

Quality of Educator Preparation: How the California State University Collaborates to Prepare Education Professionals and Refute the Claims of Policy Makers

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Abstract

The educator preparation programs of the nation's largest university system have continued to collaborate to evaluate and improve the quality of teachers they produce throughout a period of continual criticism from the United States Department of Education. This study describes the manner of this collaboration and compares the evaluation by graduated teachers and their employment supervisors to the characterization of the profession. Results from 12 years of data collection, with a total N surpassing 57,000, shows that over 81% of principals rated the graduates as well or adequately prepared as did 73% of the graduates themselves, figures nearly double those repeatedly quoted. Further, research conducted as part of the system collaboration indicates that three of the four major components of the United States Department of Education's proposed Title II regulations appear to be invalid.

Keywords: educator preparation, program evaluation, standards.

University based teacher preparation programs are under increased scrutiny and criticism, particularly from top policy makers and the media. Consistent throughout the messages is the problem of the existence of too many “mediocre” programs, and that the solution is to implement market-based reforms that may sound reasonable but, on the whole, lack a sound research base (Harris, Ingle, & Rutledge, 2014). In 2009, United States Secretary of Education Arne Duncan stated in a highly publicized speech at Columbia University: “By almost any standard, many if not most of the nation’s 1,450 schools, colleges, and departments of education are doing a mediocre job of preparing teachers for the realities of the 21st century classroom.”

The Renaissance Group (TRG), a national consortium of colleges, universities and professional organizations with a major commitment to the preparation of education professionals, supplied Secretary Duncan with a compilation of multiple research studies carried out by its members, showing that the numbers he cited are not supported by the research (Tracz, 2013). None of the areas of preparation in any of the studies reviewed by Tracz obtained results as low as those repeatedly cited by Secretary Duncan.

In spite of evidence to the contrary, the assertion that university-based teacher preparation programs are below standards persists (Cochran-Smith, Piazza, & Power, 2013). The 2015 proposed Title II regulations, subsequently released by the United States Department of Education (USDOE) again utilized these same figures in the slides accompanying Secretary Duncan’s presentation. Kumashiro (2015) identified a number of concerns with these Title II regulations including unfounded attribution of educational inequities to individual teachers rather than to systemic causes, an improperly narrow definition of teacher classroom readiness, a reliance on test-based accountability and value-added measures, and an unwarranted, narrow, and an overall harmful view of the very purposes of education.

The substance of the Title II proposal requires states to develop federally mandated but state-enforced definitions of program quality. Each state must assess and rate every teacher preparation program every year (USDOE, 2015). The ratings will be based on four performance indicators;

- Student learning outcomes, primarily of student growth or gains in test scores, commonly referred to as value-added measurement (VAM),
- Employment outcomes, placement, and retention rates of program graduates,
- Survey outcomes (perceptions of the program—both by graduates and by employers), and
- National accreditation.

Teacher shortages have become a reality in much of the nation. In 2002 there were 77,705 students enrolled in teacher preparation programs in California, by 2014, the number had reduced to 18,900 (CCTC, 2015). As teacher shortages loom and Congress considers funding for alternative approaches and pathways to teacher credentials, it is imperative that decisions are made on a sound basis, especially given emerging research (Kee, 2012) that indicates alternatively certified teachers feel less prepared than their traditionally certified counterparts.

Darling-Hammond, Chung, and Frelow (2002) found that teacher preparation is a stronger correlate of student achievement than other controllable factors. To partially assess teacher preparation, the California State University (CSU) System has been collecting valid data for the past 15 years in the form of a survey that the USDOE, in 2011, recommended that all educator preparation programs replicate. Such a survey is included in the Title II requirements.

The purpose of this manuscript is to describe how the CSU institutions have worked together to improve educational outcomes for teacher educators. Further, it will present evidence that statements repeatedly made by the USDOE are unfounded in respect to CSU educator preparation. Additionally, evidence collected by the CSU in this process of improvement, including the specific survey the USDOE advocates, directly contradicts three of the Title II proposed regulations themselves, and indicates that these measures appear to be invalid.

Mission of the California State University

The mission of the CSU (2015a) includes preparing significant numbers of educated, responsible individuals to contribute to California's schools, economy, culture, and future. It includes offering undergraduate and graduate instruction leading to degrees in the liberal arts and sciences, applied fields, and the professions, including education. To evaluate its success in this latter profession, the CSU founded the *Center for Teacher Quality* (CTQ) in 1999.

California Context. Unlike most states, California statutes prohibit colleges and universities from offering undergraduate degrees in education. Teacher candidates must complete a post baccalaureate program in order to earn a preliminary teaching credential. The authority for approving institutions to award a teaching credential lies with the *California Commission on Teacher Credentialing* (CCTC).

California State University educator preparation. The CSU system is the largest four-year university system in the United States. The CSU is comprised of 23 regional campuses serving 460,000 students while employing 44,000 faculty and staff (CSU, 2015a). Twenty-two campuses of the CSU have successfully designed and implemented state-accredited teacher preparation programs along with one system wide on-line program. During the 2010-11 reporting period, the 23 programs recommended a total of 8432 teacher candidates for credentials, representing half of all teachers credentialed that year in the state (CCTC, 2012).

Because of the rigorous accreditation requirements stipulated in California's program standards and Teaching Performance Expectations, teacher preparation programs across the CSU system have many features in common, including:

- Coursework that can be completed in one year of full-time study;
- Alignment of coursework with *Teacher Performance Expectations*;
- Passage of a CCTC approved, high stakes, *Teacher Performance Assessment*;
- Alignment of course syllabi, particularly reading methods courses, with the domains of the *Reading Instruction Competency Assessment* (RICA), a CCTC required assessment;
- Strong emphasis on the effective use of current and emerging instructional technologies and on preparation to teach English learners and learners with special needs;
- Fieldwork of at least 800 hours;

- Annual data collection from graduates and the employers of graduates;
- Documented use of data for continuous program improvement.

System Wide CSU Educator Preparation Improvement Activities

Over the past two decades, the CSU Chancellor's Office and the CSU Education Deans have created structures for programs to work together to improve teacher preparation. The following projects are representative, but not exhaustive, of all such efforts.

Meetings of Education Deans/Associate Deans. For over twenty years, the Education Deans and Associate Deans have met for two days, at least three times per year. The Associate Vice President for Educator Preparation from the system Chancellor's Office generally meets with the group however the meetings are organized and chaired by the Education Deans' Executive Committee members who are elected for three-year terms. The Executive Committee jointly plans topics of interest and assures that all campuses are knowledgeable concerning system, state, and national initiatives.

Best Practices Video-Conferences. While smaller states or systems can gather professors in a single area of study together for seminars, or one-day meetings, the logistics in California make this very challenging. Sharing through regular system-wide video-conferences is designated as a signature pedagogy for reaching the relevant faculty at the 23 involved campuses. The CTQ provides data, the last three target areas were *inclusionary practices, strategies for English Learners, and reading in the content areas.*

Math Science Teacher Initiative. The *Math and Science Teacher Initiative* (MSTI) includes a system wide plan of action that consists of six primary strategies (CSU, 2015b). These include the creation of new credential pathways, provision of financial support to students, recruitment with intent to expand the number and diversity of candidates, collaboration with community colleges, internet-supported delivery of instruction and resources, and partnerships with corporate sponsors and federal laboratories.

Center for the Advancement of Reading. The *Center for the Advancement of Reading* (CAR) promotes the preparation of effective teachers and reading specialists in the CSU (CSU, 2015c). It fosters connections among CSU literacy faculty, P12 partners, and public education stakeholders by facilitating communication, disseminating research, and fostering connections.

Joint planning for Teacher Quality Partnerships. In 2014 the USDOE announced the *Teacher Quality Partnership* grant competition designed to produce teacher residency programs between universities and P12. The funds, aimed at increasing teachers in the areas of science, technology, math, and engineering were highly sought. The CSU Education deans collaborated and consulted to strengthen proposals by the system's programs which resulted in six of the 23 campus' proposals being funded among the 24 proposals funded nationwide (USDOE, 2015).

Center for Teacher Quality. The Center for Teacher Quality (CTQ) of the CSU conducts evaluations and reports evidence to strengthen the outcomes and effectiveness of teacher preparation programs on the 23 CSU educator preparation programs. The Center examines six interrelated outcomes listed below. The work is designed to provide a rich, detailed, and accurate picture of program quality and effectiveness. CTQ administers a teacher preparation *Exit Survey* to each candidate as they complete their program. Because of its success, in 2016 the CTC has contracted with CTQ to administer the survey to all California program completers, not just those from the CSU system.

The *First-year Teacher Survey* captures the reflections and judgments of CSU graduates on the quality, value, and effectiveness of their preparation at the end of their first year in classrooms as the paid teacher of record. More than 28,500 graduates of CSU programs have participated in the survey since its inception. The evaluation includes distinct questions for each type of credential as well as content-specific questions for teachers of several distinct subjects, enabling them to provide subject-specific feedback.

An *Employer Survey* goes to school-site supervisors of teaching graduates. Unlike most follow-up studies of this type, the CTQ provides each supervisor with the name of the teacher who is guided and assisted by that supervisor, and whose preparation is to be assessed by the supervisor. A core set of questions has been in the annual supervisor evaluation since 2001, enabling CSU to see trends over time. To date, more than 21,200 school leaders have participated in the annual evaluations--essentially all of them principals.

Multiple entities, including the USDOE, the *National Center for Teacher Quality*, and CAEP (Allen, Coble, & Crowe, 2014) advocate for the assessment of educator preparation programs, at least in part, by the ***Persistence in Teaching*** of graduates. The CTQ completed a large-scale analysis of retention and attrition patterns among California's P12 public school teachers. The findings and recommendations from this study appeared in a report titled, *A Possible Dream: Retaining California Teachers So All Students Learn* (Futernik, 2007). Utilizing data from 2000 current and former teachers, this assessment was able to identify specific factors that affected employment decisions. The findings provided insights into the role of teacher preparation in decisions to remain in or to leave the profession and recommendations in the report enable educators and policymakers to better understand the cost of teacher attrition and the numerous factors that affect retention patterns.

The Futernik study debunked the notion that programs should be ranked or rated based on graduate retention in a school or district. Teachers leave the job because of bureaucratic impediments and a lack of collegial support. They stay in teaching because of administrative and collegial support. Poor university coursework was listed as the 32nd out of 34 reasons for teacher leaving. A strong preparation program was 10th of 32 reasons for staying in teaching.

The CTQ examined relationships between teacher preparation programs and the ***Effect on P12 Learning***. In 2008, the CTQ formed partnerships with four large urban school districts in California, which provided rich, valuable evidence that was used to assess these relationships. The evidence included the results of statewide learning exams as well as local assessments sponsored by the participating districts. Using a value-added approach, this evaluation of CSU teacher preparation assessed the impact on students of (a) different levels of preparation among teachers, (b) substantively different approaches to preparation, and (c) different policies that govern the preparation of new teachers. While examining the effects of these variations in preparation, CTQ statistically neutralized the effects of the demographic characteristics and socio-economic conditions of different schools. Results were reported by comparing the relative importance of various factors in terms of the percent of one standard deviation of students' year-to-year gains in math. The most influential factor was student's prior level of math learning, which accounted for 60% of one standard deviation in math achievement. The least influential factor was class size, which explained less than 1% of the variance (Wright & Beare, 2011).

Other significant factors were student's disability status (28%), teacher's years of experience (12%), and student's English proficiency (10%). The urban students learned 14% of one standard deviation higher math achievement when taught by a first or second year CSU teacher education graduate compared to all other teachers in the participating districts.

A second analysis examined alternative pathways into teaching as a factor in P12 student learning as compared to other educational and demographic factors. Of note here was that having completed a full, regular student teaching experience under the supervision of a master teacher resulted in 11% higher math achievement than having a teacher who completed his or her credential as an intern, meaning the candidate was the teacher of record while completing student teaching. This status was 18 times more influential than class size, three times more influential than parent education, and twice as influential as family income level.

Bechtel Foundation-Preparing Next Generation of Educators. In 2014, the Bechtel Foundation, in collaboration with the CSU, committed \$15 million funding over five years to move educator preparation in the system to a higher level, the goal being to transform the recruitment, selection, and preparation process so that future elementary and secondary teachers are given the inspiration, support, and resources necessary to become models of excellence and expertise in their fields (CSU, 2015d). California's adoption of the new *Common Core State Standards* (CCSS) and *Next Generation Science Standards* (NGSS) was the catalyst leading to fundamental changes in curriculum and instruction in P12 schools. Thirteen campuses were funded during the first year to serve as pilot and demonstration sites, testing and sharing implementation strategies and outcomes data with each other and the CSU system. The initiative emphasized a vision for institutional change that can be sustained, investing in proven methods of professional development and learning communities for faculty and P12 educators.

Present Research

In working toward a culture of evidence concerning teacher preparation, all schools, departments, and colleges of education of the CSU established common assessments as recommended by Cochran-Smith (2009) and Darling-Hammond (2006).

In 1999, the survey of credentialed graduates at the end of their first year of professional teaching and the graduate's employment supervisor during that year of teaching as described above was initiated by the CSU. Results are reported annually and include a summary of all data since the inception of the surveys for comparison purposes, and parallel results for the 23 CSU programs compiled system wide. This unique service allows each campus to track the effects of program changes designed to improve performance.

Research question. Are assertions correct that the majority of graduates and their employment supervisors believe teachers' preparation for the classroom was inadequate?

Independent variable. Preparation as a teacher by one of the teacher credential programs in the CSU.

Dependent variable. Scores on the *System wide Evaluation of Professional Teacher Preparation Programs Survey* (SEPTPP) administered by the CSU. After teaching for one year, all basic teaching credential completers from the CSU and their employment supervisors are asked to complete separate but parallel 110 item surveys administered by the CSU's Center for Teacher Quality. The survey is designed to collect information about the extent to which P12 teachers who were recent graduates of CSU teacher preparation programs were prepared for important teaching responsibilities, and the extent to which preparation was professionally valuable and helpful to them during their initial year of teaching (CTQ, 2009).

In 2003, the CSU Deans of Education grouped together survey items that were substantively related to each other. For example, the survey includes several items related to preparing teachers for diversity in education and these questions were grouped together in a composite called *Preparing for Equity and Diversity in Education*. The grouping of composites represents important aspects of teaching and facilitates the analysis and interpretation of large amounts of complex data. The composites are divided into areas that also include (a) overall effectiveness, (b) preparation to understand and teach core subjects, (c) preparation in general pedagogy, and (d) preparation to teach diverse groups and stages of learning.

Development and validation of the instrument. The Deans of Education in the CSU reviewed instruments used by other universities and research centers to develop an extensive set of items. Alignment of items with state content standards, state expectations for newly credentialed teachers, and state and national accreditation standards by the individuals who had participated in drafting those standards strengthened validity (CTQ, 2006). "The validity of the CSU composites derives substantially from the Deans' extensive efforts to ensure that each composite consists of questions that are conceptually related to each other and that address important issues in the preparation of P12 teachers" (p. 8). In 2003, the CSU subjected the questions to a confirmatory factor analysis using SPSS to assess empirical validity of the Deans' conceptual groupings. The results suggested minimal changes, shifting a few items. After review, the Deans accepted the changes, bringing the *SEPTPP* to its present form.

Additional validity. Beare, Marshall, Torgerson, Tracz, and Chiero (2012a) analyzed responses from 19,050 employment supervisors statewide and found no significant correlations between principals' evaluation of graduates' preparation on the *SEPTPP* and certain characteristics of schools in which the graduates taught during their first year. Specifically, the percent of students eligible for free or reduced lunch, the percent of students who were English learners, school achievement level on state tests, or the percent of teachers in the school with emergency teaching permits had no effect on the evaluation of the teachers by principals. The authors concluded that these findings, devoid of extrinsic variables affecting the ratings, speak to the applicability of *SEPTPP* in establishing a culture of evidence for teacher preparation program improvement.

Reliability. Since the inception of the *SEPTPP*, each year's data set yields the percent of respondents who gave specified answers to the survey and included reliability estimates for each finding in the form of confidence intervals. These are based on both the number of respondents and the concurrence or homogeneity of responses. The composite scores are substantially more reliable than are the individual survey items (CTQ, 2006). The confidence intervals of the composite scores range from zero to two percentage points at the 90 percent confidence level.

Method

To answer the research question, the totality of supervisor and graduate responses to the CTQ survey since its inception were utilized. Employment supervisor and program graduate ratings of the teachers' preparation as

evaluated at the end of their first full year of teaching employment was examined overall and for each of the three basic teaching credentials:

Multiple subject (elementary), single subject (secondary) and educational specialist (special education). The scores were also calculated for the composite scores for the 19 special areas of interest measured by the instruments.

Results

Return Rate

The return rate for the surveys varies among campuses and year to year. For Academic Year (AY) 2013 there were 4,768 program completers. Of this number, 4405 completers, 92%, were identified as having taught in K12 public schools during the AY2014. If a completer leaves the state, teaches in a private school, or are not employed they are not surveyed. For AY2013, employment in public schools ranged from 83% to 99% for the 23 programs. Of the 4,405 teaching in California, the CTQ was able to find the specific school location for 3,076 or 70% of those teaching. Without the specific school location, principals cannot be identified and surveyed. Of the 2076 teachers whose school site was identified, 1877 or 61% responded to the survey. The range among the CSU campuses was from 26% to 82% response rate. The response rate for supervisors was 35%, with 1072 principals replying.

Ratings of Preparedness

Table 1 documents that the survey had been returned by 23,621 employment supervisors and 34,353 program completers prepared for teaching by the CSU. The numbers are divided among the three basic credentials, multiple subject, single subject, and education specialist. Table 1 clearly answers the research question. Over 81% of the employment supervisors stated that candidates prepared by the CSU were well or adequately prepared overall. This figure held for each of the three basic credentials taken separately. These figures are double the rate repeatedly reported by Secretaries Duncan and Mitchell. The overall self-rating by program completers was 73% well or adequately prepared as compared to the Department of Education's statement of 38%, not quite double the stated figure. The graduates' scores for the three basic credentials ranged from 72% to 74%. There was variation across years, but in no case did scores approximate the figures stated by the Department of Education. Scores for the 19 composites totaled for all respondents may be seen in Table 2. The number of respondents varies greatly depending upon the specific composite. For example, *B2 Preparation to understand and teach mathematics (K-8)* had 14,651 respondents while the parallel composite *B4* for grades 7-12 received only 1401.

The former group included all elementary completers while the latter was only secondary math. For the supervisor rating, the highest assessed category was *B3 Preparation to understand and teach English (7-12)* with 91% well or adequately prepared. All of the secondary content areas were rated above 89%. The only two areas rated below 80% by the supervisors were *D1 Preparation for equity and diversity in K12 education* at 79.4% and *D7 Preparation to teach special learners in inclusive schools* at 78.5%.

Discussion

This research question asked if the teachers prepared in the CSU fit the U.S. Department of Education's repeated admonition that teachers in our country are unprepared for the classroom, in the opinion of their principal, as well as themselves. The data from California overwhelmingly demonstrates that this is a false characterization by USDOE officials. This finding supports a study by Tracz (2013) that found no approximation of poor preparation of program completers from 12 different states. In that this study's data is overwhelmingly clear and that the USDOE recommended and now wishes to require all educator preparation programs to use such as survey, it begs the question as to why this perseverance of negativism continues. USDOE officials are not expected to single out one system from criticism but due to the large number of teachers and principal respondents, ignoring such data is questionable. Data gathered by the CSU not only negates the negative characterization of educator preparation but also negates the value of three of the four ranking procedures required in the new Title II regulations.

VAM. The Title II standard directed at developing a Value Added Measure may be deemed unreasonable given the CTQ's work on the effects on P12 learning that indicates approximately ten percent of one standard deviation can be attributed to educator preparation institution variables. This conclusion was supported by multiple researchers (e.g., Berliner, 2014; Haertel, 2013; Newton, Darling-Hammond, L., Haertel, & Thomas, 2010).

Persistence. With a nationwide teacher shortage, employment rates are high everywhere (Rich, 2015), employment rates of all programs are rising though there is no evidence they are all improving.

CTQ research pertaining to teachers who stay and leave show that educator preparation programs are a minimal factor (Futernik, 2007). The important factors are administrative support, a sense of collegiality among P12 teachers in a school, and teacher's sense of empowerment. Other authors such as Pogodzinski, Youngs, and Frank (2013) and Tricarico, Jacobs, and Yendol-Hoppey (2015) found a similar result. No evidence was seen for rating educational preparation on this basis.

Accreditation. The last Title II standard requires institutions to seek national accreditation, with CAEP being the only organization available. CAEP (2013) standard 3.2 requires accredited institutions to admit cohorts of students at the 50th percentile or higher on the SAT or ACT as of 2015. Evidence, using the very survey the USDOE recommends/requires, shows that SAT scores do not predict anything in terms of quality of preparation to be a teacher, yet implementation of such a standard could eliminate 80% of the teachers of color from among graduates of the CSU (Beare, Torgerson, Tracz, & Grutzik (in press).

Limitations

The obvious limitation to this study is that the subjects were all educated in California, and they are teaching in California as well. The teachers were also all prepared as post baccalaureate students because of the absence of an undergraduate education major in California. The number of subjects, however, is large compared to any other such published research to allow for generalization.

Summary

The collective work of the CSU demonstrates that a higher education system can collaborate and produce effective educators. It demonstrates that the statements made by the U.S. Department of Education are not true in the regards to the public institutions of California. The data collected also clearly disprove the value of three of the four main tenants of the Title II standards that the USDOE has released. The requirement of a survey of program completers and employers is shown to be of value in this report. This same survey provides evidence to disprove the other standards. The CSU work does not stand alone and other valid education research reaches the same conclusion.

The actions of the USDOE can only be interpreted through speculation. No logic seems to be evident in the obvious false claims made nor in the Title II proposals that face overwhelming criticism. It is confounding for schools and colleges of education to be in a field where national leaders ignore research and promulgate standards with no evidentiary basis.

Recommendations

Data indicates that the collaborative nature of the educator preparation programs is effective in producing teachers much better prepared than those referred to repeatedly by the U.S. Department of Education. Teacher preparation programs, however, must continually strive to improve teacher preparation and educational outcomes for P12 students. They must use research-based techniques and marshal resources to inform their practice. The CSU has been doing this as a group and the data reported in this manuscript indicates that it has been successful.

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Table 1: Number of Respondents, Number of Judgments, and Percent and Range of Respondent Ratings of CSU Teacher Education Program Completers as Well or Adequately Prepared Overall for Their Teaching Duties for Years 1999-2012.

	N	Judgments	Mean % Well or Adequately Prepared	Range
Multiple Subject Overall Preparation				
Supervisors	12232	349555	81.20%	80%-86%
Graduates	18551	583232	74.08%	72%-79%
Single Subject Overall Preparation				
Supervisors	8401	198298	81.20%	78%-83%
Graduates	11344	312790	74.35%	73%-75%
Education Specialist Overall Preparation				
Supervisors	2988	88524	82.75%	78%-86%
Graduates	4458	144377	72.35%	69%-75%
Overall Preparation All Credentials Combined				
Supervisors	23621	636377	81.40%	78%-86%
Graduates	34353	1040399	73%	69%-79%

Table 2: Number of Respondents and Percent and Range of Respondents Rating CSU Teacher Education Program Completers or Well or Adequately Prepared for Various Teaching Duties 1999-2012.

	Supervisors			Teachers		
	N	Percent Well/Adequately Prepared	Range	N	Percent Well/Adequately Prepared	Range
Preparation to understand and teach core subjects of school curriculum at distinct levels						
B1 Preparation to understand and teach reading-language arts (K-8)	14651	82.9	81-86	21543	81.6	76-87
B2 Preparation to understand and teach mathematics (K-8)	14651	84.3	83-87	21543	80.3	76-84
B3 Preparation to understand and teach English (7-12)	2156	91	88-93	2920	77.6	75-81
B4 Preparation to understand and teach mathematics (7-12)	1401	86.5	81-89	2022	81.6	78-86
B5 Preparation to understand and teach science (7-12)	1176	89.4	83-92	1733	79.4	76-83
B6 Preparation to understand and teach history (7-12)	1433	89.1	85-95	2120	80.6	75-83
B7 Preparation to understand and teach other subjects (7-12)	2764	89.7	87-91	3609	83.3	81-88
Preparation in general pedagogical principles and practices across subjects and school levels						
C1 Preparation to plan instruction for all students & subjects	23026	84	83-86	29280	79.9	78-81
C2 Preparation to motivate students to be active learners	23026	83	81-86	30280	78.9	77-81
C3 Preparation to manage instruction for learning	23026	81.4	81-84	30280	74.6	72-77
C4 Preparation to use education technology effectively	23026	82	75-90	30280	64.1	62-68
C5 Preparation to use good pedagogy across the curriculum	23026	83	82-84	30280	75.6	73-78
C6 Preparation to assess and reflect on K-12 teaching	23026	80.9	79-83	30280	76	74-79
Preparation to teach California's students in diverse groups and stages of development						
D1 Preparation for Equity and diversity in K-12 education	23026	79.4	78-81	30280	73.8	72-77
D2 Preparation to teach young children in grades K-3	4144	84.3	81-88	8644	78.6	78-83
D3 Preparation to teach middle-grade students in grades 4-8	5560	81.1	77-85	11469	75.4	73-81
D5 Preparation to teach English learners in grades K-12	17653	82.3	79-86	23793	75.1	72-77
D6 Preparation to teach special learners in Special Ed	3110	83.7	80-86	4873	77.4	76-82
D7 Preparation to teach special learners in inclusive schools	19623	78.5	77-81	27798	71	69-75