

Vision for Reform

The **Central California Partnership for Teacher Quality Programs (CCP~TQP)** is an innovative collaborative that brings together three institutions of higher education (IHE) – California State University Bakersfield (CSUB), California State University Monterey Bay (CSUMB), and California Polytechnic State University San Luis Obispo (Cal Poly) and two K-12 partners – Kern County Superintendent of Schools and Tulare County Office of Education – in the central region of California to address the diverse needs of schools, teachers, and students within a large geographical, primarily rural, area. With a focus on science, math, and special education, the partnership has a bold vision for teacher education reform that includes **unique approaches for the preparation and induction of new teachers**.

Core components include (a) curricula for science, math, or special education that focus on scientifically supported teaching and learning methodologies, including the use of technology; (b) clinical experiences that serve as a continuous core and culmination of professional preparation; (c) case-based approaches that complement concurrent field experiences, and (d) ongoing professional development for teacher education faculty, teacher candidates, and K-12 educators and administrators. CSUB and CSUMB will use a research-based medical model for pre-baccalaureate programs that places teacher education faculty in K-12 classrooms within the local community. Cal Poly will develop a post-baccalaureate online science and math program for secondary teachers in rural areas.

The programs will be teacher- and student-data driven and assessment focused, with formative and summative assessment guiding the preparation of new teachers and revisions to the curriculum. Due to the rural setting, we will implement a communication concept developed in England known as networked learning communities (Hargreaves, 2007).

Through resources and assistance of Apple Inc., we will connect the work and artifacts professional learning communities (PLCs) in a network of sharing that is inter-institutional in nature. PLCs in any one setting will receive support from other PLCs as they grapple with common issues. Artifacts of good teaching practices in video and document form will be shared and distributed between sites and between institutions of higher education. Starting with three target counties, over time this project will realize a sustainable and continuous cycle of inquiry, program improvement, and closing of the achievement and opportunity gaps for thousands of children located throughout central California in an eight-county region of approximately 36,000 square miles.

I. Quality of the Project Design (40 points)

Needs Assessment and Resource Analysis

The CCP~TQP represents a collaborative effort to unify teacher reform efforts across the heart of California, beginning with three counties: Kern, Tulare, and Monterey. Overtime, additional nearby counties (Inyo, San Luis Obispo, Santa Barbara, Kings, and San Benito) will be impacted. Educational attainment levels are considerably lower in this region relative to the rest of the state, with only 14% of adults holding a college degree compared to the state rate of 29% (Kern County Network for Children Report, 2008).

Innovative and visionary reform to address the ongoing cycle of students’ low educational attainment requires systematic change not in one region but through collaborative efforts across the spectrum of partners (Public Policy Institute of California, Just the Facts, 1996). Together, the three IHEs can directly impact the preparation of prospective and new teachers in this region and promote teacher quality and student academic achievement in local schools.



Students in the three counties struggle to meet proficiency on California’s Standardized Testing, as shown in Table 1. Overall performance on proficiency is flat and declining in math and science, compared to statewide scores.

Table 1: Student Scoring at Proficient and Advanced Levels, 2007-2008

Source: California Department of Education STARS Report, 2008

Subjects	Kern County N=174,180	Tulare County N=95,310	Monterey County N=69,828	Statewide N=6,275,469
Mathematics	34%	36%	35%	43%
Science	36%	29%	24%	46%
Language Arts	36%	36%	25%	46%

For English language learning (ELL) students, which are 40% of the population in the targeted schools (California Department of Education Data Quest, 2008), the gap between ELLs and the highest performing subgroup is 10 points; for low-income students, the gap is 8 points. To better prepare new teachers and improve student achievement, this grant will focus services and clinical experiences on the high-need local education agencies (LEAs) identified in Table 2.

Table 2. High-Need School Districts Serviced by CCP~TQP

High-Need LEA School Districts (SD)	Enrollment	% of ELLs
Tulare County		
Visalia Unified SD	27,019	19%
Tulare Joint Union High SD	5,022	13%
Kern County		
Kern Union High SD	37,783	10%
Wasco Union SD	3,182	46%
Lamont Elementary SD	2,626	67%
Richland Union Elementary SD	3,124	45%
Wasco High SD	1,795	25%
Monterey County		
Alisal Union SD	7,591	79%
Gonzales Unified SD	2,296	44%
Total/Average Numbers	90,438	39%

Teacher Needs. The Central California Partnership will target high-need LEAs in Kern, Monterey, and Tulare counties. Each county shares a need to improve teacher quality in science, math, and special education. Table 3 provides an overview of first- and second-year teachers and those without full credentials in the three counties.

Table 3. First- and Second-Year Teachers and Those without Credentials

County	Number Teachers	1 st /2nd Year Teachers	% Lacking Full Teaching Credential			
			Overall	Math	Science	Special Education
Kern	8,460	11%	5%	7%	14%	22%
Tulare	4,653	10%	4%	10%	10%	31%
Monterey	3,428	12%	6%	14%	21%	26%

Kern County needs are even higher in their K-8 school districts: 59% in mathematics and 13% in science lack full certification (California Department of Education, 2008). The data indicate the need for highly qualified science, math, and special education teachers and ongoing training and professional development for current teachers. Available data also indicate that attrition is as high as 10% annually in these fields among teachers in the first 5 years of teaching (California State University Chancellor’s Office), pointing to a need to increase new-teacher retention. Table 4 provides a snapshot of the 2007 hires for three targeted counties in one year.

Table 4. Overview of 2007 Teacher Hires

County	Subject		
	Math	Science	Special Education
Kern	100	50	103
Monterey	33	10.5	9
Tulare	26	13	20
Total	159	73.5	132

Technology Use in the Classroom

Research conducted by the California Technology Assistance Project (2007) shows that regular use of technology in classroom instruction is occurring in less than one-quarter of the schools in the region, pointing to the need for teacher training in effective use of technology.

Local Assessment Feedback. During the development of this grant application, the core management team distributed a questionnaire to targeted LEA superintendents. Items on the questionnaire assessed districts’ needs for increasing the number of highly qualified science, math, and special education teachers in the next 5 years. Survey results showed that 50% of respondents identified needing math or science teachers even in the current economic budget,

and nearly 70% reported they would support CSU faculty participation in district professional learning communities (PLCs) and program improvement teams.

Resource Assessment

California State University, Bakersfield. CSUB was founded in the richest agricultural region with the largest concentration of migrant and seasonal farm workers who did not have a public 4-year university within a 100-mile radius. CSUB is the only IHE in the southern San Joaquin Valley to support both pre-service and in-service professional development of K-12 teachers with state funding. In collaboration with LEAs, CSUB has enhanced the professional partnerships across its academic units in mathematics, science, and education.

Currently, CSUB has a successful secondary “math-blended” pre-baccalaureate program, to create a pipeline for undergraduates majoring in mathematics to enroll in teacher education program. It is recognized that the campus needs (a) a pre-baccalaureate program for secondary science teachers; (b) a pre-baccalaureate program for special education teachers; (c) to improve and sustain a high-quality clinical educational program pre-service and in-service teachers; and (d) to offer professional development for teacher leaders and school administrators.

CSUB receives a combination of private and public funds to support teacher education programs. Private resources from Chevron, Paramount Farms, and Kern Schools Credit Union support specific development for highly qualified teachers. Public resources include the California Commission on Teaching Commission (CTC) funds for intern and paraprofessional development. Recently CSUB was awarded one of the highly competitive National Science Foundation (NSF) Math and Science Partnership planning grants to fund a planning effort focused on training a cadre of expert science and math teachers to mentor and lead science and math teaching reforms at participating schools using a design that will be integrated with the activities and goals of the CCP~TQP project. In addition, CSUB recently was awarded a

prestigious Noyce Teacher Scholarship Grant to provide scholarships for recruitment and preparation of talented students into math and science teaching; this grant will also be leveraged and coordinated with the project to increase impact of the TQP funds.

California State University, Monterey Bay. CSUMB has a number of model projects that support innovation in teacher education and new teacher support and professional development. For example, it currently has funding from the California Math Science Partnership Program for upper elementary and middle grade teacher professional development in mathematics based on a whole-school reform model. In addition, the campus is beginning a Noyce Scholarship program, supported by NSF, for prospective math teachers. The activities of these projects will be coordinated with the CCP~TQP reforms. CSUMB is completing a successful teacher recruitment grant from the U.S. Department of Education Office, extended through September 2010, for the recruitment of math, science and special education teachers.

A notable campus resource for the CCP~TQP is the CSUMB's Reading Center, which has a unique capacity focused on literacy to provide teacher training based on essential components of reading instruction. Science Department resources include the Watershed Institute, an on-going science education training center for teachers of our service area, and Project RISE, an NSF Alliance for Minority Participation science education initiative for middle school students to encourage their pursuit of science-related careers, including teaching. In addition, CSUMB has strong technology capacity, enabling it to connect the project's partners through videoconferencing and teleconference. CSUMB's county partner, the Monterey County Office of Education (MCOE), also has a professional development and curriculum library of standards-aligned curriculum resources available through a dedicated cable television channel.

California Polytechnic State University San Luis Obispo. Cal Poly is a polytechnic

institution and a model in California for teacher preparation and professional development in math and science. For example, Cal Poly receives special funding from the state's Science Subject Matter Project (through the University of California President's Office) and from the California Math Science Partnership Program for standards-based professional development programs. The campus has two Noyce Scholarship programs supported by NSF: one for prospective math and one for prospective science teachers.

Cal Poly has several experimental initiatives supported by federal, state, and foundation partners, e.g., the Science Teacher and Researcher program, which provides summer internships in national labs to enhance preparation and retention of new science and math teachers; this is supported, in part, by the U.S. Department of Energy, Steven Bechtel Fund, and Flour Foundation. Recently Cal Poly received [REDACTED] from the Cal State system-wide Math and Science Teacher Initiative to develop online math and science credential programs.

The campus infrastructure to develop and support such initiatives includes the Center for Excellence in Science and Mathematics Education (CESaME), which is funded through the university and private partners and supports school districts across the region. These initiatives and funding will be coordinated with the CCP~TQP and available to prospective, new, and current teachers. In addition, Cal Poly is unusually well equipped in technology infrastructure and personnel, including capacity for online instructional delivery utilizing Blackboard and Elluminate, for which the campus holds site licenses. Further, Cal Poly's extensive information technology staff provides services ranging from a help desk to complex technology usage.

Partnerships with the Local Education Agencies

In California, county offices of education provide direct services to high-risk children in the form of special education services, court and community schools, and preschool education. In addition, county offices of education provide support services for high-need schools identified in

Program Improvement under “No Child Left Behind” and comprehensive new-teacher support through a variety of state-funded programs. The following section provides a brief overview of services that will be used to leverage and sustain services after grant funds have ended.

Kern County Superintendent of Schools (KCSOS). KCSOS Curriculum, Instruction and Accountability staff provides support services to Kern County’s 47 school districts. Many services assist schools with their continuous improvement efforts, and department staff provide guidance in the planning, implementation, and evaluation phases of instructional and assessment programs. Department staff acts as liaisons between the state and national departments of education, keeping districts informed on matters of subject-matter content, statewide assessments, and federal and state categorical programs. In addition, KCSOS provides new-teacher support through Alternate Route to Teacher Certification Program, Paraprofessional Teacher Training Program, and the Beginning Teacher Support and Assessment (BTSA) program. Each are state funded and will be leveraged to expand and enhance CCP~TQP services.

Tulare County Office of Education (TCOE). TCOE provides similar services to KCSOS but also has expanded services through alternative funding for recruitment services. In September 2006, TCOE was awarded an 18-month contract for [REDACTED], which resulted in hiring 2,174 highly qualified teachers in high-need subject areas. This contract was administered by the Sacramento County Office of Education, granted by the California Department of Education, to recruit an ethnically diverse teacher pool for math, science, and special education. Renamed The California Teacher Recruitment Program (CTRP), the grant serves the Central and Salinas valleys, the Inland Empire, and Los Angeles County. This new program will develop and sustain a pipeline for aspiring math, science, and special education teachers by identifying students interested in both Science Technology Engineering Mathematics (STEM) fields.

Private Sector and State Leadership Resources

Apple Inc. Apple Inc. has agreed to partner with the CCP~TQP to expand a pilot project into targeted school districts. KCSOS California Technology Assistance Project is partnering with the Apple to pilot technology tools (e.g., Connect and Coach software), in classrooms, enabling staff to provide data collection to participating teachers. In addition, Apple provides a collaborative resources and has offered to provide these as in-kind resources to the CCP~TQP.

Center to Close the Achievement Gap (CCAG). CCAG, through its free Just for the Kids-California online data and school improvement system, provides schools and districts throughout California with longitudinal student achievement data, organizes peer-to-peer exchanges with higher performing look-a-like schools, and provides tools and artifacts of best-practices from high performing schools that enables all schools to improve teaching and learning. Through the CCP~TQP, CCAG will collect evidence of best teaching practices to compare with evidence collected from hundreds of high-performing, high-poverty schools across the U.S. The data will help determine the effectiveness of the project's impact on student achievement.

As a result of this unusually strong set of resources, the CCP~TQP represents an exceptional approach to the improvement of existing credential programs as well as the development of new educational leaders. The three IHEs and two county offices of education propose to overhaul the traditional university structure of teacher education by reconstructing it with a clinically based model that incorporates experimental laboratories of practice with local schools. The CCP~TQP will re-center teacher education in the classrooms where children and youth are taught. Courses of study will be redesigned to extended clinical experiences that brings teacher education faculty, teacher candidates, and public school personnel together in PLCs to advance teaching and student achievement in high-needs public schools.

School leaders in the rural areas of the Central and Salinas valleys are often professionals

working in isolation. While teachers in these communities have colleagues to call upon, new principals may not have an opportunity to meet with a colleague for days and weeks at a time. This project will include new and aspiring leaders to the networked learning communities and to leadership faculty at the three IHEs through a series of structured events and fluid networking intended to focus the new leaders' attention on instructional leadership and management.

CSUB and CSUMB will provide prospective pre-baccalaureate teachers with 2 years of increasingly intensive experiences in teacher education followed by a minimum of 2 years of induction support; Cal Poly will provide prospective post-baccalaureate teachers with 1 year of online coursework and intensive clinical experience followed by 2 years of induction support. Quality in re-designed coursework will derive from the participation of three universities and expert consultants, in the development of new course content and experiences that exemplifies the best research findings and empirically based approaches to teaching and learning. CSUB and CSUMB courses will be sequenced and organized to support a clinical experience that models the introduction to practice experienced by medical students. For all CCP~TQP courses, prospective teachers will work in classrooms with professors, master teachers, supervisors, and teacher leaders to collaboratively plan, teach, assess, and reflect on students' learning progress.

The year-long clinical experience will ultimately lead to independent solo practice before the credential is conferred. Intensive application of formative and summative assessments will lead to early detection of challenges and the provision of interventions to guide struggling new teachers to success. The networking of learning communities will facilitate the sharing of best practices across diverse and geographically dispersed settings as well as the close involvement of school leaders in developing their understanding of reform-based instruction.

The three IHEs will bring extensive resources for curriculum improvement to this project,

including management databases. The two county offices of education, which have extensive experience and expertise in teacher recruitment and induction program development, also operate alternative pathways to teacher licensure that will benefit from the reform efforts emerging from the universities. The involvement of Apple Inc. to install and sustain networked learning communities that can share exemplary practices through video document capture and sharing will add enormous capacity to our project. Our project management structure and mutually developed work plan will assure the ongoing effectiveness and collaboration for the benefit of teachers, students, and emerging leaders throughout central California.

Description of Program

GOAL 1: TO REFORM AND ENHANCE TEACHER PREPARATION PROGRAMS

Objective 1: Improve undergraduate and post-baccalaureate curriculum mathematics and science teacher candidates through the specific use of a cohort model affecting 500 future elementary teachers and 250 secondary (math and science) teachers at CSUB, CSUMB, and Cal Poly

1.1: Increase candidate knowledge and skills in research based instructional strategies

1.2: Use data to inform instructional decisions to close achievement and opportunity gaps

1.3: Utilize collaborative technologies to facilitate networked professional learning communities (PLC) and peer exchanges of best practice

1.4 Enhance integration of English language learning strategies as demonstrated by instruction practices with ELL students

Each of the reforms for teacher preparation programs will be included in all pre-baccalaureate and fifth-year credential programs of the three IHEs, as addressed below:

- **Reform element: Implement teacher preparation program curriculum changes that improve, evaluate, and assess how well all prospective and new teachers develop teaching skills using empirically-based practice and scientifically valid research about**

teaching and learning. Prospective and new teachers will understand and implement research-based teaching practices in classroom instruction and have knowledge of student learning methods.

CSUB, CSUMB, and Cal Poly will call upon faculty resources across institutions to train and update colleagues in math, science, multiple subjects, and teacher education programs on the application of empirically based practice and scientifically valid research to teach in rural schools with limited English proficient, poor, and rural students. The quality of the practices and research will be held to the highest standards, as exemplified by policy and examples of the Institute for Educational Sciences and similar institutes regarded for their quality of research methodology. Faculty will regularly review the latest research on student learning methods, engage inter-disciplinary reflection, and collaboratively decide how to address curricular content.

Faculty will produce course notes, update syllabi, and adopt curriculum resources supported by empirically based practice and scientifically valid research as well as student learning methods and their applicability to teaching in rural schools with limited English proficient, poor, and rural students. Faculty will also develop appropriate formative and summative assessments of candidate knowledge and understandings that will be a part of the outcome measures used by our external evaluator to assess the extent to which prospective and new teachers can apply better strategies and high-quality research to improved teaching practices, including the Teacher Performance Assessment required for teacher licensure.

Results of the curriculum development and assessment efforts will be seen in university-approved revisions to syllabi, course content, and course descriptions that include empirically based and research-supported methodological approaches to teaching. Following faculty training and curriculum development, prospective math, science, multiple subjects, and other teachers

will attend classes arranged around central clinical experiences, where teacher candidates will demonstrate that they understand and can apply empirically based practice and scientifically valid research when teaching in rural schools with limited English proficient, poor, and rural students. Candidates will also know and be able to teach student learning methods to these populations. During courses and the year-long practical training experience, candidates will be supported by technology to demonstrate instructional practices that are appropriate to limited English proficient learners who may be poor and living in rural settings. Our teacher candidates will demonstrate the application of empirically based, research-related instructional preparations through continuous improvement in their outcome performance assessments.

- **Reform Element: Prospective and new teachers will possess skills to analyze student achievement data and other measures of student learning and use such data and measures to improve classroom instruction.**

The CCP~TQP will call upon strong faculty resources in the respective institutions and, as needed, external consultants and specialists to train and update colleagues in math, science, multiple subjects, and all other teacher education programs to understand and convey to teacher candidates the skills needed to analyze student data and improve classroom instruction.

Candidates will learn to use data from classroom formative and summative assessments, district-based assessments that may rely on curriculum pacing of content standards with benchmark assessments, the value of common assessments to assess state standards achievement, and the ability to use district disaggregated assessments of state standards to identify instructional and learning shortcoming related to standards. Additional assessment skills will focus on English language literacy assessment and diagnosis of reading challenges. Teacher education faculty will produce course notes, update syllabi, and adopt curriculum resources that convey skills, abilities,

and knowledge of student learning methods and use of student data to improve instruction.

- **Reform element: Prospective and new teachers will possess teaching skills and an understanding of effective instructional strategies across all applicable content areas that enable general education and special education teachers to meet the specific learning needs of all students and to differential instruction for all students.**

CSUB, CSUMB, and Cal Poly faculty experts, working across institutional lines and with qualified specialists, as appropriate, will provide teaching skills and an understanding of effective instructional strategies across all applicable content areas that enable general education and special education teachers to meet the learning needs of all students, and to differentiate instruction for these students, including those with disabilities, students who are limited English proficient, students who are gifted and talented, and students with low literacy levels. Every effort will be made to provide empirically based and research valid strategies and methods appropriate for these students in the context of high-needs schools in our rural area.

Following the acquisition of knowledge on these important skills and understandings and differentiation of instruction to meet student needs, faculty of the CCP~TQP universities will enhance the curricula of their courses to convey these skills, including revisions to syllabi, course descriptions, course notes, and the selection of curriculum resources. Faculty will also prepare formative and summative assessments to measure candidate acquisition of skills and strategies for the affected student populations described above. Students will be expected to demonstrate their skills and to differentiate instruction on the Teacher Performance Assessment required for the teaching credential. Through these developments, faculty will provide teacher candidates with skills and effective instructional strategies to meet a broad array of student needs, particularly those students found in the high-needs schools of the high-need LEAs of the project.

- **Reform Element: Prospective and new teachers will learn to effectively participate as a member of the individualized education program team, as identified in section 614 (d)(1)(B) of the IDEA.**

Faculty specialists with expertise in the IDEA and the role and function of individualized education program teams and, as appropriate, consultants and school personnel who understand proper functioning of these teams will teach all faculty of CCP~TQP teacher preparation programs the knowledge and skills prospective and new teachers need to convey participation skills for individualized education program teams to teacher candidates. Subsequently, faculty will convey these skills of participation to prospective and new teachers and make adjustments to syllabi, course descriptions, course notes, and the selection of instructional resources to convey the skills of effective participation. Faculty will also develop formative and summative assessments to measure candidate acquisition of participation skills and how to develop these skills within practical training experiences. Future teachers in the programs ordinarily have the requisite content knowledge, preparation, and degrees required to teach Advanced Placement or International Baccalaureate courses successfully, and current practices ensuring this preparation will be extended to new teachers in the project.

- **Reform Element: Prospective and new teachers can successfully employ effective strategies for reading instruction using essential components of reading instruction.**

Faculty experts with deep knowledge of essential components of reading instruction – including reading effectiveness, knowledge of assessments and their use, effective use of national reading programs and their interventions, and the means to provide specialized assistance to students with particular needs, especially limited English proficient students – will convey to their colleagues the content and skills of reading instruction that must be added to

courses and practical training experiences. Following this training, faculty will update and improve reading instruction for all students in all programs, including improvements to syllabi, course outlines, course notes, and the selection of instructional resources. Faculty will learn to assess and evaluate candidate acquisition of reading instruction skills. Subsequent to instruction, all candidates will take and pass the Reading Instruction Competency Assessment (RICA), a standardized test of reading instruction based on the essential components of reading instruction.

- **Reform Element: Partners ensure collaboration with departments, programs, or units outside of teacher preparation program in all academic content areas to ensure that prospective teachers receive training in teaching and relevant content areas to become highly qualified, including teaching in rural communities and students with disabilities.**

Several content-area faculty outside of teacher education will work on the development of curriculum to assure candidates are highly qualified, including subject-matter course development and student advisement with regard to subject-matter competency. The work plan will include subject-matter faculty leading this aspect of the project; subject-matter faculty, department chairs, and deans of units outside of teacher education serving on the executive council assure that faculty of the disciplines have a strong role to play in curriculum development, both in content and relevant pedagogy.

- **Reform Element: Develop and implement an induction program**

Strategic partners of the project include the TCOE and the KCSOS, who are responsible for the development and enhancement of the induction program. Induction mentors and leadership will participate in the pre-baccalaureate PLCs (CSUB and CSUMB) as well as the post-baccalaureate online program (Cal Poly) to assure smooth transition from prospective teacher status to new teacher within an induction program. Each inductee will be provided with a

trained and compensated support provider who has the time and capacity to assist the inductee in meeting formative and summative assessments of the induction program. Development of the induction program will be led by the KCSOS local operating unit, with involvement of the operating units at the universities and the TCOE.

- **Reform Element: Develop admissions goals and priorities aligned with the hiring objectives of the high need local education agency in the eligible partnership.**

The ongoing needs assessment of LEAs and their high-needs schools will be evaluated by the TCOE and KCSOS local operating units. Further, the LEA representatives to the executive council will oversee the regular assessment of employment needs by the high-need LEAs and high-need schools within the partnership. The TCOE and KCSOS local operating units will meet at least once a semester with the LEA human resource directors to monitor projection of staffing needs and to convey those projections to the core management team, which will in turn convey to the IHEs' local operating units the need to recruit and admit. TCOE will lead the recruitment effort in response to needs identified by the LEAs.

- **Reform Element: Partners will implement program and curriculum changes to ensure that prospective teachers have the requisite content knowledge, preparation, and degree to teach Advance Placement or International Baccalaureate courses successfully.**

The faculty of the disciplines outside of teacher education, in collaboration across the three IHEs, will review requirements and expectations for teacher content preparation to teach Advance Placement or International Baccalaureate courses. The content specifications will be reviewed against course content of the approved subject-matter programs at the universities. Additional courses or enhancements to existing courses will be undertaken by the content faculty under the review of the IHEs' local operating units. As curriculum reviews and modifications are

concluded, they will be presented to the executive council for review. Faculty and administrative Executive Council members of the content disciplines will advise the curriculum development.

▪ **Reform Element: Update faculty expertise and instruction in reform-based teacher education courses: Inclusion of universal design for learning**

Faculty experts in universal design for learning at CSUMB, CSUB, and Cal Poly will provide faculty training seminars for other faculty to assure the inclusion of universal design for learning in course experiences, seminars, and practical training exercises. Syllabi, curriculum resources, and outcomes of teaching methodology courses in math, science, and multiple subjects will be modified to include universal design for learning as an embedded feature of methodology curriculum and teaching. University-approved revisions to syllabi, course content, and course descriptions will show evidence of embedded universal design for learning in methodology course syllabi, curriculum resources, and candidate assessments. Prospective math, science, multiple subjects, and other teacher candidates will understand and use principles of universal design for learning to meet the needs of limited English proficient, rural, and poor students in affiliated high-needs schools. Finally, teacher candidates will demonstrate application of universal design for learning preparations, planning, teaching, assessment, and continuous improvement in outcome performance assessments.

▪ **Reform Element: Update faculty expertise and instruction in reform-based teacher education courses: Positive behavioral interventions and support strategies**

CCP~TQP will call upon strong faculty resources to train and update colleagues in math, science, multiple subjects, and other teacher education programs to understand and convey to teacher candidates the positive behavioral interventions and support strategies applicable to teaching in rural schools with limited English proficient, poor, and rural students. Teacher

education faculty will produce course notes, update syllabi, and adopt curriculum resources that convey skills and abilities of positive behavioral interventions and support strategies applicable to teaching in rural schools with limited English proficient, poor, and rural students. Faculty with mastery in the use of positive behavior interventions and support strategies will make adjustments to their curricula, resulting in university-approved revisions to syllabi, course content, and course descriptions that include positive behavior-management and support strategies for limited English proficient students of poverty in poor and rural high-need schools.

Following extensive curriculum revision efforts, CSUB, CSUMB and Cal Poly faculty will convey skills and knowledge for effective use of positive behavioral interventions and support strategies to teacher candidates who are or will be teaching in rural schools in classrooms with limited English proficient, poor, and rural students. Courses of study, particularly those that support teacher-candidate growth and development of skills during the year-long practical training experience, will convey to teacher candidates, with the support of technology, the use of positive behavioral interventions and support when teaching limited English proficient students in poor and rural high needs schools. These courses will be arranged to support the re-conceptualized clinical experiences that are described in a later section.

CSUB, CSUMB and Cal Poly teacher education faculty who teach the pre-baccalaureate and fifth-year credential curriculum in professional education will guide teacher candidates to: demonstrate application of positive behavior interventions and support strategies in instructional preparations, planning, teaching, and assessment; and continuous improvement in outcome-performance assessment skills and knowledge to employ essential components of reading instruction to meet the needs of all students (including those with disabilities, who are limited English proficient, who are gifted and talented, and who have low literacy levels) in rural schools

in classroom with limited English proficient, poor, and rural students.

GOAL 2 –IMPROVE AND SUSTAIN A HIGH-QUALITY CLINICAL EDUCATIONAL PROGRAMS FOR PRE-SERVICE AND NEW TEACHERS

Objective 2: Enhance and Integrate a Continuum of Clinical Experiences

2.1 Restructure clinical/field experiences to emphasize early and significant learning among prospective teachers at school sites based on a collaborative Professional Development School model focused on high-performing and high-poverty schools identified through student achievement data

2.2 Expand new teacher induction to include K-12 mentor teacher activities aligned with university roles and recognition

2.3 Increase the use of research based strategies implemented in classrooms using a coaching support model and technology observation tools

Reform Element: CSUB, CSUMB, Cal Poly, and affiliated high-need LEAs will plan year-long clinical experiences in high-needs rural schools that enroll poor, limited-English proficient students

University teacher education faculty, master teachers, university supervisors, administrators, and induction support providers will participate in re-conceptualizing supervision to include shared responsibility for instruction with teacher candidates and master teachers.

Teacher education curricula at the partner universities will be adjusted to accommodate a full-year practical training experience of increasing intensity and duration. University teacher education faculty, school administrators, and teachers in affiliated high-need schools will assure that all pre-baccalaureate and fifth-year candidates at the CSUB and CSUMB will be enrolled in the year-long practical training experience during their senior year by Fall 2012; Cal Poly

candidates will be enrolled during the last two quarters of the online program.

University teacher education faculty, master teachers, and teacher candidates will share responsibility for the instruction of classes of P-12 students, including planning, instruction, and student-evaluation activities. Every effort will be made to place teacher candidates in schools of the community from which they came and where they will ultimately pursue teaching careers.

Reform element: Comprehensive involvement in the operation and supervision of the clinical year-long experience by school administrators, university faculty, teachers, induction leaders, and university supervisors.

The university faculty and colleagues of high-need districts and schools will plan new roles and responsibilities leading to close supervision of all aspects of the instructional process; university faculty will act as preceptors, and direct supervision roles will be established for master teachers, principals, and induction support personnel. Teacher education faculty will supervise as co-team leaders for a class of students. All pre-baccalaureate students will be enrolled in the year-long practical training experience during their senior year by Fall 2012

University teacher education faculty, master teachers, university supervisors, administrators, and induction-support providers will participate in re-conceptualizing supervision to include shared responsibility for instruction with teacher candidates and master teachers. CSUB and CSUMB faculty, school administrators, teachers, and master teachers, under leadership from principals and lead university faculty-master teacher, will share instructional roles to university faculty and teacher candidates, with responsibility for daily instruction by faculty. Cal Poly university faculty, university supervisors, school administrators, master teachers, and induction-support providers will support candidates during daily instruction.

Reform Element: University faculty, master teachers, and teacher candidates will share

instructional responsibilities for a model classroom throughout the school year.

Close supervision of all aspects of the instructional process will be conducted by university faculty acting as preceptors, and the establishment of a direct supervision role for master teachers, principals, and induction-support personnel. Teacher education faculty will supervise from the position of co-team leader for a class of students, with cooperating or master teachers co-leading in this role. University teacher education faculty, school administrators, and teachers in affiliated high-need schools will plan and develop the experience so that all pre-baccalaureate or fifth-year credential students at CSUB and CSUMB will be enrolled in the year-long practical training experience during their senior year by Fall 2012. University teacher education faculty, master teachers, university supervisors, administrators, and induction-support providers will participate in re-conceptualizing supervision to include shared responsibility for instruction with teacher candidates and master teachers. University teacher education faculty, master teachers, and teacher candidates will share responsibility for the instruction of classes of K-12 students, with each sharing responsibility for planning, instruction, and students. Finally, University faculty, school administrators, teachers, and master teachers, under leadership from principals and lead university faculty-master teacher, will share instructional roles to university faculty and teacher candidates, with responsibility for daily instruction by faculty.

Cal Poly university faculty, university supervisors, school administrators, master teachers, and induction-support providers will support candidates during daily instruction.

Reform Element: Re-scheduling of senior year coursework to complement and support the development of teacher candidate knowledge and skills during year-long clinical experience

Teacher education courses with reform modifications will be scheduled to support year-long clinical experience, with clinical experience as the grounding centerpiece of the curriculum.

Throughout the clinical year, teacher candidates will encounter course experiences that complement their evolving roles in clinical experiences with integrated problem-based studies. University teacher education faculty, school administrators, and master teachers in high-need schools will plan curriculum integration of course offerings scheduled and redesigned to correspond with problem-based approaches and issues to be encountered through the year.

University teacher education faculty, master teachers, university supervisors, administrators, and induction-support providers will participate in re-conceptualizing supervision to include shared responsibility for instruction with teacher candidates and master teachers. University teacher education faculty, master teachers, and teacher candidates will share responsibility for the instruction of classes of P-12 students with each sharing responsibility for planning, instruction, and student evaluation activities. Master teachers will share responsibility for daily instructional roles with university faculty and teacher candidates

Throughout the project, mentor teachers will work with secondary math and science teachers, using researched-based coaching strategies. Opportunities for mentors, team leaders, and teacher participants to develop observation skills will be provided by all partners. For mentors doing observations, the C3 coaching tool (developed by CTAP Region 8 and Kern County Superintendent of Schools) will be used. C3 is a coaching collaborating and data-collection tool designed to help get an accurate snapshot of the classroom, analyze data, and share concepts with others. This web-based application can be used with most web browsers and is optimized for use on an Apple iTouch or iPhone. Many of its features can be customized to fit the needs of a district or school site and saved into templates.

C3 supports charting and printed reports, aggregating by school, subject, or grade level. Each observable activity can be simplified or extended for everything from a 5-minute walk

through to a series of comprehensive visits. The goal of the project is to develop templates that teachers can use in their own classrooms to observe student progress and to use as a self-observation tool. Observable content is based on effective research and can be amended to provide for future strategies and localization.

Induction Programs for New Teachers

Teacher quality is the most important school-related influence on student learning. The quality of a child's teacher influences learning and academic preparation leading to success in subsequent grades. The National Commission on Teaching and Americas Future *No Dream Denied* report recommends that "well planned systematic" induction programs for new teachers be created "to maximize their chances of being successful in any school setting, but it is especially critical in high-need schools."

The CCP~TQP project will implement research-based strategies developed by the Santa Cruz New Teacher Center (NTC) to supplement and strengthen current teacher-induction programs. County office of education LEAs will work with participating school district administrators and university partners to develop highly qualified new teachers to serve central California's rural classrooms by improving new teacher practice, reducing teacher attrition, and significantly impacting student learning. The project's induction coordinator has received extensive training and support resources from NTC. Strategies and theory received during the 2008 NTC 30-hour Induction Institute and additional training and consultation received from NTC were utilized to frame this proposal. Converging agreement from policy and research communities regarding what constitutes a quality induction program includes: Rigorous mentor selection process; Professional development, training, and ongoing support for mentors; New teachers matched with mentors whenever possible by grade level and subject matter; Protected

time for mentors to meet with and observe new teachers; and Multi-year mentoring.

Mentor Selection Reform

Just as the classroom teacher is widely considered the essential ingredient for student learning, the mentor teacher is the most important feature of any high-quality induction program. Quality mentoring requires careful selection, training, and ongoing support. Not every outstanding classroom teacher is necessarily a talented mentor. The following research-based NTC selection criteria (http://www.newteachercenter.org/pdfs/MAGA_flyer.pdf) will be used to rigorously select mentors for this project, including strong intrapersonal skills, credibility with peers and administrators, a demonstrated curiosity and eagerness to learn, respect for multiple perspectives, and outstanding instructional practice.

Mentor Professional Development. Mentors will meet 4 hours per week, for a total of 130 hours of professional development training focusing on the pedagogy of mentoring. Mentors will take part in professional development to assist in translating knowledge to adult learners and professional colleagues. High-quality and ongoing training as well as a PLC will be utilized to help mentors develop the skills to identify and translate the effective teaching elements to beginning teachers serving rural schools with limited English proficient, poor, and rural students.

New Teachers Matched to Mentors. New teachers will be matched with mentor teachers by grade level and subject matter whenever possible. Induction coordinators will work with district partners to ensure that new teachers for math, science, and special education are matched by subject matter; other content areas will be matched by grade level and subject matter. Mentor teachers will have designated time to focus on beginning teacher development. The CCP~TQP mentor teachers and their beginning teachers will have 1.25-2.0 hours per week to allow for the most rigorous mentoring activities. The time will be protected by teachers and administrators.

Multi-year Mentoring. Mentoring will be intensive and ongoing. The project will include 2 years of mentoring but will also pilot, on an experimental basis, a 3-year induction-support model for new teachers in the content areas of math, science, and special education to improve teacher practice and consequently student achievement. NTC and other research suggest that most deep learning about instruction (through mentoring) happens during the second and third year of teaching. The fact that beginning teachers tend to be less effective and are concentrated in schools and districts with large numbers of disadvantaged pupils further exacerbates the achievement gaps that the project partners seek to eliminate.

The participating partner schools currently provide some sort of induction-support program for new teachers, but it has not bridged the achievement gap, as evidenced by the number of districts in this region that are in Program Improvement. In *From Good to Great*, Jim Collins writes that “good” is often the enemy of “great”. Simply requiring new teachers be assigned a mentor without implementing an intensive teacher induction model to mentor or program quality has not led to success.

The CCP~TQP project will involve faculty in the use of empirically-based practice and scientifically valid research on teaching and learning to improve the current induction model and move toward networked high-quality induction that leverages both NTC-existing research as well as build improvements in the model to recognize unique contexts of rural schools.

The county office LEA teacher development programs have the capability and commitment to provide recruitment, pre-service training, ongoing professional development, and mentor support for the new teachers hired by high-need district partners. The Tulare County and Kern County offices of education and the California State University associates have an established collaborative partnership within the community for teacher development and new-

teacher support. University, county offices of education, and district representatives meet regularly to participate in our joint dedication to maintain and expand new teacher development.

GOAL #3: TO DEVELOP AND IMPLEMENT EFFECTIVE MECHANISMS TO ENSURE THAT THE ELIGIBLE PARTNER DISTRICTS ARE ABLE TO RECRUIT QUALIFIED INDIVIDUALS TO BECOME HIGHLY QUALIFIED TEACHERS.

Objective #3: Recruitment & retention of qualified teachers (also addresses GPRA Indicator 1.1.

3.1 Recruit new talent into teaching, including undergraduates and community college students.

The CCP~TQP will focus on outreach to senior high students and teacher preparation initiatives presently at California's community colleges, i.e., "Teach For Tomorrow," BECCA (Bilingual Educators for Career Advancement), Mini-Corp, and Intro to Teaching Classes. Community-college students who complete associate's degrees and agree to teach in high-need areas will be recruited. Creating sustainability, CCP~TQP will support the education of highly qualified minority teachers in teacher training programs at community colleges and 4-year universities. Further, CCP~TQP will support a process to nurture the development of teachers beginning in senior high school. The proposed new partnership will develop a "Grow Your Own Model," with systemic change at both the K-12 level and the university level in recruitment, preparation, and support of highly-qualified minority teachers.

3.2 Place and support new teachers with the documented ability to raise student achievement and close achievement gaps.

The California Teacher Recruitment Program (CTRP) has developed a model that has effectively referred over 3,000 teachers, resulting in 2,174 hires of "Highly Qualified Teachers" from November 2006 to April 2008. CTRP will lead the recruitment component of CCP~TQP using a customized Customer Management System to refer teachers who complete the reform

programs via strategic marketing; attendance at research-based events; targeted information sessions in community colleges, other IHEs, community events, and local schools; and then will coordinate with the partner IHE and county office teacher fairs. CTRP will train partner institutions on data collection for the purpose of placement and retention of project teachers.

3.3 Establish a nationally replicable recruitment program in math, science, and special education.

The CTRP had its inception in 2001 as the Central California Teacher Recruitment Center (CCTRC), serving over 300 districts with four satellite offices (Visalia, Ventura, Stockton, and Monterey). CTRP has built partnerships with districts, county offices, private entities, community programs, and universities, and it requires strategic marketing to bring individuals into the teaching profession. The program has built capacity, resources, and a mechanism for partnership to market, recruit, and provide required program application information to potential teacher candidates. By building a candidate pool of ethnically diverse candidates in the high-need areas, the recruitment center screens and refers highly qualified candidates to schools and districts. In 2004, four out of six recruitment programs closed their doors due to funding issues, but the CCTRC sustained its program in the Agricultural Heartland, spanning from Kern County to San Joaquin County and serving 119 school districts. In 2002 and 2005, the CCTRC was awarded U.S. Department of Education Teacher Quality Enhancement Recruitment grants, and three Transition to Teaching grants in 2001, 2002, and 2004. CCP~TQP will leverage CTRP's success to recruit and prepare teachers through reformed programs to meet the needs of rural schools and classes with limited English proficient, poor, and rural students.

Literacy Training: Enhancing the Literacy Skills and Knowledge

Objective: Improving skills and knowledge of pre-service and in-service teachers to provide effective literacy instruction in science and mathematics.

Outcomes: Improved literacy instruction as reflected in Teacher Performance Assessment (TPA) and Performance Assessment for California Teachers (PACT) and strengthened literacy instruction, as reflected in evaluation by field supervisors and employers and annual surveys.

Literacy is essential to students' social and economical advancement. However, a large number of children in America – and especially those in the rural regions served by this project – do not have the literacy skills to meet the demands of the increasingly competitive global economy. Thus, it is critical that teachers understand the nature of literacy development and the role of instruction in facilitating literacy (Snow, Burns, & Griffin, 1998). In 2000, the National Reading Panel (NRP) issued a report responding to a Congressional mandate to help educators and the public identify key skills and knowledge contributing to reading achievement. Using research-based evidence, the report identified two major approaches proven to be effective for developing literacy skills: Direct Explanation and Transactional Strategy Instruction. The Direct Explanation strategy focuses on the teacher's ability to help students develop literacy skills using problem-solving techniques, such as asking the students to find the main idea of the text. The Transactional Strategy Instruction approach develops the teacher's ability to provide students with opportunity to interpret the text for deeper understanding.

These research-based strategies are supported in the work this project and will accomplish preparing future teachers to meet the needs of limited English proficient, rural, and poor students in affiliated high-needs schools. Pre-service teachers in this project will acquire knowledge about literacy development through coursework and the central focus of the year-long field experience. Research-based professional development in person and through networking communities will focus on literacy acquisition associated with increase in student achievement (Armbruster, Lehr, Osborn, 2003).

While research provides insights about literacy acquisition, many questions remain unanswered regarding the learning of limited English proficient, rural, and poor students in high-needs schools. Rigorous experimental and qualitative research in literacy will be infused throughout this project. Building on best-practice educational reforms, the CCP~TQP will address the following research questions: (a) Can reading strategies be successfully incorporated into science and mathematics instruction? (b) How can pre-service and in-service teachers be taught to provide the most optimal instruction in improving students' literacy?

Literacy will play a major component in the various programs and services provided for pre-service and in-service teachers. Below are activities that will improve teachers' skills and knowledge about teaching literacy to limited English proficient and ELL students in rural and poor high-needs schools. Professional development in reading/literacy in the content areas will be provided by the CSU Center for the Advancement of Reading (www.calstate.edu/CAR/). CAR serves the CSU system in its work preparing outstanding literacy educators for the P-14 schools. CAR facilitates faculty communication and research; disseminates research and policy information; fosters connections among the CSU literacy faculty, P-12 partners, and public education stakeholders; and serves as a forum for the interchange of public and academic interests. CAR sponsors activities to strengthen the reading/literacy teaching skills of candidates: ***(A) Implement instruction that incorporates the essential components of academic literacy in the content areas.*** CAR will conduct training sessions for candidates, university faculty, 6-12 mentor teachers, and field supervisors (including university supervisors and public school master teachers). Individuals involved in coursework (i.e., faculty) and clinical experiences (i.e., 6-12 mentor teachers and field supervisors) will participate with candidates in sessions so that candidates' academic learning and field experiences are integrated and strengthened. Sessions

will provide participants with a richer understanding of the theoretical underpinnings and research bases of academic literacy, including critical reading and instructional strategies for expository reading and writing. CAR will address the roles, development, assessment, and systematic instruction for each topic. Furthermore, implications for English Learners and struggling readers will be addressed in depth.

(B) Use assessments as a basis for literacy instruction and provide effective literacy

instruction. Assessment and research-based instructional strategies regarding expository reading and writing will be included in training sessions. Candidates will develop a breadth of understanding about the purposes, strengths, and limitations of a variety of assessments, including screening and diagnostic instruments to determine students' literacy levels, strengths, and areas of difficulty; formative assessments tied to the curriculum; and summative assessments at the classroom, district, and state levels. Candidates will work in teams with 6-12 Mentor Teachers and university faculty to review data and determine appropriate classroom instruction (including individualized, intensive, and targeted intervention) to improve all students' academic literacy. In addition to the training sessions, CAR will convene quarterly meetings of faculty and field teams in the grant to identify and disseminate effective processes for engaging candidates in high-quality clinical experiences in assessment of students and provision of appropriate instruction for the range of learners.

(C) Integrate literacy skills in the classroom across subject areas. CAR will collaborate with the grant's partners to work with campus teams to identify and disseminate effective processes for engaging candidates in high-quality course and clinical experiences in which discipline-specific literacy is addressed across subject areas. Teams will include subject-matter university faculty, who will enhance the literacy practices in their own subject-matter university courses,

and teacher preparation faculty and field supervisors, who will mentor candidates.

Cal Poly faculty who are experts in the area of secondary literacy will participate in the virtual online PLCs and the study-lesson activities related to reading. District teachers with certification to teach the CSU Expository Reading and Writing Course will also assist teacher candidates and new teachers in addressing the challenges in the area of reading through online PLC interactions.

GOAL 4 – PARTNERS CO-DEVELOP AND CO-IMPLEMENT PROFESSIONAL DEVELOPMENT TO SUPPORT TEACHER LEADERS, SITE ADMINISTRATORS, SUPERINTENDENTS, UNIVERSITY FACULTY AND DOCTORAL CANDIDATES WITH RESEARCH BASED BEST PRACTICES THAT SUPPORT PARTERS’ SCHOOL IMPROVEMENT AND EDUCATIONAL LEADERSHIP EFFORTS.

Objective #4: Leader Preparation:

4.1: Train teacher leaders, principals, and other leaders in distributed leadership, mentoring, technology integration and management approaches to increase achievement & teacher retention

4.2: Enhance IHE and LEA facilitation skill development to support the collaborative model of networked learning for PD, mentoring and other capacity building efforts

4.3: Develop a technology enhanced induction and mentoring network that spans the career arc for teachers, teacher leaders and rural administrators

4.4: Produce and disseminate research findings and field-tested processes and products by network participants

School leadership is increasingly seen as a “not doable,” with too many expectations to be met by one person. Students are more diverse than ever, and they continue to bring many of society’s problems to the schoolhouse door. Qualified teachers are harder to find, particularly in

the areas of math, science, and special education, and technology plays an ever-increasing role in education. Safety will likely remain a top concern, and resource issues and creating time and space for professional development of administrators and teachers creates obstacles to implement what we know are successful strategies. Perhaps most importantly, academic achievement is increasingly tied to professional accountability of administrators.

Balance these pressures with the emerging literature about factors associated with successful leaders. Marzano and associates (2003) reviewed over 30 years of research about the effects of leadership practices on student achievement. After analyzing 5,000 studies, they identified 21 leadership responsibilities significantly correlated with student achievement and generated a “balanced leadership framework,” which the CCP~TQP will use to reassess existing PD and academic preparation programs in the network. Effective leadership means more than knowing what to do; it means knowing when, how, and why to do it, as reinforced by Leithwood et al. (2008).

The CCP~TQP is designed to offer a range of services spanning a variety of participants, including those enrolled or preparing to enroll in school leadership programs leading to careers as superintendents, principals, early childhood education program directors, or other school leaders. CCP~TQP will also support existing school-site leaders and superintendents of high-need LEA partnership districts and IHE faculty. Research-based professional development in various delivery modes, including web and hybrid technology, will be co-created and co-delivered across the partnership to better prepare leaders to improve in the areas of student achievement, teacher and administrator retention, resource utilization, technology integration, networking infrastructure, assessment, and data use aligned to needs of high-need LEA schools.

ISLLC guidelines will be used to ground the fidelity of our efforts and ensure that we

meet national standards. Facilitation skill development using a synthesis of models adapted for rural and networked settings, including Wellman's Adaptive schools model and job-alike mentoring, will be embedded concurrently and will become the foundational aspect of effective communication within professional learning communities. These facilitation skill development activities will include participation and leadership by network members supported initially in some areas by outside expertise. The sustainability will be realized by creating the capacity within the grant partners to continue this type of training.

The PLC model that frames this grant will focus on data utilization as the key ingredient to improving student learning and bridging the achievement and opportunity gaps of students. The eight-step Datawise approach developed by Murnane and Boudett (2005) at Harvard's Graduate School of Education will serve as our original stimulus.

At the project school site level, each of the five key partner sites will use data teaming to generate logic models for annual review of the alignment of school-improvement plans and student-performance results. The executive leadership team will review data and implement changes in light of these data-enhanced logic models and use this process to inform instructional decisions at the classroom, school, and network levels as well as grant management. How to use data in this way will be a standing item on the agenda of every meeting, in-service, and networked conversation and reinforced at the grant level with CCP~TQP annual data retreats.

The goal is to institutionalize data use for program improvement into the organizational culture of every partner, thus realizing a higher level of sustainability than currently exists. In addition, faculty from Arts and Sciences and Education will participate in using data to enhance K-18 instruction. This learning by IHE faculty will be added to course syllabi and become part of the regular curriculum in teacher preparation courses and part of partner IHE unit assessment

systems. IHEs will use the same strategy to improve instruction in teacher preparation programs.

A climate of collaboratively designed and delivered professional development, with a focus on improving student academic achievement and the development of effective instructional leadership skills, needs to start with creating that vision within and across district leadership. Deal and Peterson (1999), in *Shaping School Culture*, presented the need for the leader; in our case, superintendents of high-need LEAs will set the example.

Using a networked approach - both physical and virtual to leverage scarce human, fiscal, and material resources – this project will be supported by established organizations, such as the Association of California School Administrators, Springboard Schools, and business partners, such as Apple Inc. and the California Business Roundtable, a collaborator with the Center to Close the Achievement Gap.

Our initial survey with superintendents in the partnership region suggested that the majority would attend and see the need for such an activity as an “Executive Leadership Center.” This center would use the PLC model mentioned earlier and be dedicated to furthering the capacity for distributed leadership in the region – on both physical and virtual levels. This collaboration will involve superintendents and other IHE and LEA faculty and administrative partners. Masters and doctoral leadership candidates would be included to build a more sustainable administrative pipeline in the three-county service area.

Given our preliminary needs assessment, networking communities will address such topics as: (a) understanding pedagogical and assessment skills needed to support successful classroom instruction; (b) using data to evaluate instruction and improve teacher and student learning; (c) building capacity by managing human and technical resources (parents, community members/leaders, businesses) to improve student academic achievement to leverage additional

resources; and (d) collaboratively creating the capacity to maintain this network and evolve facilitation skills which ensure sustainability beyond TQP funding.

In terms of existing capacity, all three IHEs have state-accredited clinical education programs that lead to full State Administrative certification. This two-tier leadership preparation and induction program adheres to the CTC requirements, where leaders participate in a 24-unit program with field experience leading to a Certificate of Eligibility. Once a position as an administrator is attained, the new administrator must complete the Professional Clear Administrative Services Credential, with a minimal requirement of 2 years with mentoring and support required along with coursework or CTC-approved programs leading to the advanced credential. This grant will improve these programs by enabling partners to co-design a distributed network of supplemental PLC leadership opportunities in rural central California to complete their Professional Clear Credential.

Selection of Individuals for the Leadership Program. Teacher leaders participating in the activities of this grant will be natural recruits to the school leadership programs at CSUB, CSUMB, and Cal Poly. The activities of the eligible partnership districts conducted through this grant will help identify those individuals, including under-represented populations, who have the skill set and desire to serve as superintendents, principals, or other school administrators in rural and geographically isolated communities and school leader shortage areas.

In view of the large geographic region of central California supported by this grant, we have a substantial population of mid-career professionals from other occupations, former military personnel, and recent college graduates with a record of academic distinction who will be primary recruits by partnership districts. Selection criteria will include teacher leaders and principals who are partners in eligible high need districts. Recruits will be encouraged to enroll

in the Education Administration program at one of the partner campuses. Requirements for these programs include (a) graduate of an institution of higher education; (b) current teacher/educator with a minimum of 3 years school experience who is interested in becoming a school leader; (c) and highly qualified, as identified by passage of the CBEST. New recruitment strategies to be developed by the partnership include how to identify mid-career professionals from outside the field of education with strong content knowledge or a record of professional accomplishment.

II. Quality of the Project Evaluation (25 points)

Overview of Evaluation

The evaluation will be led by an independent evaluator, Evaluation & Development Associates LLC, in collaboration with internal evaluation resources at the CSU system level as well as by each IHE and LEA partner. The evaluation plan and team is described in detail in Appendix D. Both internal and external evaluation representatives have participated throughout the development of this proposal. This includes the collaborative design of a quasi-experimental time series design in which participating teacher candidates and program completers placed in high needs project schools are matched with comparisons using historical data from campus-based 2008-09 baseline data across the CSU system of 23 teacher training institutions. The quasi-experimental design will be used to study the project impact on teacher candidates and their students. Over the 5-year period, teacher candidates will be assigned to the treatment group based on factors related to background, demographic characteristics, and academic preparation.

Using a model that synthesizes the work of Patton (2008), Stake (2004), and Fetterman (2005), the evaluation plan will examine the extent to which objectives and related outcomes have been accomplished, the processes and contexts that support the project's effectiveness, obstacles to attaining planned objectives, and corrective actions to address problems. This comprehensive and systematic approach is oriented toward utilization, responsiveness,

empowerment, and revealing the complex layers that are invariably generated by projects of this nature. The result will be an iterative process designed to use systematic and triangulated data sources to ensure continuous improvements at formative and summative stages. The expected outcome is increased evaluation capacity and institutionalization across the partnership. By leveraging internal and external evaluation resources, the complexity of a consortial grant such as this one can be viable. Qualitative and quantitative data can be regularly collected, analyzed, and used for data-enhanced decision-making to address research and evaluation questions.

Linkages with Research

Evaluation will be enhanced with research being conducted by the partners. Three major research themes will address candidate/new teacher impacts, student impacts and partnership infrastructure sustainability. This will serve as way to orient research by PLC as well as coalescing research conducted by faculty and masters and doctoral students across the partnership. The following research questions will frame the study:

1. Do project candidates and new teachers demonstrate improved content knowledge, increased use of research-based instructional strategies, and better preparation for addressing the needs of all learners than comparable candidates and new teachers not in the project? How do the cohort, PLC, and mentoring models contribute to these outcomes?
2. What impact is found on achievement of those students whose teachers were trained and supported during their early teaching by the grant versus non-project teachers? And when do impacts on student outcomes emerge?
3. Do the roles and responsibilities of IHE and LEA members change as professional learning communities develop at school sites as well as across the partnership network? What role does technology play in this? How sustainable are project-created collaborative networks?

What infrastructure, resources and policies are required to facilitate sustainability of successful elements?

The sample for investigating impacts on K-12 student achievement will include matched comparison groups of students at treatment and comparison sites. Treatment and comparison sites will meet the qualifications as high need schools. A multifactor matched-pair methodology will be used in the evaluation because random assignment of teachers is not feasible and to minimize the possibility of baseline differences between the treatment and comparison groups influencing findings. The comparison group will be defined by similarity of poverty, ethnicity, and English proficiency to ensure the comparison group is equivalent and to capitalize on the potential benefits of having multiple teachers from one school learning together as a group.

Each student having a project teacher at treatment schools will be matched with a student from comparison schools using a two-step protocol. First, a set of primary matching variables will be used to create a group of possible matched pairs. The primary matching variables will be: Grade level, Free and Reduced Lunch Status, Language Status, Special Needs Status, and Gender. To create the best possible matches, a second set of criteria will be used as a supplement to the primary matching variables. California Standards Test (CST) scores and ethnicity will be included in the second level match process. Using all of the matching variables, the comparison students representing the best matches will be selected for the study.

Analyses of student baseline data will be used to establish pretreatment comparability between the treatment and comparison groups. Measures of student achievement at all grade levels will include CST math and reading scores. At higher grade levels, other achievement measures such as CAHSEE scores and the CSU Early Assessment Program (EAP) will be used in analyzing impacts on student achievement.

Data Collection

Quantitative and qualitative data will be collected regarding the project objectives as well as project management, partner, and support systems. Data collection will include the following longitudinal datasets already in place: K-12 student performance data using California's CST, standards-based teacher performance based assessment across CSU system's teacher preparation programs which are aligned to national standards (e.g., ISLLC, ISTE, NCATE, NSDC), including candidate standardized tests dealing with content and pedagogy knowledge as well as application skills (TPA/PACT); rubric-based teaching portfolios and classroom and coaching observations; district and university financial, performance and demographic databases; action research patterns. Specifically, the CSU Center for Teacher Quality has been collecting and analyzing comprehensive online surveys of first-year teachers and their employment supervisors across the 23-member CSU colleges of education.

Just for the Kids-CA is conducting, as part of the CSU Center to Close the Achievement Gap, Best Practice Audits and methodology to collect data about teacher implementation of best practices. California Technical Assistance Project will be responsible for disaggregating their statewide database to supply data regarding the percentage of teachers trained to integrate technology effectively into curricula and instruction, including technology consistent with the principles of universal design for learning; and to use technology effectively to collect, manage, and analyze data to improve teaching and learning for the purpose of improving student academic achievement.

The external evaluation will work with IHE and LEA partners to build the evaluation capacity and sustainable infrastructure for longitudinal studies of project new teachers in their high-needs schools. New data collection tools will include interviews, questionnaires, focus

groups, online surveys of partners, logic modeling, and facilitation rubrics. Specific performance measures are summarized in the detailed evaluation plan in Appendix D. As can be seen in , the project evaluation aligns measurable objectives across four goals with clear outcomes and specific measures. We will assess outcomes that relate to teacher preparation and student achievement.

Baseline 2008-2009 data and all outcome measures will be collected in the spring and examined annually. This will allow for analysis of whether the project might produce improved results on metrics of teacher preparation quality without subsequent improvement of student achievement outcomes, and whether adjustment is needed in the metrics of quality or in the continuous improvement of the content and pedagogy of the preparation programs themselves.

The Center for Teacher Quality will compile, analyze and report program-specific outcomes through the annual CSU System-wide Evaluation of Teacher Preparation, which compiles comprehensive evidence of program effectiveness from recent graduates and their employment supervisors. Student-level scores on CELDT and on CST will be compiled in all subjects of interest to the consortium.

Data Analysis

Multiple regression statistical techniques will be used where possible for the quantitative data analysis. End-of-year achievement and gain scores of students will be examined to assess the impact on achievement of a student's having a project participant as a teacher. Scores will be disaggregated by sub-groups (e.g., racial-ethnic group, language background and status, special needs students) and core subjects to assess increased achievement among all students. These data will be correlated with documented improvement of teaching practice to analyze causality as well as possible gaps between desired teacher-quality indicators and subsequent student

achievement outcomes.

The evaluation will be designed to provide performance feedback and to permit periodic assessment of progress toward achieving the projects' intended outcomes. The Project's Core Management Team, Executive Committee, and project staff have planned procedures to ensure use of these data in data-driven decision making and continuous improvement. The project evaluation is designed to address all teacher outcome measures designated in section 204(a) of the Higher Education Act. In addition, the project will participate fully in the collection of all federally required data for meeting annual and long-term GRPA requirements.

Ways in which the project impacts K-12 students and candidates and new teachers in relation to their prior experience and background will be of particular interest. In addition, variations in impacts across school sites will be examined, with attention to factors that facilitate or impede student achievement in PLC sites. Cross-tabulation will be carried out by major subgroups (e.g., traditional student teachers vs. alternate routes, first- vs. second-semester field experiences, each year of induction).

Qualitative data on teaching and learning and other factors will be analyzed using scoring rubrics that reflect project objectives. Open-ended answers in digital portfolios, survey, focus group, and interview items will be analyzed using content analysis. Using grounded theory, patterns and themes found in the survey data can be triangulated with findings of the interviews, focus groups, and site-visit observations and quantitative data.

Reporting of Evaluation Activities and Use of Evaluation Results: The evaluation reports will serve an accountability function by demonstrating the outcomes associated with the project. Implementation challenges and obstacles will be identified and specific approaches that were successful will be examined as a foundation for learning about effective strategies for replication

in other settings. To provide feedback for continuous program improvement, results will be reported by the evaluation team representatives on a quarterly basis with the management team to support data-enhanced decision-making. In addition, an annual data retreat, led by the external evaluator and internal evaluators, will be held each August with the management team to review overall annual impacts and collaboratively develop annual work plans. Reporting evaluation activities and results will be continuous throughout the project.

Once negotiated, we will implement the plan (seek answers to contextual, formative and summative questions) and present evaluation findings to appropriate audiences including project managers, TQP program officers, and the Project Advisory Board. We foresee annual 524b reporting addressing GPRA indicators and collecting data for the national evaluation TQP study. The external evaluation will also coordinate follow-up quarterly planning sessions with the Executive Committee for the evaluation findings to be useful to program decision makers.

III. Significance (20 points)

The CCP~TQP is designed to produce significant impact for the advancement of theory, knowledge, and practices focusing on the connections between improving teacher quality and student achievement in science, mathematics, special education, and in teacher education in general. It is unique compared to other educational reforms by its integration of the comprehensive partnerships between three IHEs and LEAs, using research-based school reforms associated with positive student-learning outcomes. The proposed partnerships of three IHEs, two county offices of education, and numerous high-need districts will be the first in California to achieve comprehensive reform affecting the high-need and rural school districts.

Systemic Change and Improvement

Significant and long-lasting changes in preparation of teachers and school leaders

education at three universities will arise from major changes to the curriculum and the development of a new model for clinical training in teacher education based on laboratories of practice in which evidence-based reforms are designed and tested. The changes will be profound, affecting every aspect of teacher education at CSUB, CSUMB, and Cal Poly. Further, the involvement of the county offices of education and the high-needs schools will assure that the realities of teaching in challenging settings are addressed through the involvement of teacher education faculty as instructors in K-12 school settings.

The PLCs for teacher education, networked through assistance from Apple Inc., will provide capacity to link rural schools to each other, to their county offices of education, and to the faculty at three universities. Further, the establishment of a high-quality induction program based on a model of continuous improvement using student achievement data will lead to support for, and retention of, new highly qualified teachers in high-needs schools.

The CCP~TQP partnership will extend to the over 50 high-need districts within central California. The comprehensive partnership between IHEs and LEAs addresses the most pressing issue in the U.S. education system: recruiting highly qualified candidates to teach science, mathematics, and special education; retaining teachers to build a stronger work force for the teaching profession; improving teacher quality by providing effective professional development; and developing effective leaders to sustain educational reforms at the high-need school sites.

The ultimate goal is to improve student achievement in science and mathematics and strengthen the performance of special needs students. The laboratories of practice will build on evidence-based research on educational reforms, focusing on universal design for learning positive behavior intervention scientifically-based instructional practices, differentiated instruction, effective strategies for reading instruction, and data-based decision making processes

(Holcomb, 1999; Schmoker, 1999; Johnson, 2002; Love, 2002; Freeman, Smith, & Tieghi-Benet, 2003; Bernhardt, 2004).

Teacher and Student Achievement

Data will be used to drive decision making. Of particular importance, due to the goals of the project, is the partnership with the CSU Center for Closing the Achievement Gap. The Center, through its founding partner Just for the Kids-California (www.jftk-ca.org), has collected 7 years of longitudinal, student-level data from participating districts. This data has proven to be valuable to teachers and school leaders to understand the strengths and weaknesses of their own practices and to benchmark against higher performing, demographically matched grade levels, schools, and districts to learn and apply their best practices. This sharing and application of student-achievement data to improve instruction will be a focal part of the college of education's preparation of new teachers and the induction program in the high-need LEA.

As part of the Center's role as a project partner, it will develop a longitudinal teacher data set for each campus that will provide the ability to track teachers credentialed through the project and placed in the LEA. These data will provide critical information on placement, retention best-practice implementation, and student academic achievement results; the data will also allow for learning from comparative assessment of teachers prepared within and outside the project. Through laboratories of practice and data-based decision-making, CCP~TQP will build local capacity to provide, improve, and expand services to address the needs of children and youth, new and prospective teacher, and emerging school leaders for rural and high-need schools.

As the goals and objectives of this project are achieved, lasting changes to existing services and new programs and services will extend to the future to ensure continuing improvement in teaching and learning, improvement to school leadership, and improvement in student achievement at more than 50 high-need school districts. The following features are a

sample of what we believe will extend beyond the period of funding to effect permanent change:

1. Major course changes and new approaches to clinical training at three universities will change teacher preparation in keeping with the reforms of the project on a long-term basis. The changes will be reflected in new university-approved course syllabi, course outlines, descriptions, and curriculum resources and a new model of clinical preparation based on laboratories of practice that feature design and evaluation of research-based teaching reforms.
2. Professional learning communities that engage university faculty with K-12 students in classrooms will be developed, with changes in position responsibilities and time and effort allocations within departmental budgets. PLCs will not depend on grant funding for operating and personnel expenses by the fifth year of the project. Thereafter, PLC support will be part of the budget and continue at each of the three universities.
3. New induction supports and activities will be designed for sustainability within the budgetary support for 2-year induction programs provided by the county offices of education. To a great extent, the in-kind match for this project has been provided by the county office partners (Kern, Monterey, and Tulare). These budgeted activities will support this project in years 3 through 5 of the grant, and they will be available to continue enhanced induction services after federal funding is over.
4. The networked learning communities, brought together for mutual support and sharing of resources, will serve as a demonstration site for new technologies and capacities to be developed by the project with support from the Apple, Inc. These technological capacities will be supported after the project is over through the support of the county offices of education.

CCP~TOP Outcome and Results. CPP outcomes and results will be significant and of substantial scope and magnitude with far reaching influence on the quality of teaching and on

student achievement in the entire region. Through the CCP project, large numbers of teachers will demonstrate improved teaching, and large numbers of rural, poor, and limited English proficient students with low performance levels will demonstrate growth in achievement. The improvements will be important because of their scale and because student achievement gains will be mapped through the evaluation to specific improvement in the teacher preparation.

Finally, the CCP~TQP will implement the following strategies to ensure long-term impact and sustainability: (a) develop pre-baccalaureate program (CSUB and CSUMB) and online post-baccalaureate program (Cal Poly) and enhance other teacher education programs, (b) improve and sustain high-quality clinical education program for pre-service and new teachers, (c) develop and implement effective mechanisms to ensure that the eligible partner districts are able to recruit highly qualified teachers, and (d) provide professional development for teacher leaders, site administrators, superintendents, university faculty and doctoral candidates focusing on research-based practices in school improvement and educational leadership.

Faculty from CSU campuses will facilitate professional development trainings for in-service teachers in concern with our efforts establishing PLCs across districts, schools, departments, and grade levels. The interactions among individuals from IHE and K-12 institutions will generate broad systemic improvements in teaching and student achievements. This exchange of evidenced-based practices will be supported by the collaboration between faculty, deans of the colleges, and school superintendents to develop a transformative leadership program that supports teaching and learning in high-need schools. One of the major goals of this project is to communicate and transfer best practices to other CSU campuses and school districts. The effectiveness of this change will be measured by the CSU Center for Teacher Quality.

Of equal significance will be the emergence of a new model of teacher education based

on laboratories of clinical practice. We will connect professors of education to the realities of the K-12 high-needs classroom by including them in professional learning communities for teacher education where they will conduct planning, design, teaching, assessment, and reflection activities as models of teaching behavior for examination by their teacher candidates and new teachers in the high-needs schools.

High Potential for Continued Funding. CCP~TQP demonstrates high potential for continued support after federal funding due to demonstrated commitment of many supportive entities within and beyond the partnership. Continuing capacity will be built into this project through budgeting and human resource planning focused on sustaining services on the budgets of the institutions after cessation of federal funding. As indicated, the positions of faculty and teachers in professional learning communities will be structured as sustainable by the budgets of teacher education departments. Roles and responsibilities will be revised to allow for re-allocation of time and effort to the professional learning community for teacher education model.

The induction experiences will be reorganized and supported by federal funds, but planning for continuing operations will be based on county office of education funding and operations for district induction activities, including the provision of mentors and coaches on these budgets. Networking of PLCs will be sustained by new communication technologies and services provided through our work with the Apple, Inc. Finally, improvements in teacher education and student achievement will result from grant-supported changes to the curriculum of courses and practical training experiences supported by the grant initially but continued as integral parts of the professional education curriculum at three universities when funding ceases.

Dissemination of Results. CCP~TQP will establish a model that can replicable to other IHEs, LEAS, and communities. CCP~TQP will share the results of the program and will create

structures to provide technical assistance to other universities and local educational agencies. CCP~TQP will develop social networks and a website that will provide one avenue for dissemination. Videos will be developed that will describe the keys to the project's success, the obstacles it faced, and the effective practices it developed. CCP~TQP has secured commitment from faculty who will be tasked to document and publish findings.

The Center to Close the Achievement Gap will disseminate effective strategies through its Just for the Kids website. This national dissemination will be reinforced by CSU's national and international MERLOT web-based repository of learning resources.

IV. Quality of the Management Plan (15 points)

The CCP~TQP envisions broad and significant improvements to teacher education as it is conducted for prospective teachers at three universities of the CSU system in conjunction with county offices of education partners and high-need LEAs. In recognition of the scope and complexity of this undertaking, we have developed a project management organization and structure intended to achieve all the goals objectives of the project and to meet all statutory reforms and improvements stipulated in the teacher quality partnership grant application.

Core Management Team

Dr. Curt Guaglianone at CSUB will serve as grant administrator and chair of the core management team; other members include Dr. Mark O'Shea, Principal Investigator of the grant and leader of the CSUMB campus component, Dr. Randy Shultz, Co-Principal Investigator at CSUB; Dr. Bonnie Konopak, Co-Principal Investigator for Cal Poly; Ms. Donna Glassman-Sommer, Co-Principal Investigator for TCOE; and Ms. Tania Schalburg, Co-Principal Investigator for KCSOS. The core management team will be responsible for achieving project goals and objectives as delegated to local operating units at each setting receiving a sub-contract.

The core management team will be joined by the external evaluator when they meet to act on recommendations and directions from the executive council. The core management team responds to direction from the executive council. The team will meet monthly during the grant implementation phase of 2009-2010, and quarterly, at a minimum, thereafter.

Executive Council

Dr. Mark O'Shea, Professor of Education at CSUMB, will be the Principal Investigator and responsible to the U.S. Department of Education for the achievement of project goals and objectives and the prudent use of resources to achieve project ends. Dr. O'Shea will chair the executive council, which will oversee the project, evaluate its effectiveness, and determine changes to be made to meet goals and objectives. The executive council includes the members of the core management team and additional personnel from each setting. The executive council manifests the partnership and includes all key constituencies in the project. The executive council includes the external evaluator, three representatives of high-need LEAs (each within the service region of each of the universities), and an academic dean representing the College of Arts and Sciences at each of the three colleges and/or the department chairs of the content area subjects for which teacher education program revisions are taking place. This group will assure the quality of the program by reviewing reports of progress made by the evaluator and reports provided from each local program management team. The executive council will meet at least once each academic semester and provide direction to the core management teams, members of which lead local operating units. The work plan for achievement of the objectives of the proposed project on time and within budget, including clearly defined responsibilities, timelines, and milestones for accomplishing project tasks and mechanisms for ensuring high-quality products and services is contained in Appendix D.