

**Preparing Multiple- and Single-Subject Teachers to  
Educate Students with Special Learning Difficulties**

**A Working Paper of the  
CSU Systemwide Evaluation of Teacher Preparation**

**Center for Teacher Quality  
Office of the Chancellor  
The California State University  
November 1, 2005**

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### **Brief Introduction to the Systemwide Evaluation**

During the 1990s, campuses of the California State University initiated and implemented many changes in teacher preparation. Campuses substantially increased the numbers of candidates who earned credentials. They also made changes in program content and organization. Curriculum changes tended to focus on learning to teach reading and mathematics, learning to teach English learners and culturally-diverse students, the instructional uses of technology, and several other *domains* of teacher preparation. In 2000, the CSU Deans of Education collectively decided to initiate a systemwide evaluation to see how well the reforms in teacher preparation were working in practice. CSU Chancellor Reed supported the evaluation by allocating funds and staff time to it.

The primary *purpose* of the *CSU Systemwide Evaluation of Teacher Preparation* is to provide accurate, valid information to the CSU Deans of Education so faculties and other academic leaders of CSU campuses can determine whether additional changes are needed in teacher preparation. At several CSU campuses, the evaluation has prompted substantive discussions of teacher preparation issues among faculty and administrators. An additional *purpose* is to enable Chancellor Reed to assess the overall effectiveness of teacher education throughout the CSU, and to decide on systemwide initiatives that may be needed. The Chancellor's staff has nearly completed one such initiative, in the *domain* of learning to provide content-based reading instruction in secondary schools, which was prompted by systemwide evaluation results. Additional systemwide initiatives, also flowing from the evaluation, are under consideration.

### **Brief Introduction to this Working Paper**

One focus of the evaluation has been the preparation of teachers to fulfill the educational needs of students with special learning difficulties. In reviewing the systemwide results of the evaluation, the Chancellor's Office recently became concerned that this important domain of preparation in Multiple-Subject and Single-Subject Programs may need increased attention in the coming years. The results suggested that preparation to teach special learners may not be as effective as CSU preparation to teach other populations that have also been historically underserved in K-12 education. To address these issues systemwide, the Chancellor's Office appointed a Teacher Education Task Force, which is being asked to examine the evidence, assess the University's current needs, explore its anticipated needs, and fashion solutions that promise to be effective in the world's largest teacher preparation institution. This Working Paper was prepared for the Task Force.

## Nomenclature in the Working Paper

The Chancellor's staff welcomes the Task Force's comments and suggestions regarding all aspects of the Working Paper. Intended merely to initiate dialogue among Task Force members, the Working Paper uses the term *special learners* to refer to students whose learning difficulties require special instructional accommodations in schools and classrooms. The paper uses the terms *multiple-subject teachers* and *single-subject teachers* to refer to the two groups of CSU candidates whose preparation needs to become more effective for *special learners*. This domain of preparation, which includes *all aspects of preparing multiple- and single-subject teachers to be effective in teaching children with special learning difficulties in regular education*, is referenced here as *mainstreaming*, for lack of a concise term that is more satisfactory.

## Evaluation Questions and Response Options: Program Effectiveness

To obtain *information* that campuses can use in assessing teacher program effectiveness, the evaluation communicates annually with (1) program completers who teach in K-12 schools during the first year after they complete all requirements for teaching credentials,<sup>1</sup> and (2) the site-level administrators who directly supervise these former CSU students during their first year of certificated teaching.<sup>2</sup> For the information to be *reliable* so CSU campuses can trust it as one basis for program decisions, the evaluation includes large numbers of teaching graduates and employment supervisors each year. To ensure that the compiled information has adequate *validity*, the Deans of Education ask evaluation questions that are *closely aligned* with many of the *educational goals* of CSU credential programs.<sup>3</sup> The Chancellor's Office has conducted these annual evaluations near the end of each school year beginning in 2001.

One way to assess the *effectiveness* of teacher preparation is to find out *how well* newly-certificated teachers were prepared for the multiple responsibilities of teachers. As a measure of *preparation effectiveness*, the evaluation included the following question for multiple- and single-subject *completers* each year since 2002.<sup>4</sup>

### **Preparation Effectiveness Question for Multiple- and Single-Subject Completers**

*Once you finished your teacher preparation program and began to teach with your credential, how well prepared were you to begin to meet the instructional needs of students with special learning difficulties?*

**Response Options:** As a new teacher, I was . . .

- |                                  |                            |
|----------------------------------|----------------------------|
| -- Well Prepared to Begin.       | (Response Value = 3)       |
| -- Adequately Prepared to Begin. | (Response Value = 2)       |
| -- Somewhat Prepared to Begin.   | (Response Value = 1)       |
| -- Not at All Prepared to Begin. | (Response Value = 0)       |
| -- I Cannot Answer.              | (Response Value = Missing) |

<sup>1</sup> The evaluation includes completers of Education Specialist Credential Programs (Level I), but the Working Paper focuses on the preparation of teachers who earn Multiple- and Single-Subject Credentials.

<sup>2</sup> The Working Paper concentrates on the reported judgments of CSU program completers and their employment supervisors. The evaluation also compiles important information about teacher retention, instructional practice and student learning.

<sup>3</sup> The evaluation does not purport to assess all of the programs' goals, but does purport to assess educationally important goals.

<sup>4</sup> Some *non-teaching completers* may be included in a future evaluation. To date the evaluation is limited to *program completers* who teach in public and private K-12 schools at any location where the evaluation manager can find them.

In elementary schools, most of the supervisors are principals. In secondary schools they include principals, assistant principals and department chairs. Each supervisor receives the name of the specific teacher whose preparation is being assessed. As one measure of *program effectiveness*, supervisors are asked to answer the following question if the new teacher has a multiple-subject or single-subject teaching assignment.

**Preparation Effectiveness Question for Multiple- and Single-Subject Supervisors**

*When this (named) new teacher began to work with the authorization of a state teaching credential, how well prepared was s/he to begin to meet the instructional needs of students with special learning difficulties?*

**Response Options:** This new teacher was . . .

- |                                  |                            |
|----------------------------------|----------------------------|
| -- Well Prepared to Begin.       | (Response Value = 3)       |
| -- Adequately Prepared to Begin. | (Response Value = 2)       |
| -- Somewhat Prepared to Begin.   | (Response Value = 1)       |
| -- Not at All Prepared to Begin. | (Response Value = 0)       |
| -- I Cannot Answer.              | (Response Value = Missing) |

**Evaluation Questions and Response Options: Program Value and Helpfulness**

The two evaluation questions shown above relate specifically to the *effectiveness* of preparation to begin to meet the instructional needs of students with special learning difficulties. The *scope* of the evaluation is not limited to this important goal of teacher preparation. It seeks to assess *comprehensively* the *effectiveness* of CSU programs in preparing candidates for many of the major responsibilities of most beginning teachers (e.g. responsibilities related to planning instruction, managing activities, interpreting assessments, etc.). Additionally, the evaluation complements the assessment of *preparation effectiveness* by assessing the *value and usefulness of preparation* among CSU program completers. While the construct of *preparation effectiveness* is defined in terms of *how well* CSU completers, in the aggregate, are prepared for the most common responsibilities of K-12 classroom teachers, *preparation value and helpfulness* is defined in terms of *how much first-year certificated teachers find their preparation to be valuable and helpful in guiding their professional practice*. As a measure of *preparation value and helpfulness*, the evaluation included the following question for multiple- and single-subject program completers each year beginning in 2003.

**Preparation Value and Helpfulness Question for Multiple/Single-Subject Completers**

*Based on your actual experience as a K-12 classroom teacher, how valuable or helpful was each of the following elements of your Teaching Credential Program?*

- (7) Instruction in teaching students with special learning difficulties.

**Response Options:** My preparation in this area was . . .

- |                                   |                            |
|-----------------------------------|----------------------------|
| -- Very Valuable or Helpful       | (Response Value = 3)       |
| -- Somewhat Valuable or Helpful   | (Response Value = 2)       |
| -- A Little Valuable or Helpful   | (Response Value = 1)       |
| -- Not At All Valuable or Helpful | (Response Value = 0)       |
| -- Does Not Apply                 | (Response Value = Missing) |

The evaluation questions about *preparation effectiveness* and *preparation value and helpfulness* were designed so CSU faculty and administrators could compare (1) the responses of completer-teachers with responses by their supervisors, (2) the responses of multiple- and single-subject program completers, and (3) different annual cohorts of CSU program completers.

CSU Deans of Education do not view *preparation effectiveness* and *preparation value and usefulness* as separate constructs for assessing CSU programs. The two constructs are surely related to each other. Statistically, responses by CSU program completers to the two sets of questions are somewhat correlated with each other. The two constructs are not synonymous. By asking both sets of questions, the evaluation seeks to provide an enriched vein of valid, reliable information for consideration and potential use by faculty and academic administrators who are responsible for CSU teacher preparation.

## **Additional Information about Questions and Responses in the CSU Evaluation**

In asking a series of questions about *preparation effectiveness*, the CSU Deans of Education emphasize to program completers and employment supervisors that the *goal* of preservice preparation is to enable new teachers to *begin* teaching as instructors-of-record in K-12 classrooms. To put this goal into a sensible context, CSU questions about *program effectiveness* are preceded by the following statement for completers.

**12. Your CSU campus designed your initial teaching credential program to prepare you to *start working as a new teacher in a school where your preparation would continue.*** In your credential program, the CSU wanted you to learn *basic teaching skills and educational ideas at an initial level.* Your campus expected you would have a *mentor in your school* to assist you in learning how to *use your teaching skills in class with your students.* CSU expected that you would also have chances to *develop your teaching skills and ideas with your mentor's help.* You were not expected to be able to teach at the level of an experienced practitioner immediately after you finished your program. **Important aspects of a teacher's job are listed below. At the CSU, *how well prepared were you to begin each aspect of a teacher's job while you extended your initial skills with a mentor's help?***

With some minor changes in syntax, the same statement is read by employment supervisors before they respond to CSU questions about *preparation effectiveness.* Both statements provide assurance that teachers and administrators have contextually-valid expectations about the potential effects of preservice preparation *before they judge CSU effectiveness.*

Additionally, CSU Deans have been concerned that program completers and employment supervisors might answer some questions without sufficient evidence to support their responses. Both groups are encouraged to select *I Cannot Answer* or *Does Not Apply* if (a) the supervisor has not seen sufficient instances in which teachers demonstrated the level of their preparation in specific domains, or (b) a teacher's preparation did not include a particular domain of teaching responsibilities, or (c) a completer does not recall the instruction that was provided related to a question. Analysis of patterned responses to both sets of questions indicates that teachers and supervisors frequently select these special response options for the intended reasons.

## Systemwide Evaluation Calendar

Information in the following chart may assist readers in interpreting the evaluation's findings.

Successive Groups of CSU Program Completers	Final Year of a CSU Cohort's Credential Preparation	When Campuses Recommended State Credentials	Initial Year of Certificated K-12 Teaching	When CSU Evaluation Questions Were Answered
CSU Cohort 1	1999-2000	Spring-Summer 2000	2000-2001	May-June 2001 <sup>5</sup>
CSU Cohort 2	2000-2001	Spring-Summer 2001	2001-2002	May-June 2002
CSU Cohort 3	2001-2002	Spring-Summer 2002	2002-2003	May-June 2003
CSU Cohort 4	2002-2003	Spring-Summer 2003	2003-2004	May-June 2004
CSU Cohort 5	2003-2004	Spring-Summer 2004	2004-2005	May-June 2005
CSU Cohort 6	2004-2005	Spring-Summer 2005	2005-2006	May-June 2006 <sup>6</sup>
Etc. <sup>7</sup>				

### Summary Findings: Multiple- and Single-Subject Preparation for Mainstreaming

The table on page 6 summarizes the overall findings of the evaluation regarding the preparation of multiple- and single-subject teachers for *mainstreaming*. Later, a graph on page 8 provides a measure of context for understanding and interpreting the *mainstreaming* findings. The table provides the *numbers* of respondents in each group (*Ns* in Column 1), the *percentages* of respondents who gave particular responses (Columns 2-5), the numeric *averages* of the group responses (Means in Column 6), and levels of *variability* in the group responses (*Standard Deviations* in Column 7). In Column 6, *mean* values could range from a maximum of 3.00 and a minimum of zero. Mean values from 2.50 through 3.00 would indicate good preparation, values from 1.50 through 2.49 would reflect adequate preparation, and values lower than 1.50 could be associated with poor preparation. *Standard deviations* in Column 7 reveal how much each respondent's answer was different, on average, from the mean value. So *standard deviations* measure the extent to which preparation effectiveness or preparation value *vary* among CSU program completers. The table begins with *effectiveness reports* by K-12 supervisors followed by the *effectiveness responses* of CSU completer-teachers and the *value-and-helpfulness responses* of the completers.

<sup>5</sup> The evaluation in May-June, 2001, was regarded as a pilot study to investigate the potential feasibility and cost of a large-scale evaluation. The pilot study included small samples of teachers and supervisors, and small numbers of evaluation questions. The pilot study did not include a distinct question about CSU effectiveness in preparing MS-SS teachers for *mainstreaming*.

<sup>6</sup> CSU expects to do an evaluation in May-June 2006 with a focus on the cohort of 2004-05 program completers who are teaching in 2005-06. It may be possible for the evaluation to include new questions about *mainstreaming* at that time.

<sup>7</sup> The Chancellor's Office projects a continuation of annual evaluations beyond the current year. The Deans of Education may consider switching to an alternate-year schedule commencing in 2007.

**Effectiveness and Value of CSU Preparation for Mainstreaming:  
Multiple-Subject and Single-Subject Program Completers Who Teach  
(Four Cohorts of Completers Experienced CSU Preparation 2000-04 and Were K-12 Teachers 2002-05)**

	Col. 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6	Col. 7
<b>Supervisors: How Well Was the CSU Completer Prepared for Students with Learning Difficulties?</b>							
<b>Supervisors of CSU Completer-Teachers:</b>	<i>Ns</i>	Well Prepared	Adequate Prepared	Somewhat Prepared	Not at All Prepared	Mean	SD
1 Supervisors of MS <u>and</u> SS Completer-Teachers	2,164	30 %	41 %	26 %	3 %	1.97	0.83
2 Supervisors: Multiple-Sub. Completer-Teachers	1,417	32 %	39 %	26 %	4 %	1.98	0.85
3 Supervisors: Single-Sub. Completer-Teachers	747	26 %	44 %	27 %	3 %	1.95	0.79
<b>CSU Completers: How Well Were You Prepared for Students with Learning Difficulties?</b>							
<b>Groups of CSU Completers Who Were Teaching:</b>	<i>Ns</i>	Well Prepared	Adequate Prepared	Somewhat Prepared	Not at All Prepared	Mean	SD
4 MS <u>and</u> SS Program Completer-Teachers	6,986	21 %	36 %	34 %	9 %	1.68	0.91
5 Multiple-Subject Program Completer-Teachers	4,630	21 %	35 %	34 %	9 %	1.69	0.91
6 Single-Subject Program Completer-Teachers	2,356	20 %	36 %	34 %	10 %	1.66	0.91
<b>CSU Graduates: How Valuable/Helpful Was Instruction about Students with Learning Difficulties?</b>							
<b>Groups of CSU Completers Who Were Teaching:</b>	<i>Ns</i>	Very Valuable	Somewhat Valuable	A Little Valuable	Not at All Valuable	Mean	SD
7 MS <u>and</u> SS Program Completer-Teachers	6,818	46 %	34 %	16 %	4 %	1.98	0.89
8 Multiple-Subject Program Completer-Teachers	4,524	52 %	32 %	13 %	3 %	2.03	0.89
9 Single-Subject Program Completer-Teachers	2,294	34 %	38 %	22 %	6 %	1.88	0.89

### Short Summary and Analysis of the Above Findings

Compared with multiple-subject teachers and supervisors, fewer single-subject teachers and supervisors *participated* in the evaluation, as Column 1 indicates. This occurred because fewer single-subject teachers enroll in CSU programs, and fewer are invited to answer the CSU questions. According to the *percents* in Columns 2-5 and the *means* in Column 6, CSU multiple-subject programs are *slightly more effective* than single-subject programs. The difference between the two groups of programs was *more pronounced* in the *findings for program value and helpfulness*. Both groups of program completers considered themselves to be *less effectively prepared* than did their own supervisors. This pattern characterizes CSU preparation in all domains of the curriculum. Compared with their own *effectiveness* ratings, first-year teachers generally regard their CSU preparation to be *valuable and helpful* in establishing and guiding their teaching practice.

## **Mainstreaming in Relation to Other Domains of CSU Teacher Preparation**

The evaluation includes questions for program completers and employment supervisors about many domains of the teacher preparation curriculum. Questions about *preparation effectiveness* and *preparation value* address preparation to teach subjects of the curriculum (i.e. reading, mathematics), preparation for the tasks of teaching (i.e. instructional planning, grading homework), and preparation to work collaboratively with other adults (i.e. parents and other teachers). *In each evaluation year, the CSU questions about preparation for mainstreaming have received some of the least favorable reports, in the aggregate, from teachers and supervisors.*

*Students with special learning difficulties* are not the only group of learners who are the focus of evaluation questions. The Deans of Education also solicit judgments about the value and effectiveness of preparation to meet the educational needs of *English language learners*, and of *students who are culturally-diverse*. In each case, the CSU questions have language that parallels the language of the "mainstreaming questions." For example, here is the *effectiveness* question that program completers answer pertaining to *English language learners*.

### **Preparation Effectiveness Question for Multiple- and Single-Subject Completers**

*Once you finished your teacher preparation program and began to teach with your credential, how well prepared were you to begin to meet the instructional needs of students who are English language learners?*

Response Options: As a new teacher, I was . . .

- *Well Prepared to Begin.* (Response Value = 3)
- *Adequately Prepared to Begin.* (Response Value = 2)
- *Somewhat Prepared to Begin.* (Response Value = 1)
- *Not at All Prepared to Begin.* (Response Value = 0)
- *I Cannot Answer.* (Response Value = Missing)

Similarly, multiple- and single-subject program completers respond to the following question about the *value and helpfulness* of CSU preparation to work with *culturally-diverse students*.

### **Preparation Value and Helpfulness Question for Multiple/Single-Subject Completers**

*Based on your actual experience as a K-12 classroom teacher, how valuable or helpful was each of the following elements of your Teaching Credential Program?*

(7) Instruction in cultural diversity and multicultural education.

Response Options: My preparation in this area was . . .

- *Very Valuable or Helpful.* (Response Value = 3)
- *Somewhat Valuable or Helpful.* (Response Value = 2)
- *A Little Valuable or Helpful.* (Response Value = 1)
- *Not At All Valuable or Helpful.* (Response Value = 0)
- *Does Not Apply.* (Response Value = Missing)

The graph on the following page reports the average (mean) judgments of employment supervisors (left side) and program completers (center and right side) in response to questions about preparation throughout the CSU system to address the educational needs of *students with special learning difficulties* (green line), *English language learners* (red) and *students who are culturally diverse* (purple).

In posing distinct questions to program completers and employment supervisors, the CSU Deans of Education do not assume that the questions describe groups of students who are distinct from each other. The questions address overlapping populations. Evidence from the evaluation suggests that respondents in K-12 schools do not consider the questions to be synonymous with each other. The three sets of evaluation findings in the graph address the preparation of teachers to work with three significant populations of pupils who have been historically underserved in K-12 education.