

Report of Second Annual Systemwide Evaluation of CSU Teacher Preparation Programs as Reported by Employment Supervisors of CSU First-Year Teachers February 2003

Summary

The outcomes of teacher education programs on 21 CSU campuses were examined in a second annual evaluation and are summarized in this report. Most of the evaluation evidence indicates that CSU programs are increasingly effective. The report outlines the purposes, design, and uses of the evaluation as well as ways in which the evaluation scope may expand in the future.

Background

In 2001 and 2002, the California State University completed systemwide evaluations of professional preparation programs for new K-12 teachers. Both evaluations were based on Trustee policy in *CSU's Commitment to Prepare High Quality Teachers* (adopted in 1998) and on specific evaluation questions by the 21 CSU Deans of Education. Trustees heard the first evaluation report in late 2001. The Trustees and Chancellor Reed agreed on the need to continue the evaluations each year.

There are three purposes of the systemwide evaluations: (1) to provide accurate information about program quality to campus leaders, (2) to enable the university's academic officers to improve programs as needed, and (3) to address concerns that may arise about the effectiveness of CSU teacher preparation. In keeping with these purposes, academic officers of the 21 CSU campuses have been the primary recipients of evaluation reports in 2001 and 2002. Summary reports of evaluation findings are also being provided to education leaders and journalists in California.

Preparing First-Year Teachers: Expected Levels of Teaching Proficiency

There may be some occupations in which university-based preparation enables new practitioners to perform all aspects of a job on their own. Teaching is not one of these occupations, however. Like practitioners in medicine, law, architecture, accountancy, and several other professions, teachers face complexities and challenges that can be studied and learned but not mastered before the teachers begin teaching. To be valid, a teacher preparation program evaluation should begin with an accurate understanding of the teaching proficiencies that can reasonably be expected of first-year teachers.

Professional teacher preparation programs include coursework in pedagogy and intensive fieldwork in K-12 schools which culminates in day-to-day supervision of the candidates in *practice teaching*. This combination of study and supervised practice should enable program graduates to serve as the instructors-of-record in actual teaching positions. The pre-service

preparation of the new teachers, however, does *not* enable even fully-credentialed novices to serve in this important capacity without continued consultation, coaching, assistance, and study. Intensive *induction programs* for beginning teachers typically provide these services. Without such assistance in their schools, new teachers cannot become fully proficient in applying and utilizing the pedagogical principles and analytical skills they have learned in university-based preparation programs. These limits on a new teacher's proficiency are due to the subtleties and nuances of effective teaching and do not reflect on the novices' personal abilities or the quality of their prior preparation. Regardless of how excellent or effective the pre-service preparation of credential candidates may be, continuing assistance is essential because of teaching's rigors. In the context of induction programs, newly-credentialed teachers can surmount the situational complexities of helping today's students to learn a challenging curriculum. Working in isolation, however, new teachers are typically overwhelmed by the demands of the job, even when their prior preparation meets all professional standards for excellence and effectiveness.

The State of California has recognized the important needs of beginning teachers by implementing the Beginning Teacher Support and Assessment (BTSA) Program. This statewide initiative offers sufficient funds so every agency that employs beginning teachers can provide the intensive services of site-based mentors who are carefully selected and specially trained to guide and assist first-year and second-year teachers who have already completed pre-service preparation. BTSA's purposes are to enable beginning teachers to utilize their prior preparation in their day-to-day practice, to extend and enhance their understanding of curriculum content and advanced pedagogical practices, to increase their job satisfaction, and to retain them in the teaching profession. Multiple evaluations of BTSA have consistently demonstrated its effectiveness in addressing these purposes.

Preparing First-Year Teachers: A University's Responsibilities

In this context, programs of professional teacher preparation should enable CSU graduates to begin functioning as novice teachers in full-time positions that include participation in induction programs. Each CSU program graduate should have a clear understanding of multiple pedagogical practices in the major subject areas and should be equipped to *begin* using these practices in her or his classes. Each one should also have entry-level skills in working effectively with children or adolescents, some of whom may need a little encouragement to become motivated learners, but the CSU graduates also need the assistance of experienced mentors to extend and apply their management and motivation skills. With continuing support and instruction during the induction years, CSU teaching graduates should develop into professional practitioners who quickly assume full responsibility for all aspects of their school positions.

The primary purpose of the evaluation is to assess the extent to which CSU graduates have entry-level skills and understandings that are adequate or more than adequate for them to function as beginning teachers while participating in BTSA or other induction programs. An additional goal is to assess the extent to which CSU graduates receive induction services and become effective professional teachers. Results of the evaluations should be interpreted in light of the goals and

intended outcomes of pre-service programs for teachers. Participants in the annual evaluations were informed of these goals and purposes, and were asked to answer the CSU evaluation questions accordingly. In most cases, a veteran school supervisor is likely to understand the limits of a first-year teacher's pedagogical capabilities more insightfully than the first-year teacher herself.

Systemwide Evaluation: Responsibility, Design and Dimensions

The *CSU's Commitment to Prepare High Quality Teachers* focused on programs of professional teacher preparation on 21 CSU campuses. In 2000, the Deans of Education on these campuses decided to assess their progress in implementing the Board's *Commitment*. The Deans organized and planned the first annual Systemwide Evaluation of Teacher Preparation in the CSU. Led by a six-member committee chaired by Dean Lionel "Skip" Meno, College of Education, San Diego State University, the 21 Deans of Education posed a series of questions to be addressed in the evaluation. They also decided who would be asked to answer the questions. In response to this plan by campus academic leaders, the Chancellor's Office allocated the necessary resources to conduct a pilot study in 2001 and a full-scale evaluation in 2002.

In the 2002 evaluation, Chancellor Reed asked a random sample of CSU's teaching graduates to answer the Deans' questions about the intrinsic qualities of their CSU programs and the effectiveness of their preparation for K-12 classroom teaching. The Deans' questions focused on the preparation of CSU graduates to begin teaching the *Content Standards for California Public Schools (K-12)* that have been adopted by the State Board of Education. The language of the questions reflected current California policy that pre-service programs should prepare new teachers to *begin* teaching the state's K-12 curriculum while they participate in intensive induction activities.

Teachers who participated in the 2002 evaluation had completed CSU programs of professional preparation during the 2000-01 academic year. Of the 10,457 graduates that year, a total of 4,436 teachers were randomly selected and invited to participate in the evaluation. Chancellor Reed also invited each CSU graduate's supervisor to answer the Deans' questions about that teacher's preparation to *begin* teaching the California curriculum in the graduate's school of employment. Each graduate was informed that her/his supervisor would be invited to participate. Each supervisor received the full name of the CSU teaching graduate whose preparation was to be assessed. Participants were assured that their responses would be compiled by a

"To be honest, all the courses offered in the CSU . . . program were very helpful. I especially enjoyed the math course. I learned a variety of teaching techniques that I use with my students."

A CSU graduate of 2000-01 after serving as a first-year teacher in Inglewood, California.

professional evaluator and reported in the aggregate. Individual responses are kept in secure, confidential files.

In 2002, the respondents represented 55 percent of the sampled graduates and 50 percent of their employment supervisors. When responses of this magnitude are based on stratified random samples, their aggregated responses describe the population with very high reliability. With a *margin of error* of three percentage points, the statistical findings in this report apply generally to the population of 10,457 CSU program graduates in the class of 2000-01. The evaluation findings are the best estimate of the CSU System's actual effectiveness in K-12 teacher preparation during the 2000-01 year.

First Evaluation Finding: CSU Graduates Serve as K-12 Teachers in Record Numbers

In the late 1990s, research studies and news articles confirmed that California's need for many well-prepared teachers reached crisis proportions. The state's severe shortage of teachers has shown no signs of abating in 2001 or 2002. How many of CSU's 2000-01 graduates served as K-12 teachers one year later? Did their *teaching participation rate* match that of CSU's prior graduates?

Ninety-five percent of the graduates of CSU teaching credential programs in 2000-01 were teachers in K-12 schools one year later. Virtually all of these CSU graduates provided their teaching services in California's public schools during 2001-02. Less than one percent of them worked in private K-12 schools or in schools outside of California. Two percent of the graduates of CSU teacher preparation programs began the 2001-02 year as K-12 teachers but did not remain in their positions all year. Most of these 142 graduates took leaves of absence for family-related reasons; some of them may return to teaching in the future. Three percent of the 2000-01 cohort did not serve as K-12 teachers during the year following their CSU graduation. Eighty-five percent of these 315 graduates planned to serve as teachers in 2002-03 or later.

For the graduating class of 2000-01, the *teaching participation rate* was almost identical to that of the 1999-2000 cohort, ninety-six percent of whom served as teachers one year after their CSU graduation. One percent of the earlier graduates began but did not complete their first year as teachers. The proportion not teaching remained identical (3 percent) both years. Minor fluctuations in the *teaching participation rate* can be attributed to yearly variations in job markets and family circumstances.

During a 24-month period from 1999 through 2001, the CSU produced more than 20,000 qualified teachers. Ninety-five percent of these CSU graduates served in K-12 teaching positions for at least one school year. The long-term retention of these CSU graduates in the teaching profession will be the subject of future evaluations. In the available literature, no university's teaching participation rate has previously been higher than 67 percent.

Second Finding: CSU Is Increasingly Effective in Standards-Based Teacher Preparation

A total of 2,002 principals and vice-principals in K-12 schools answered the CSU's evaluation questions about the graduates of 2000-01. The questions focused on the CSU's effectiveness in preparing the graduates to begin teaching the California school curriculum according to California Content Standards. The principals were not asked about the preparation of new teachers in general, or about the preparation of CSU graduates in general. Instead, each principal received the name of a CSU graduate who was known to be a first-year teacher in that administrator's school. In answering the CSU questions, the principal was asked to evaluate the preparation of that particular teacher. Principals could rate each graduate as *well prepared* or *adequately prepared* or *somewhat prepared* or *not at all prepared* to begin teaching California's Content Standards. Alternatively, principals could indicate they *did not know* about the new teacher's level of prior preparation. In this report we focus on the responses of school principals who had observed the CSU graduates' classrooms during active instruction, or who had discussed the graduates' teaching in extended conferences with the first-year teachers during the 2001-02 year.

"She knows grade-level standards in all subjects, and she uses effective strategies to help all students."

A K-6 principal in Oxnard.

For young students, instruction in *reading-language arts* is the most important responsibility of CSU's teaching graduates. According to 1,303 principals of K-8 schools, 83 percent of the CSU graduates of 2000-01 were *well prepared* or *adequately prepared* by the CSU "to begin to use instructional materials and to teach reading-language arts according to California Content Standards for their grade levels." One year earlier, K-8 principals reported that 81 percent of the 1999-00 graduates were *well-* or *adequately-prepared* for standards-based reading-language arts instruction among young students. According to the two-year sequence of evaluations, CSU campus programs are highly effective and increasingly effective in preparing teachers for standards-based reading instruction in K-8.

The progress of K-8 students in mathematics is also crucial for their eventual success in school and their eligibility for CSU admission. Again, 83 percent of the 1,303 principals of K-8 schools reported that specific teaching graduates of the CSU were *well prepared* or *adequately prepared* "to begin to use instructional materials and to teach mathematics according to California Content Standards for mathematics at (the teacher's) grade level." One year earlier the principals reported that 80 percent were *well-* or *adequately-prepared*. This evidence provided by experienced school administrators indicates that the CSU is also highly effective and increasingly effective in preparing teachers for standards-based mathematics instruction in California's elementary schools.

"She arrived with excellent skills in the teaching of reading, mathematics and ESL."

Principal of a K-8 school in
Paramount

In grades 7-12, CSU's teaching graduates are typically given specialized teaching assignments in *specific subjects* such as science, history, English, or the arts, consistent with their preparation and their state credentials. In high schools and middle schools, experienced principals, vice-principals and department chairs who supervised these first-year teachers reported that ninety percent of them were *well prepared or adequately prepared* by the CSU "to teach their primary subject areas according to the State Curriculum Framework and Content Standards for their grade(s)." These evaluations were earned by 89 percent of the CSU graduates in English (N = 55), by 88 percent in mathematics (N = 24), by 98 percent of them in science (N = 38), by 94

"She knows her content well, uses a variety of excellent strategies to motivate her students, and has excellent people skills."

Principal of a high school in
Los Angeles

percent in foreign languages (N = 18), by 100 percent in music and art (N = 18), and by 98 percent in physical education (N = 23)¹. One year ago, school principals and other veteran administrators reported that 86 percent of the CSU graduates in specialized teaching assignments (grades 7-12) were *well- or adequately-prepared* to teach their major subjects. Across all subjects,

the sequenced evaluations indicate reliably that the CSU is extremely effective and increasingly effective in preparing teachers in grades 7-12 to teach their major subjects according to the Curriculum Frameworks and Content Standards of the State Board of Education.

High school teachers have a special responsibility to use instructional materials effectively in their instruction, in part because of the growing role of *textbooks* as students reach increasingly advanced levels of knowledge and understanding in subjects such as science, mathematics, history, government and languages. The high school administrators who participated in the study reported that 87 percent of CSU's graduates who were teaching in grades 7-12 were *well prepared or adequately prepared* "to use instructional materials and textbooks that are aligned with the State Content Standards in their primary subject areas." In the earlier pilot study, 85 percent of the graduating teachers of 1999-2000 were reported by their high-school supervisors to be *well- or adequately-prepared* in this area.

Overall, the comprehensive evaluation found that very large majorities of CSU's teaching graduates are prepared to teach the core subjects of reading-language arts and mathematics in grades K-8, and to teach California's challenging academic curriculum in grades 7-12. A benchmark for assessing the CSU's overall effectiveness can be found in a nationwide survey of teachers that was conducted in 2000 by the National Center for Education Statistics (NCES), a federal agency, which showed that 66 percent of first-year teachers throughout the United States were *very-well or moderately-well prepared* to "implement state or district curriculum and performance standards" in their subjects.

¹ For these subject-specific percentages, the *margin of error* is nine percentage points.

Third Finding: CSU Is Increasingly Effective in Fostering General Instructional Skills

Whether they teach in elementary schools, middle schools or high schools, CSU teaching graduates need to learn specific pedagogical skills and abilities that contribute to teaching effectiveness at all levels and in all subjects. CSU campuses need to foster skill in planning instruction, conducting classroom activities, motivating students' interest, and communicating with parents, to cite a few examples. The CSU asked school principals several questions about these areas of teacher education in the California State University. Chart 1 shows the percentages of the 2,002 participating school administrators who reported that first-year teachers under their active supervision were *well prepared* or *adequately prepared* by the CSU for eight significant aspects of teaching in California schools.

Chart 1: Preparing CSU Graduates for the General Instructional Responsibilities of Teachers

School Principals	Teaching Skills and Abilities for Which Named CSU Graduates Were <i>Well Prepared</i> <u>or</u> <i>Adequately Prepared</i> to Begin Teaching ²
89 Percent	To prepare lesson plans and make arrangements for pupils' class activities.
83 Percent	To use an effective mix of teaching strategies and instructional activities.
82 Percent	To organize and manage a class or group of students for instruction.*
80 Percent	To meet the instructional needs of pupils from diverse cultural backgrounds.*
88 Percent	To maintain positive rapport with students and to foster their motivation.
85 Percent	To communicate effectively with students' parents or guardians.*
88 Percent	To work collaboratively on school issues with other teachers in the school.*
86 Percent	To think insightfully about teaching problems and to try out various solutions.

Across all eight aspects of teacher skill and understanding, experienced California school managers reported that CSU teacher preparation was highly effective during 2000-01. The asterisks in Chart 1 identify four areas of K-12 teaching that were also evaluated in the pilot study of the 1999-2000 class. In the first three of these four identified areas, school principals and other administrators reported the CSU's effectiveness to be increasing in 2000-01. Only in the area of working collaboratively on school issues with other teachers did the CSU System's effectiveness decline--from 90 percent in 1999-2000 to 88 percent in 2000-01.

"She is very proficient in classroom management, standards-based instruction, and student motivation."

Vice-principal of an elementary school in Chino, California

² The right column of Chart 1 describes the eight teaching skills in exactly the same language that the school principals responded to in the CSU evaluation questions.

Fourth Finding: CSU Is Effective in Preparing Teachers for All of California’s Students

A widespread belief is that universities like the CSU are most effective in preparing teachers for high-performing schools that predominantly serve students from middle-income and upper-income families. The “flip side” of this assumption, which is only rarely investigated, is that institutions are *not* effective in preparing new teachers to be successful with children from lower-income families in low-performing schools. To evaluate these assumptions, the systemwide evaluation invited school principals to answer questions about the *group characteristics* of the students in their schools. The informed responses of the school principals to these questions provided information about the CSU’s effectiveness in preparing teachers for the broad range of schools in California. Unlike the prior sections of this report, the next paragraphs are about CSU’s effectiveness in *different sets of schools*.

Schools at Different Income Levels. In some schools, many families are eligible for subsidized school meals. Fewer students have this eligibility in other schools. Researchers consider this factor to be a reliable index of family income among the students in a school. The CSU graduates’ schools were grouped in three sets with high, intermediate, and low percentages of pupils and families eligible for subsidized meals.³ *Among these three sets of schools, the CSU was almost equally effective in preparing its graduates for the responsibilities of teaching.* In schools with the highest percentages of low-income students, for example, 88 percent of CSU’s teaching graduates were *well-prepared or adequately-prepared* “to maintain positive rapport with students and to foster their motivation” at all grade levels. In the second set of K-12 schools, with intermediate percentages of low-income pupils, 89 percent of CSU’s graduates were *well- or adequately-prepared* in this important area of teaching. Finally, among the CSU graduates who were teaching in the third set of schools with the smallest percentages of low-income students, 88 percent had the same high levels of preparation in the CSU, according to the principals of these first-year teachers.⁴

Schools in Different Communities. Schools are located in every community of California, including urban, metropolitan, suburban, and rural communities. School principals were invited to describe their schools in these terms; the schools were again grouped according to descriptive information provided by the principals.⁵ Again the pattern of results suggested *small differences in the CSU’s effectiveness in preparing teachers for schools in distinct communities.* For instance, 81 percent of CSU teaching graduates in elementary schools that were described as “urban” or “metropolitan” by the principals were *well prepared or adequately prepared* “to begin to use instructional materials and to teach *reading-language arts* according to California Content Standards for their grade levels.” In schools that the principals described as “suburban” or “rural schools,” 85 percent of the university’s graduates were *well prepared or adequately*

³ During the evaluation, approximately equal numbers of CSU graduates were teaching in the three sets of schools.

⁴ This analysis of CSU effectiveness in schools at different levels of family income is based on evaluations provided by 1,874 experienced principals and other school administrators in 2002.

⁵ The percentages of CSU graduates who were teaching in the four groups of schools ranged from 28 percent in “urban schools” to 24 percent in “suburban schools” during the 2001-02 school year.

Tricia is an exemplary first-year teacher. She is organized, writes detailed lesson plans addressing standards, and uses differentiated instruction to meet the needs of all students.”

Principal of an elementary school in Orange, California

prepared in this critical area of the school curriculum. While these differences are important, they do not sustain an assumption that university-based teacher preparation contributes to inequalities in different school communities. This pattern of nearly equal CSU effectiveness among schools in urban-metropolitan and suburban-rural communities was also found in the pilot evaluation one year ago.⁶

Schools at Different Performance Levels. School performance levels are now tracked annually by the State of California in a reporting format called the Academic Performance Index (API), which is based on pupil scores on standardized achievement tests. The API identifies schools at ten overall performance levels, based on test scores that students earn in all subjects and grades. Is the CSU’s preparation of teachers as effective in low-performing schools as it is in higher-performing schools? The K-12 schools where CSU graduates worked were grouped in three sets: schools with overall API scores from one to three; schools with scores from four to six; and schools with scores from seven to ten. In the first set of these schools, 86 percent of CSU’s teaching graduates were *well prepared* or *adequately prepared* to “maintain positive rapport with students and to foster their motivation,” according to their principals (K-12). In schools that had earned API scores from four through six, and in schools that earned scores from seven through ten, 90 percent of CSU’s graduates were also *well- or adequately prepared* in this key aspect of school teaching.⁷ *While an important measure of equity is still to be achieved in CSU-based teacher preparation programs, the differences found in the evaluation would seem to be smaller than would be expected, especially in comparison with school-to-school differences in student performance levels, which are much larger.⁸*

⁶ This analysis summarizes the evaluations of 1,186 principals (K-8) who participated in the 2001 study, and of 1,260 school principals (K-8) in the 2002 evaluation.

⁷ Schools were included in the three performance levels based on API scores the schools had earned in 2001, which was one school year *before* the initial year of certificated teaching by the participants in the evaluation (2001-02).

⁸ This analysis of CSU effectiveness in low-to-high performing schools is based on evaluations provided by 1,818 principals of elementary, middle and high schools.

Fifth Finding: School-Based Support Is Critically Important for Effective Preparation

Given that CSU-based teacher preparation is not entirely equal in effectiveness in different groups of schools, what are the program qualities that can be associated (based on evaluation data) with greatest and least effectiveness? Findings of the annual evaluations indicate that *the most important factor in producing teachers at different levels of readiness is the intensity and quality of site-based assistance that school districts provide to CSU-enrolled credential candidates when they engage in the practice-teaching component of their preparation.* For example, in the case of former student teachers (K-8), who experienced very intense coaching and guidance on a day-to-day basis as they learned to teach while teaching, 81 percent subsequently reported they were *well- or adequately-prepared* “to begin to use instructional materials and to teach *reading-language arts* according to State Content Standards for their grade levels.” Among their counterparts who had been K-8 intern teachers during their pre-credential preparation, and who experienced less intense levels of site-based coaching and assistance, 75 percent were *well- or adequately-prepared* to teach K-8 reading. In a third group of graduates, who had been emergency teachers during their CSU preparation, and who experienced little or no in-school support or advice, only 68 percent reported being *well- or adequately-prepared* in this critical area of responsibility (K-8 reading).

The same levels of effectiveness mark the preparation of these three groups in other subjects of the curriculum, and in other responsibilities of teachers.⁹ The 2001 pilot study revealed this same pattern of findings as the 2002 evaluation being summarized here. When student teachers, intern teachers, and emergency teachers enroll in CSU programs of credential preparation, the three groups are required to complete the same CSU courses. They also receive the support and advice of the same university-based supervisors, which they said was “very valuable” in this evaluation. Program differences occur in the K-12 schools, however, because only the student teachers have the frequent assistance of in-class supervising teachers. The evaluation results indicate that *this program variation is the most important factor in explaining high, medium, and low levels of effectiveness in the preparation of CSU’s teaching graduates.*

Significantly, the same variation in teacher preparation is also related to different performance levels in K-12 schools. Prior studies showed that high concentrations of emergency teachers are hired to work with low-income students in urban and metropolitan areas. Taken together, the findings of this study and others indicate that varying degrees of in-school support for credential candidates explain high, middle and low levels of CSU effectiveness and are also associated with varying levels of school effectiveness in fostering student achievement on standardized examinations. *In teacher preparation, the CSU may be able to achieve greater equity or greater effectiveness only when all CSU-enrolled*

⁹ Fifty percent of the evaluation participants had previously been student teachers while they were enrolled in their CSU programs of teacher preparation. Twenty percent had been interns, and thirty percent had been emergency teachers. This analysis is based on evidence provided by 1,465 of them who were certificated K-8 teachers during 2001-02.

candidates for credentials benefit from intensive site-based support similar to the assistance that K-12 schools typically provide to student teachers. This shift in the practices of school districts would significantly benefit K-12 students in two ways. Pupils would have access to well-supported instruction while their teachers were earning credentials, and they would be taught by better-prepared teachers once the credentials have been earned.

“I really needed to work with a teacher in my classroom. I envied my classmates who were student teaching. In retrospect, getting the emergency job was not good for my training.”

A CSU graduate in San Leandro who served as an emergency teacher.

Uses of the Systemwide Evaluation Findings

This report has summarized the most important findings of the CSU Systemwide Evaluation of Teacher Preparation in 2002. On each CSU campus, more detailed findings have been provided to Presidents, Vice-Presidents for Academic Affairs, and Deans of Education. Depending on academic needs and circumstances that prevail on each campus, CSU officers are using the evaluation results (along with information from multiple other sources) to improve the curriculum and delivery of professional teacher preparation programs. The evaluation findings will lead to changes in campus programs during 2003-04 and beyond.

While CSU campuses implement evaluation-based improvements in programs, the summary findings in this report will be useful in communicating the CSU’s continuing *Commitment to Prepare High Quality Teachers* to state leaders, education officials, and the general public.

Additional Areas of Systemwide Evaluation Beginning in 2003

To date the Systemwide Evaluation of Teacher Preparation has focused on programs of professional teacher preparation in order to address the Trustees’ *Commitment to Prepare High Quality Teachers*. The Chancellor’s Office has begun to expand the scope of the evaluation to include the preparation of teachers in their knowledge and understanding of subjects to be taught. External funds from sources outside the CSU may be requested to examine the pedagogical practices that CSU graduates actually *use* in their first-year classrooms, which were *not* examined in the 2001 or 2002 evaluations. Another need is to review the effects of CSU preparation over time by tracking the graduates and soliciting information from them after three years and after five years in the teaching profession. Ultimately, the academic achievement of K-12 students is the primary purpose of university-based programs for beginning teachers. Given that student learning is influenced by many factors that are beyond the control of teachers and their preparing institutions, it may not be feasible to examine valid relationships between teacher education and student achievement, but an exploratory study of such relationships may provide insights that are not currently available.