
	TIR	-0.5297
	Alternative	-0.5983
TIR	CO Undergrad	-0.3020
	Other Undergrad	-0.2351
	CO Post- Baccalaureate	-0.3209
	Other Post- Baccalaureate	0.5297
	Alternative	-0.0686
Alternative	CO Undergrad	-0.2334
	Other Undergrad	-0.1665
	CO Post- Baccalaureate	-0.2523
	Other Post- Baccalaureate	0.5983
	TIR	0.0686

* $p < .05$

Table 32 — Post-Hoc Test for Standard Eight - Democracy, Educational Governance and Teaching Careers

(I) Training	(J) Training	Difference
CO Undergraduate	Other Undergrad	0.0511
	CO Post- Baccalaureate	-0.0429
	Other Post- Baccalaureate	0.4886
	TIR	0.6191
	Alternative	0.1159
Other Undergraduate	CO Undergrad	-0.0511
	CO Post- Baccalaureate	-0.0941
	Other Post- Baccalaureate	0.4375
	TIR	0.5679
	Alternative	0.0648
CO Post-Baccalaureate	CO Undergrad	0.0429
	Other Undergrad	0.0941
	Other Post- Baccalaureate	0.5316
	TIR	0.6620
	Alternative	0.1588
Other Post-Baccalaureate	CO Undergrad	-0.4886
	Other Undergrad	-0.4375
	CO Post- Baccalaureate	-0.5316
	TIR	0.1304
	Alternative	-0.3727
TIR	CO Undergrad	-0.6191
	Other Undergrad	-0.5679
	CO Post- Baccalaureate	-0.6620
	Other Post- Baccalaureate	-0.1304
	Alternative	-0.5032
Alternative	CO Undergrad	-0.1159
	Other Undergrad	-0.0648
	CO Post- Baccalaureate	-0.1588
	Other Post- Baccalaureate	0.3727
	TIR	0.5032

* $p < .05$

Table 33 — Ranking of teacher preparation tools by perceived value by teachers

Rank	Tool	% of teachers who found The tool very valuable
1	Constructive feedback from cooperating teacher	75.7
2	Regular evaluation from cooperating teacher	70.5
3	Exposure to a variety of teaching situations	61.3
4	Regular communication with your principal	60.1
5	Extra preparation time	60.0
6	Regular meetings with mentor teacher	57.9
7	Constructive feedback from faculty supervisor	57.0
8	Common planning time with other teachers	52.1
9	Regular evaluations from faculty supervisor	49.7
10	Coaching by regular observing teacher	43.9
11	Observation of model lessons by teacher leader	39.2
12	Extra classroom assistance	33.1
13	Seminars for beginning teachers	29.1

Table 34 — Open ended response categories – Most beneficial aspect of teacher preparation program

Category	% of respondents
Classroom experience	35.5
Working with mentor/experienced teachers	19.6
Classroom management tips and techniques	12.0
Specific courses	9.1
Work specific to district/state expectations	7.9
Professors	6.2
Colleagues	5.3
Content preparation	2.6
Life experiences	.6
Adult learning friendly	.6
Few meetings	.3
Portfolios	.3

Table 35 — Open ended response categories – Least beneficial aspect of teacher preparation program

Category	% of respondents
Irrelevant/redundant courses an work	49.3
Not enough classroom management	11.9
University – professors and administration	7.6
Mentor	7.2
Literacy course	6.8
Induction	4.7
Not enough classroom time	2.9
Methods courses	2.5
Not enough about government requirements	2.5
Not enough time for homework	2.2
Assessment courses	1.1
Pedagogy courses	.7
CCHE policy changes	.4
Distance learning	.4

Appendix B: First-year Teacher Survey Instrument

1. How many years have you been teaching, excluding student teaching or paraprofessional work?

- ❍ One year, including this year
- ❍ More than one year

If more than one year, end survey.

2. What type of license do you hold?

- ❍ Provisional
- ❍ Alternate
- ❍ TIR Authorization
- ❍ Emergency Authorization

3. In what area(s) are you endorsed/licensed? Please indicate your "Primary" field, and then any other endorsements/licenses you hold.
Allow only one entry in each column
"Primary" must not be blank
The "Additional" Columns can have blanks

	Primary	Additional	Additional
Agriculture	❍	❍	❍
Art	❍	❍	❍
Bilingual education		❍	❍
Business/marketing	❍	❍	❍
Consumer & Family studies/home economics	❍	❍	❍
Drama	❍	❍	❍
Drivers Education	❍	❍	❍
Early childhood	❍	❍	❍
Elementary	❍	❍	❍
English as Second Language	❍	❍	❍
English Language Arts	❍	❍	❍
Foreign Language	❍	❍	❍
Gifted and Talented	❍	❍	❍
Health	❍	❍	❍

Mathematics	❍	❍	❍
Music	❍	❍	❍
Physical Education	❍	❍	❍
Science	❍	❍	❍
Social Studies	❍	❍	❍
Special Education	❍	❍	❍
Speech	❍	❍	❍
Technology Education	❍	❍	❍
Trade & Industry Education	❍	❍	❍
Other-please specify_____ _____ _	❍	❍	❍

4. First year teachers sometimes teach in areas outside of their endorsement/licensure areas. Regardless of your endorsement/licensure area, what subjects are you teaching this year? Please note, this information will never be released in any way that would personally identify you.

Allow multiple choices

- ❑ Agriculture
- ❑ Art
- ❑ Bilingual education
- ❑ Business/marketing
- ❑ Consumer & Family studies/home economics
- ❑ Drama
- ❑ Drivers Education
- ❑ Early childhood
- ❑ Elementary
- ❑ English as Second Language
- ❑ English Language Arts
- ❑ Foreign Language
- ❑ Gifted and Talented
- ❑ Health
- ❑ Mathematics
- ❑ Music
- ❑ Physical Education
- ❑ Science
- ❑ Social Studies
- ❑ Special Education
- ❑ Speech
- ❑ Technology Education
- ❑ Trade & Industry Education
- ❑ Other-please specify _____

5. In what type of building do you teach?

- ❍ Preschool or Elementary only
- ❍ Secondary only
- ❍ Multi-level (e.g., K-8, K-12)

If Elementary only, then go to Q 6 & 7 and Skip Q 8 & 9,
If Secondary or Multi-Level, skip Q 6 & 7 and go to Q 8 & 9

For Q 6-31 , This should be at the top of each screen.
When you began this school year in your classroom, how well prepared were you to:

6. Provide literacy instruction

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

7. Provide mathematics instruction

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

8. Incorporate literacy in your content specialty, where appropriate

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

9. Incorporate general mathematical concepts in your content specialty, where appropriate

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

10. Design standards-based instruction plans.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

11. Develop valid and reliable assessment tools for the classroom

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

12. Use assessment data as a basis for instruction

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

13. Use assessment data as a feedback tool with various audiences (e.g., students, parents, guardians, professionals, administrators, and the community)

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

14. Utilize my content knowledge to ensure student learning.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

15. Enhance content instruction by utilizing the Colorado Model Content Standards.

- ❍ Not at all prepared

- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

16. Differentiate appropriate intervention strategies/practices to ensure a successful learning environment

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

17. Utilize knowledge of the cognitive processes (e.g., critical and creative thinking, problem structuring and problem solving, invention, memorization and recall) associated with various kinds of learning.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

18. Work with parents as partners in student learning

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

19. Maintain appropriate student records for student and school needs

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

20. Employ a wide range of teaching techniques to adapt the classroom experience to the unique needs of specific learners.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared

- ❍ Well prepared
- ❍ I cannot answer this item

21. Design or modify standards-based instruction in response to the unique needs of specific learners.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

22. Develop and implement an Individualized Education Program (IEP) for my students

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

23. Consider knowledge of individual students' medical conditions and medications and their possible effects on student learning and behavior, to tailor instruction when appropriate.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

24. Use technology in the classroom to improve student achievement

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

25. Utilize technology to communicate information

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

26. Use technology to utilize data driven assessments of learning, e.g., use Excel to analyze test scores for a group of students

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

27. Instruct students in basic technology skills

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

28. Contribute to developing productive citizens in a democratic society

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

29. Respond to influences on educational practice (e.g., federal, state and local government)

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

30. Promote teaching as a worthy career choice

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

31. Take control of my professional development as a teacher

- ❍ Not at all prepared

- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

32. Based upon the education and training I received in my undergraduate or post-baccalaureate program, I was _____ for teaching students in my classes during my first year.

- ❍ Not at all prepared
- ❍ Somewhat prepared
- ❍ Adequately prepared
- ❍ Well prepared
- ❍ I cannot answer this item

If Q 3 had any selection of Special Education, ask Q 33-35. If no Special Education marked, skip Q 33-35

33. Please indicate the level of students you teach.
- ❍ Mild/Moderate Needs
- ❍ Significant Support Needs
- ❍ Both of the above

34. Please indicate the setting in which you provide services. Choose all that apply.
- ❑ Resources
- ❑ Classroom inclusion (in general education)
- ❑ Self-contained
- ❑ Segregated (facility or alternate school)
- ❑ Other, please specify _____

35. What would you consider to be your specialization within special education? Choose all that apply.
- ❑ Audiology/Hearing
- ❑ Cognitive
- ❑ Perceptual/Communicative
- ❑ Emotional/Affective
- ❑ Mobility
- ❑ Speech/Language
- ❑ Vision
- ❑ Adaptive PE
- ❑ Other, please specify _____

36. What was your undergraduate major?
- ❍ Anthropology
- ❍ Biology

- ❍ Business
- ❍ Chemistry
- ❍ Classics (e.g., Latin)
- ❍ Communications
- ❍ Earth Sciences/Geology
- ❍ Economics
- ❍ Education
- ❍ Engineering
- ❍ English
- ❍ Environmental Sciences
- ❍ Fine Arts
- ❍ Foreign Language (e.g., French, German, Spanish, etc.)
- ❍ Geography
- ❍ History
- ❍ Humanities
- ❍ Interdisciplinary or Liberal Arts Degree
- ❍ Mathematics
- ❍ Philosophy
- ❍ Political Science
- ❍ Physical Education
- ❍ Physical Science
- ❍ Psychology
- ❍ Social Science
- ❍ Speech
- ❍ Special Education
- ❍ Other, please specify _____

37. At what institution did you complete your undergraduate degree?
    - ❍ Adams State College
    - ❍ Colorado College
    - ❍ Colorado Christian University
    - ❍ Colorado State University, Ft. Collins
    - ❍ Colorado State University, Pueblo
    - ❍ University of Denver
    - ❍ Fort Lewis College
    - ❍ Mesa State College
    - ❍ Metropolitan State College of Denver
    - ❍ Regis University
    - ❍ Rocky Mountain College of Art & Design
    - ❍ University of Colorado at Boulder
    - ❍ University of Colorado at Colorado Springs
    - ❍ University of Colorado at Denver
    - ❍ University of Northern Colorado
    - ❍ Western State College
    - ❍ Out of state
    - ❍ Other, please specify _____

38. Did you transfer from a different college?

- ❍ Yes
- ❍ No

If Yes, go to Q39. If No, go to Q 40.

39. Please indicate the type of school from which you transferred. Choose one.

- ❍ Two year college
- ❍ Four year college or university

40. In order to apply for my Colorado teaching license, I: (choose one)

- ❍ 1.Completed an undergraduate (bachelor) degree in my content area with a teacher preparation program
- ❍ 2.Completed a post-baccalaureate teacher preparation program offered by a college or university
- ❍ 3. am participating in a Teacher-In-Residence program
- ❍ 4.am participating in an Alternative Teacher Licensing program

If 1, Skip 41, Go to Q 42
If 2, Go to Q 41 and continue
If 3 or 4, skip 41-46, go to 47

41. At what institution did you complete your post-baccalaureate program?
- ❍ Adams State College
- ❍ Colorado College
- ❍ Colorado Christian University
- ❍ Colorado State University, Ft. Collins
- ❍ Colorado State University, Pueblo
- ❍ University of Denver
- ❍ Fort Lewis College
- ❍ Johnson and Wales University
- ❍ Mesa State College
- ❍ Metropolitan State College of Denver
- ❍ Regis University
- ❍ Rocky Mountain College of Art and Design
- ❍ University of Colorado at Boulder
- ❍ University of Colorado at Colorado Springs
- ❍ University of Colorado at Denver
- ❍ University of Northern Colorado
- ❍ University of Phoenix
- ❍ Western State College
- ❍ Online program, please specify _____
- ❍ Out of state

For Q 42-54, this should be at the top of each screen:
How valuable or helpful to you was:

42. Regular evaluation from my college/faculty supervisor
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

43. Constructive feedback from my college/faculty supervisor
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

44. Regular evaluation from my cooperating teacher
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

45. Constructive feedback from my cooperating teacher
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

46. Exposure to a variety of teaching situations
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

47. Extra preparation time
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

48. Common planning time with teachers in my subject or grade level
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

49. Seminars or classes for beginning teachers
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

50. Extra classroom assistance (e.g., teacher aides)
- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

51. Regular communication with my principal, other administrators or department chair

- ❍ Not at all valuable or helpful
- ❍ A little valuable or helpful
- ❍ Somewhat valuable or helpful
- ❍ Very valuable or helpful
- ❍ Does not apply to me/did not receive

52. Regular meetings with my mentor teacher
    - ❍ Not at all valuable or helpful
    - ❍ A little valuable or helpful
    - ❍ Somewhat valuable or helpful
    - ❍ Very valuable or helpful
    - ❍ Does not apply to me/did not receive

53. Coaching by a teacher/coach who regularly observes my teaching
    - ❍ Not at all valuable or helpful
    - ❍ A little valuable or helpful
    - ❍ Somewhat valuable or helpful
    - ❍ Very valuable or helpful
    - ❍ Does not apply to me/did not receive

54. Observation of model lessons by a teacher leader
    - ❍ Not at all valuable or helpful
    - ❍ A little valuable or helpful
    - ❍ Somewhat valuable or helpful
    - ❍ Very valuable or helpful
    - ❍ Does not apply to me/did not receive

55. If you received some other type of support, please describe

    _____
    _____
    _____

56. What is your typical class size
    - ❍ 10 or fewer
    - ❍ 11-15
    - ❍ 16-20
    - ❍ 21-25
    - ❍ 26-30
    - ❍ 31-35
    - ❍ over 35

57. Please describe the **most** beneficial aspect of your teacher preparation program.

_____
_____
_____
_____
_____
_____

58. Please describe the **least** beneficial aspect of your teacher preparation program.

_____
_____
_____
_____
_____
_____

59. How could you have been more prepared for your first year of teaching?

_____
_____
_____
_____
_____
_____

60. Do you plan to teach next year?

- ❍ Yes
- ❍ No

If Yes, go to Q 61,
If No, skip 61, go to 62, then skip 63

61. Will you teach at the same school?

- ❍ Yes
- ❍ No

If Yes, skip 62 go to 64
If No, go to 63.

62. What is your reason or reasons for leaving teaching?
Allow multiple selections

- ❑ Financial/Pay/Salary
- ❑ Lack of training in teacher preparation program
- ❑ Lack of training from school district
- ❑ Not enough support from school/administration
- ❑ Not enough support from parents at school
- ❑ Not enough support from community/lack of respect
- ❑ Not well suited to teaching/better at other profession
- ❑ Personal reasons (moving, spouse moving, pregnancy, health reason, etc.)
- ❑ Student discipline problems
- ❑ Teaching is not what I expected
- ❑ Too much time involved, high work load
- ❑ Too many students
- ❑ Too many responsibilities at work
- ❑ Promotion, changed position
- ❑ Too much emphasis on standardized testing
- ❑ Not enough positions available/school downsizing
- ❑ Other (specify) _____

63. What is your reason or reasons for leaving your school?
Allow multiple selections

- ❑ Financial/Pay/Salary
- ❑ Lack of training from school district
- ❑ Not enough support from school/administration
- ❑ Not enough support from parents at school
- ❑ Not enough support from community/lack of respect
- ❑ Personal reasons (moving, spouse moving, pregnancy, health reason, etc.)
- ❑ Student discipline problems
- ❑ Too much time involved, high work load
- ❑ Too many students
- ❑ Too many responsibilities at work
- ❑ Promotion, changed position
- ❑ Too much emphasis on standardized testing
- ❑ Not enough positions available/school downsizing
- ❑ Other (specify) _____

64. What additional comments do you have concerning the quality of your teacher preparation program

_____
_____
_____
_____
_____
_____

65. Please indicate your gender

- ❍ Male
- ❍ Female

66. Please indicate your ethnicity

- ❍ Asian
- ❍ African-American
- ❍ Hispanic
- ❍ Native American
- ❍ White/Caucasian
- ❍ Other
- ❍ I prefer not to answer

67. Please indicate your age

Age _____

68. Please enter your social security number without hyphens or spaces. Note: This information is simply to help us confirm that you are a first year teacher. It will be deleted from our files upon matching data with CCHE/CDE databases.

Social Security Number _____

Thank you for taking the time to answer these questions. When you click on the “submit” button your answers will be sent to the confidential CCHE database.

Appendix C: Technical Committee for First-year Teacher Survey Instrument

Heather Rooney
Assessment Policy Analyst, CCHE – Project Manager through May 14, 2004

Sonia Schaible-Brandon
Research Analyst, CCHE – Project Manager after May 14, 2004.

Dr. Rick Ginsberg
Director of Teacher Education, Colorado State University.

Dr. Barb Medina
Chair, Teacher Education, Adams State College.

Dr. Nancy Leech
Assistant Professor, School of Education, University of Colorado at Denver.

Dr. Kathy Green
Professor, School of Education, University of Denver.

Jason Glass
Sr. Data Consultant, Colorado Department of Education.

Patti Capps
Principal, Aurora Public Schools

Appendix D: Institutional Contact Information

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Fort Lewis College School of Education Durango, CO 81301 (970) 247-7157 www.fortlewis.edu/	Johnson and Wales University 7150 Mountview Blvd. Denver, CO 80220 (303) 256-9300 www.jwu.edu/denver/index.htm	Mesa State College Teacher Education and Licensure PO Box 2647 Grand Junction, CO 81502 (970) 248-1787 www.mesastate.edu/	Metropolitan State College of Denver Teacher Education Program PO Box 173362, Campus Box 10 Denver, CO 80204 (303) 556-3691 www.mscd.edu/
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