

Teaching All of California's Children Well: Teachers and Teaching to Close California's Achievement Gap

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Introduction

California schools serve more students from a greater diversity of backgrounds than anywhere else in the country and while many of these students thrive, far too many do not. Although the ways to address the problem are as numerous as its causes, this paper will focus on the critical resource of teachers. While the importance of teachers is unquestioned, what makes a good teacher is less well understood. In addition, there are many critically important questions about the recruitment, preparation, assignment, and retention of teachers. We examine some of these issues here, especially with regard to the role of teachers in the education of diverse students.

For some time California has been a “majority minority” state with respect to its school-age population. About 10 years ago, 40 percent of the school age population was non-Hispanic white; however, today less than one-third (30%) fits that category. The single largest subgroup of the school age population is Latino, with 48 percent, followed by Asians (including Filipino) at 11.4 percent, and Blacks, 7.8 percent. Less than one percent of all students are Native American. The demographic changes in

California have not only been profound, they are also occurring rapidly. If current trends continue, the majority of all students will be Latinos by 2010. Latinos have already been the majority of incoming kindergarteners for several years.

Not only is the state ethnically diverse, it is also linguistically diverse. One fourth of the K-12 population is considered not fluent in English *at any one time*. That is, more than 40 percent of students enter kindergarten as English Learners (ELs), other ELs enter California schools in later grades, and some are reclassified as fluent in English each year. This results in a decreasing pool of ELs over time. It is important to recall, however, that most of these students come from homes in which there is little consistent use of English, and so they lack the support and reinforcement in both oral and written English that native speakers have. Although many of the world's languages are represented in California schools, the overwhelming majority of ELs are Spanish speakers (85%).

Unfortunately, there are large chasms between the academic performance of students of different ethnic and linguistic

groups. For example, while *at least* two-thirds of white and Asian 7th graders test proficient or advanced in English Language Arts (ELA), only about one-third of Latinos and Blacks score at these levels. In fact, Black and Latino 7th graders are much more likely to score below basic or far below basic in ELA and mathematics than they are

to score proficient. Only 13 percent of English Learners in the 7th grade are proficient or advanced in mathematics compared to 46 percent of fluent English speakers (see Table 1). Moreover, these stark differences among groups have remained relatively unchanged since the state began tracking them in 2003.

Table 1

percent of 7th grade students scoring proficient or advanced by ethnicity & language status, 2007

	ELA	Math
White	66	54
Asian	71	69
Latino	32	27
Black	32	22
EL		13
Fluent English		46

While California's teachers are somewhat more diverse than in the nation as a whole—for example, 72 percent are non-Hispanic white and 15 percent are Latino, compared to 83 percent white and 6 percent Latino for the nation—they still do not come close to reflecting the student population they serve. This does not mean that white teachers cannot be very effective with culturally and linguistically diverse students, but it does mean that they will need to learn a great deal about the students in their classrooms, knowledge that will probably not be readily available in their own communities. In addition, teachers' tendency to migrate back to schools in their own communities when opportunities to do so become available [1] contributes to a constantly revolving door of teachers in the schools that serve primarily Black and Latino students, as these majority

white teachers return to teach in the communities where they grew up.

Meeting the needs of diverse students is clearly a major challenge for California's teachers, and understanding the ways that diversity affects classroom learning and students' adaptation to school are key aspects of this challenge. We will argue that simply being aware of the broad range of diversity in the classroom is probably insufficient to meet individual students' needs, and that it is also important to know about the *specific* ways in which being an EL, an African American, or immigrant student, for example, are likely to affect the conditions of students' learning. We will then address strategies that can help teachers to meet this considerable challenge.

Teacher Effectiveness

Challenges to Measuring Teacher Effectiveness

While evidence supports that teachers matter, and we will discuss this evidence below, we first offer some caveats regarding the elusive nature of defining and measuring what makes teachers successful. This is due in part to the complex nature of education, to the limitations of what can be measured—such as teacher test scores and years of experience—and what is unquantifiable—such as passion and caring—and to the difficulty involved in the collection and analysis of data on those factors that are measurable [2]. Cohen, Raudenbush, and Ball [3] have also argued that teachers’ personal resources, defined as their will, skills, and knowledge, while difficult to measure, may be essential to effecting other more conventional teaching resources such as curriculum and general pedagogical knowledge. Bryk and Schneider [4], comparing more and less effective schools, have convincingly shown that trust built among teachers, students, and parents may be a *sine qua non* to effecting significant positive change in schools serving low income and minority youngsters. Without strong interpersonal trust, they assert that it may be impossible for all parties to work together toward significantly improved outcomes for schools and the children and families they seek to serve. Yet, we do not have good measures of the set of dispositions that teachers must have to foster trust, nor do we have a test of “will” to be an excellent teacher. In fact, there is little in the research literature that points to any strong personality predictors of which individuals will become remarkable teachers.

Gathering and analyzing existing data on teacher attributes in a meaningful way is complex: it requires longitudinal data

collection and retrieval systems, and crossing data streams, such as matching teacher demographics, teacher preparation, and student achievement [5]. On the outcome side of the equation, it is an intricate and inexact process to separate student achievement gains that might be attributable to teacher characteristics from those that could result from a range of other school and non-school factors. The exploration of teacher effectiveness is further complicated by the wide variation in some of the factors that are frequently observed and measured in this pursuit. For example, professional tests, used as a measure of teacher quality, differ in rigor among states [6,7].

Perhaps an even greater challenge than the collection and analysis of quantifiable data on teacher effectiveness is that this kind of data cannot tell the whole story. Some indicators, including how well teachers facilitate learning experiences, engage students, and value student interests, can only be understood by observation at the school or classroom level [8,9]. Other characteristics such as compassion, patience, and sincere interest in the well being of students are difficult to capture and impossible to quantify [10]. Despite these caveats, a growing body of research using input-output paradigms in which teacher quality or some aspect of this is the input, and student achievement is the output, demonstrates that teacher skill can affect student achievement over the long term—sometimes dramatically [11,12,13,14,15, 16,17]. “The difference in student performance in a single academic year from having a good as opposed to a bad teacher can be more than one full year of standardized achievement” [12, p. 113]. Moreover, these teacher impacts can last over time so that having a high quality

teacher in one year can contribute to greater student learning in a subsequent year. Unfortunately, this long-term effect applies in the case of ineffective teachers as well: having a poor quality teacher can contribute to decreased learning in subsequent school years [13,18].

Experience

There is reasonable agreement in the education research that teacher experience matters. Teachers with several years in the classroom outperform new teachers, as measured by student standardized test results [5,16,17,19,20,21]. There is also research supporting the conclusion that teachers who stay on the job continue to become more effective [8] and that this effectiveness can grow for four or five years [22]. It should be noted that there is another set of findings that there may be a “prime time” for teachers: that they are most effective during the middle years of their experience, and less so both at the beginning and end of their careers [7,23]. In sum, there is significant support in the educational research literature that teachers’ years of experience are part of the recipe for student teacher effectiveness.

Standardized Tests, Undergraduate Major, and Institution

There is a body of research that has found a positive relationship between teachers’ scores on the Scholastic Aptitude Test (SAT) or similar standardized tests during their undergraduate years and the success of their teaching as measured by student test scores [6,24,25]. Hanushek [26], for example, found a greater impact on student achievement related to teacher test scores than for years of experience or masters’ degrees. As far back as the Coleman report [27], teachers’ test scores have been correlated with their students’ outcomes.

Verbal ability, as indicated by standardized tests, appears as another indicator of teacher effectiveness in the research. Ferguson [6] examined Texas teachers’ verbal scores on the Texas Examination of Current Administrators and Teachers (TECAT)ⁱ in relation to student standardized test scores in reading and math.ⁱⁱ He found that the average teacher’s TECAT score explained 19-25 percent of the variance in student scores. In later research, Ferguson and Ladd [24] compared student achievement of fourth graders in Alabama with their teachers’ ACT exam scores and found that, “the skills of teachers as measured by their test scores exert consistently strong and positive effects on student learning” 24, p. 288].

Other research finds a positive link between higher teacher test scores in a particular content area and greater achievement of their students in that content area [8]. The most positive relationship is between teacher math test scores and student standardized test scores in algebra and geometry, with a less significant relationship between teachers’ and students’ biology test scores. There is also an emerging literature examining the relationship between teacher passage rates on professional certification tests and student achievement outcomes [17, 28,29]. Scholars researching this question in New York have found a positive relationship between teacher certification test performance and secondary math student achievement among teachers. Overall then, the research suggests that higher teacher test scores—most likely as a proxy for content and/or teaching knowledge—can be predictive of higher student scores on standardized exams in specific subject areas, and probably at specific grade levels.

The possible impact of the content and quality of teacher undergraduate education on student learning has been another subject of study. Recent research has linked

teachers' undergraduate majors with increased student achievement in the area of secondary mathematics and science [19,30]. Researchers also found higher achievement in algebra (where the effect was greatest) and geometry classes taught by secondary teachers who had a math major [17]. In addition, some studies report a positive relationship between the quality of the undergraduate institutions teachers attended and their students' achievement [17,29].ⁱⁱⁱ Based on a study using data from a stratified national sample of over 1,100 secondary schools, Ehrenberg and Brewer [25] found higher student test scores among teachers who attended more selective institutions. Taken together, these research findings indicate that teachers who have more preparation and knowledge—as indicated by their college major, test scores, or the quality of their undergraduate education—may be more effective at raising student achievement as indicated by standardized test scores.

Nonetheless, teacher knowledge about content is not the whole story. Research indicates that teachers' pedagogy courses —

which are designed to help them learn how to convey content and are the heart of teacher education programs—contribute to their students' learning. Several studies of teacher effectiveness indicate a positive relationship between teacher certification and student achievement [6,19,31].^{iv}

In summary, while understanding the relationship between specific teacher characteristics and effectiveness presents certain measurement challenges, several characteristics have been found in the educational research literature to be related to student success. Overall, this research indicates that the quality of teachers' undergraduate and teacher preparation academic work, as indicated by a number of factors, has an impact on student learning and that, on average, students of teachers who have more years of classroom experience outperform students of beginning teachers. As we discuss later in this paper (see p. 29), students of teachers who participate in high quality induction programs also tend to reap achievement benefits [32].

Effective Teachers for Diverse Students

Given the diversity of California's schools and that students and teachers very often do not share common backgrounds, all California teachers need expertise in the instruction of diverse students. Above and beyond skills for working with diverse students in general, teachers also must understand the particular needs of specific subgroups. For example, understanding that students bring diverse needs to the classroom does not necessarily prepare a teacher to meet the needs of a student who does not speak English, or one who has no experience with American schooling norms. Preparing teachers to meet the needs of all students in California requires both a broad

understanding of social, cultural, and linguistic differences, as well as specific knowledge of subgroup differences that can have powerful effects on learning. Such an enormous challenge is not likely to be met equally by all teachers, and so requires collaborative strategies among teachers with complementary skills and backgrounds, as well as both broad and more specific training.

Unequal Distribution of High Quality Teachers

It is clear from the above section that students who are not thriving are precisely the ones who need the highest quality

teachers. Our discussion of effective teachers for diverse students starts with this premise and with an exploration of the evidence that the students with the greatest need for high quality teachers are the ones who have the least access to this key resource. While attention and work of California policy makers and educators to this issue over the last several years has led to a decrease in the number of classrooms with under-prepared teachers as defined by their credential status, and this work is commendable, there remains an access gap to be closed, as some students routinely have less opportunity to learn from an experienced and credentialed teacher. Moreover, there is still considerable debate over the degree to which teachers who hold standard teaching credentials are indeed equipped to handle the challenges of diversity.

There is considerable research conducted both inside and outside of California revealing that experienced and credentialed teachers are not equally or equitably distributed across schools and districts [12, 20,28,33]. While there are many factors that contribute to the outcome of unequally distributed teaching expertise, including salary, working conditions, and where teachers live, it does not change the result for students. Lankford, Loeb and Wyckoff [28] studied unequal distribution across regions, districts, schools, and classes. Their research, using seven administrative datasets that in a typical year held information for approximately 180,000 New York State teachers, found variation in the distribution of quality teachers at each of those levels. Ultimately the researchers concluded that urban schools have less-qualified teachers and that low income, low achieving students of color, particularly those in urban schools, find themselves in classes with many of the least skilled teachers.

In 2007 The Center for the Future of Teaching and Learning [34] reported disconcerting statistics regarding schools with under-prepared teachers in California. Under-prepared teachers are defined in the report as those who do not have a preliminary or clear teaching credential but an authorization that is more provisional. One-third (33%) of high schools in California that serve very high proportions of African American and Latino students (90% and above) suffer from severe shortages of qualified teachers, that is, more than 20 percent of their teachers lack appropriate credentials [35]. In 2006-2007, 34 percent of the under-prepared and novice secondary teachers (those with one or two years of experience) were located in high schools with the lowest pass rates on the California High School Exit Exam's (CAHSEE) math test [34]. Thus, there is a strong convergence of schools serving isolated groups of Latino and African American students with low CAHSEE pass rates that have high percentages of under-prepared and inexperienced teachers. On the other hand, it is relatively rare to find schools serving a majority of white and Asian students that also have shortages of qualified teachers. Only five percent of high schools serving these students in California suffer from similar shortages of qualified teachers [35].

To provide some examples, Los Angeles and San Diego counties, which together have more than half of the state's almost six million students and an even greater percentage of its poor and minority students, are experiencing the highest teacher shortages. In Los Angeles, 14 percent of teachers have an emergency teaching permit [36].^v This means that more than 5,500 teachers in the metropolitan area where over half of the state's minority students reside are under-prepared to meet the significant learning challenges of their students.

Districts in rural agricultural areas where many of the students are poor and ELs also employ a disproportionate share of under-prepared teachers. In the agricultural Merced Union High School District, for example, 13 percent of teachers had emergency permits. In contrast, many suburban districts have few or no teachers who do not have the full and appropriate credentials for the classes they teach [36].

Unequal Distribution of Teacher Absenteeism

Teacher absenteeism also has a highly disproportionate impact on the schools serving Latino and African American students in California. Bruno [37] notes that teacher absenteeism lessens a school's resources in various ways. For one, it lowers the quality of instruction. It can also have an instructional "ripple effect": when a substitute teacher cannot be found—a frequent condition in urban schools—teachers at the school must fill in (thus shortchanging students in their classrooms as well). And, absenteeism is extremely costly since substitute teachers' salaries must be paid in addition to regular teachers' salaries. Based on his study of all high schools in a large California school district, crossing school district data with Geographical Information Systems (G.I.S.) to map the relationship between teacher absenteeism and school location, Bruno found that absenteeism was much more prevalent in urban schools or those with the lowest median family incomes.

Later in the paper we will discuss at greater length the value to students of color of teachers of color, but this issue warrants mention here as well. As discussed above, teachers tend to migrate back to the local communities from which they come in order to teach. Since most teachers are from white suburban or rural areas this leaves urban schools, where many of the state's linguistic

and cultural minority students attend, in a constant search for teachers [1]. Similarly, there is a significant body of research indicating that minority teachers are much more likely to work in urban schools with largely minority populations [38], and that they are much less likely to leave these schools than other teachers [39]. This research supports the need to prepare more teachers from culturally and linguistically diverse communities as a way to alleviate issues of mal-distribution of qualified teachers.

High Quality Teachers for Diverse Students

The widely diverse profile of California's students means that there will always be some degree of "mis-match" between the backgrounds of students and teachers. Not only are one-quarter of California's six million students ELs, and 40 percent from households where English is not the primary language, but these students come from a range of countries and backgrounds, and have varying academic and linguistic preparation. Moreover, there are many students in our schools who speak a non-standard English that is a completely legitimate linguistic form, but is not the language of the schools.

There is no doubt that teachers of both genders from backgrounds of every class, culture, and language can be effective with the wide range of students they are likely to teach in California classrooms. Nonetheless, the degree of diversity among the state's students raises the question, "How can individual teachers have all of the necessary information about the range of potential students that might enroll in their classrooms?" The answer, of course, is that they can't. Rather, we can and should prepare *all* teachers to have the attitudes, skills, and knowledge to work well with diverse students in general, and an

understanding of the need to seek out additional knowledge about the language and culture of the particular students in their classrooms in order to teach these children well. Such successful preparation is not gained from a single source but over a trajectory of teacher preparation that includes pre-service, induction, and professional development; it is a process along the entire career continuum. However, as we will discuss in our recommendations, even these teachers will require additional support, and schools need to find the ways to use instructional expertise to the best advantage of students and teachers alike.

Ability and Desire to Include Families and Communities in Life of School

Students' parents are their first and most important teachers and should be collaborators in their schooling; thus teachers need to communicate with parents. If they share a language and culture, this is made easier. If they do not, then teachers must have the desire and disposition to find ways to make connections with the home. The ways that parents express their aspirations for their children and the ways in which they support their children's educations may not be evident to teachers who are unfamiliar with students' cultural backgrounds [40]. In a study of 14 urban schools with high minority populations, Taylor, Pearson, Clark, and Walpole [41] found frequent teacher-to-home communication to be a common factor in classrooms where students' academic achievement was highest. Ladson-Billings' [42] ethnographic study of eight African American and white teachers who were successful with African American students also found that these teachers cultivated the relationship with students and their families beyond the classroom. In addition, research has pointed to the high correlation between various kinds of parental involvement and minority students' positive academic

outcomes [43,44,45,46]. Zeichner's [47] summary of the practices of successful teachers of linguistic and cultural minority students also found that these teachers encouraged parents and community members to become involved in students' education and gave the parents of these students a significant voice in making important educational decisions.

Different types of schools, families, and communities require different strategies for involving parents [48]. In low-income and largely minority schools, teachers commonly complain of lack of parent involvement and therefore perceive a lack of caring on the part of the parents [49]. Yet with little connection among parents, teachers, and schools, and an increasing number of parents and teachers who literally do not speak the same language and/or who come from vastly different socio-economic and cultural backgrounds, it is difficult for parents to create a role for themselves in their children's schooling, thus handicapping these students academically. This is especially true in the case of immigrants, who may have little understanding of the operations and demands of American schooling.

View of Students' Homes as Asset and Background for Learning

Another aspect of this willingness and ability to connect with students' homes and families relates to teachers' ability to appreciate the culture of their students, to call on students' experiences and knowledge in that culture to promote learning, and to view students' families as a valuable asset. Teachers need to tap into home and community resources or what Moll has termed the funds of knowledge that these students bring to the classroom [50,51]. In a synthesis of the research on characteristics of teachers whose culturally and linguistically diverse students achieve

academic success, Zeichner [47] concluded that successful teachers include contributions and perspectives of a variety of ethnic groups in the classroom and link the curriculum to the cultural resources that students bring to school. Additionally, Ladson-Billings [42] found that successful teachers of African American students explored and utilized students' previous knowledge to help them achieve, and helped students make connections between their local communities and the national and global context. The Center for Research on Education, Diversity, and Excellence (CREDE) [52] includes this connection between teaching and curriculum to experiences and skills of students' home and community in its standards for effective teaching practice. These standards are based on a synthesis of recommendations from literature "that is in agreement across all cultural, racial and linguistic groups as well as all age levels and subject matters."

Ability to Accurately Diagnose Students' Academic and Language Needs

Milk, Mercado, & Sapiens [53] include the skill to provide ongoing assessment of students' abilities in order to provide instruction aimed at an appropriate level above what students currently know as an area of essential expertise needed for working with ELs. While this skill has been found to be critical for successfully teaching all students, Delpit notes that mainstream teachers sometimes overlook or misinterpret the needs of students who are different from them; she proposes that considerable research has documented mainstream teachers' failure to appreciate the unique educational challenges that minority students face [54,55]. And, the CREDE [52] standards also include meaningful assessment to measure student learning as one of their essential teacher competencies; it is axiomatic that to be meaningful, it must

be based on an understanding of students' needs, no matter what their language and culture background. This need also argues for a linguistic match between teachers and students whenever possible.

Capacity and Desire for Professional Growth and to Learn to Teach Diverse Students Effectively

Based on his research with teachers in urban schools whose students demonstrated significant learning on test scores and work samples, Haberman [56] found that a capacity for professional growth is one critical attribute of teachers who are successful with linguistic and cultural minority students in urban schools who demonstrate significant learning through test scores and work samples. He found this to be manifested in teachers' ability to generate practical, specific application from the theories and philosophies they learn and conversely to infer principles and "derive meaning" from their myriad individual classroom experiences. Another feature of this willingness to learn was teachers' recognition and honest admission of their own mistakes and a belief that their teaching can always be better. Zeichner's [47] synthesis of the attributes necessary for quality teachers of culturally and linguistically diverse students revealed the critical importance of teachers' personal commitment to achieving equity both within and outside the classroom. These teachers firmly believed that they could make a difference in their students' lives and they established a personal bond with students rather than viewing them as "the other."

High Expectations for Student and Teacher Performance

Zeichner [47] discusses the critical importance of teachers' high expectations for the success of all students and the ability to communicate this belief effectively. He

finds that teachers demonstrate these high expectations in their practice by using an academically challenging curriculum that incorporates higher-level cognitive skills. CREDE [52] also includes high standards and challenging instruction that requires thinking and analysis to be among the most effective teaching practices. Zeichner adds the finding that these teachers have high expectations of *themselves* and they firmly believe that they can make a difference in their students' lives.

Ladson-Billings [42] centers a description of characteristics of teachers who are successful with African American students on the notion of culturally relevant teaching. A basic principle of culturally relevant teaching is that instead of aiming for slight improvement, it aims for excellence and rather than shifting responsibility for the learning of struggling students (to special education, for example), shares that responsibility with capable others including students and their families.

Thus, both Zeichner and Ladson-Billings found that successful teachers of culturally and linguistically diverse students had high expectations both for their students and themselves. Similarly, Haberman [56] found that teachers who were successful with cultural and linguistic minority students had a professional orientation to students characterized by respect and a view of education that did not blame the student for lack of achievement. The sense of their own responsibility was a central belief among these teachers. He reported that these teachers believed that they could and would teach all their students and that they were responsible for sparking children's desire to learn and to make the classroom an interesting, engaging place for every pupil, regardless of students' life conditions. He also found that this led teachers to persist in the pursuit to engage all students: "the 'problem', the talented, the handicapped and

those that are often overlooked, in learning because teaching inherently involves problems and problem students."

Ability to Call on and Use School and District Resources Appropriately and Effectively

One of the characteristics and attitudes that Haberman [56] found among outstanding teachers was an ability to work within the school system to protect and support their students and themselves. He described this as an ability to negotiate with authority to protect learners and learning. He cites as examples teachers' insistence to the principal and others on the protection of classroom time in order to enhance students' involvement in meaningful learning activities and teachers' learning how to function appropriately within the school and district bureaucracy to gain the widest discretion for themselves and their students. He also found that these teachers learned skills and habits that helped them avoid burnout, including setting up networks of like-minded teachers that they used as support systems to help them function within the bureaucracy. We discuss this issue of knowing how to use the system for students' good in a later section on teachers of ELs.

Classroom Practices and Knowledge of Effective Teachers for Diverse Learners

In addition to the skills and attitudes discussed above, effective teachers for diverse learners engage in classroom practices that contribute to these students' success. There is a growing knowledge base indicating that effective teachers of culturally and linguistically diverse students know about and can use practices found to be associated with effective teaching for these students such as creating interactive and collaborative learning environments in the classroom [47] that provide students

with opportunities to learn collaboratively, teach, and take responsibility for each other [42].^{vi} (See also pp. 21, 23-24 for EL instructional strategies.)

Teachers from the Same Backgrounds as their Students

Although the quantitative research on whether teachers of the same racial and ethnic backgrounds as their students are more pedagogically effective with these students exhibits a pattern of support for such teacher-student matching, the number of studies is small and not all are equally conclusive [57]. For example, analyzing a sample of 130,000 10th grade students in North Carolina, Clotfelter et al. [8] found that African American students had higher standardized test scores in classrooms taught by African American teachers, as did male students of male teachers and female students of female teachers. A smaller scale study of Latino students found a positive correlation between Latino student learning and the presence of Latino teachers in the classroom in 12 Florida school districts [58]. On the other hand, an earlier study using test scores of approximately 2,000 high school students from the National Educational Survey Data of 1988 (NELS) found no such relationship between teacher and student race, ethnicity, and gender [59], although researchers caution that the sample size when disaggregated by teacher ethnicity was small and thus problematic. Nonetheless there is evidence from research in other traditions that teachers who are from backgrounds that are similar to those of their students are likely to have a greater understanding of these students, be particularly motivated to help them, and have higher expectations for them.

Role Models

The work of some researchers explores how teachers from similar backgrounds as those

of their ethnic minority students serve as role models. One finding is that many minorities who opt for a career in teaching had a teacher who inspired them to continue their education and become teachers themselves [60,61,62]. Gloria Ladson-Billings [42] suggests that African American teachers can play a critical role by assisting students to “choose academic excellence yet still identify with African and African American culture” [42, p. 17]. She also proposes that one reason that being in classrooms with successful teachers of color is particularly important for students of color is to counteract schooling difficulties that can result from:

Not seeing one’s history, culture, or background represented in the textbook or curriculum or by seeing that history, culture, or background distorted. Or they may result from the staffing pattern in the school (when all teachers and the principal are white and only the janitors and cafeteria workers are African American for example) and from the tracking of African American students into the lowest-level classes [42, p. 17].

High Expectations

Based on interviews with successful African American teachers, Foster reports that study subjects said that their African American teachers always had high expectations for their success and didn’t let them “get away” with doing less. Her discussion with study subjects led the author to conclude that these teachers dispelled “The pernicious myth that without access to white culture, white teachers, white schools, and white leadership, black people could never adequately educate their children, nor hope to create a decent future for their race” [61, p. ix].

Knowledge of Background to Inform Classroom and School Decisions

A critical attribute of effective teachers of culturally and linguistically diverse students that we discussed above is the ability to make the best educational decisions for students of color based on a wide range of information, including knowledge of a student's linguistic and cultural background. Lisa Delpit [55] characterizes teachers who share a background that is similar to that of their students as being able to use their knowledge of the culture of their students to ask hard questions about the suitability for these children of dominant paradigms and challenge the wisdom of a "one size fits all" approach. This hypothesis is supported by Meier [58], who found that Latino teachers from the same ethnic heritage as their students and thus with a greater understanding of their students' language and background knowledge, were less likely to place Latino students in remedial programs, and were more likely to identify them as gifted. Knowledge about students' culture also helps teachers understand student behavior. Meier [58], for example, found that Latino students with Latino teachers were suspended or expelled significantly less often than Latino students in other classrooms across the 12 districts he studied. Downey and Pribesh [63] documented how teachers from backgrounds different from those of their students can misinterpret ways of acting that are acceptable in students' home cultures as "bad behavior" in the classroom. Using data from a behavior measure among two large-scale samples, one of kindergarteners and one of adolescents, they found that African American students in both age groups consistently received ratings of poorer classroom behavior but that this poor rating disappeared among African American students who had African American teachers.

In addition, there is an advantage of a linguistic match between teachers and students—no matter what the program of instruction. Clearly, teachers from the same linguistic background as their students have an ability to communicate with students and their families that can help teachers understand students' academic, social, and other needs and to foster a positive home-school relationship.

Counteract Negative Teacher Expectations

There is a substantial, and disturbing, strand of research that focuses on teacher expectations for culturally and linguistically diverse students. Several of these studies find that mainstream teachers and counselors of low-income and minority students are more likely to perceive these students as having low ability and, therefore, to hold lower aspirations for them [64,65,66]. Tettegah [67] reported that prospective white teachers demonstrated negative predispositions toward Latinos and African Americans with regard to cognitive ability and similar negative attitudes toward African American students' behavior. Ladson-Billings [42] described an interaction between teacher expectations and behavior in which teachers who believed that not much could be done to help their students improve either maintained these "hopeless" students in their own classes at low levels of expectation, or shifted the responsibility for these students onto the school psychologist or special education teacher. She concluded that these teachers—who are responsible for ensuring that students fit into society—were likely to believe that the place that these students "fit in" was on society's lower rungs [42, p. 22]. Such low expectations can have powerful effects on student achievement. Teachers habitually send non-verbal messages about the amount of confidence they have in students' abilities. Not only do teachers call

on favorite students more often, but research has shown that they wait longer for an answer from a student they believe knows the answer than from one who they view as less capable. Teachers are more likely to provide students in whom they have little confidence with the correct answer, or move quickly on to another student [68]. Moreover, students have been shown to be very sensitive to these subtle teacher behaviors and to “read” their teachers’

attitudes quite accurately [69]. A series of studies conducted by the psychologist Robert Rosenthal found that students tend to perform better or worse according to teachers’ positive and negative expectations [70, p. 408]. Thus, there is a great likelihood that students will confirm the expectations of teachers who do not believe that they are capable of excelling.

Unique Skills and Attributes of Effective Teachers of English Language Learners

The vast majority of California classrooms have at least one EL [71,72]. Moreover, teachers in these classrooms very often have little or no experience or background in teaching ELs. While the factors discussed in earlier sections pertain to effective teachers of all students including ELs, there is a body of research that explores specific characteristics and abilities of successful EL teachers. We touch on some of this literature below.

There has long been a debate regarding how best to educate EL children that has focused on bilingual education. While the linguistic and cognitive research supports the viability, advisability, and effectiveness of using students’ primary language in instruction [73,74], this is as much a political and philosophical debate as one about education and it is not a focus of this paper. While this debate continues outside the classroom, inside the classroom teachers are called on to meet the challenge of teaching EL students every day. No matter what the method or program of instruction, teachers of ELs need special skills and training to effectively accomplish this task. Short [75] describes the “triple task” of EL students as they learn English via content and vice versa. She argues that these students have

the academic task of learning “The combination of the three knowledge bases—English, content topic, and the manner in which tasks should be accomplished.” Echevarria and Short [76] further assert that “Another consideration for school success is the explicit socialization of students to the often-implicit cultural expectations of the classroom, such as turn taking, participation rules, and established routines.” This means, of course, that teachers have a “triple” task as well.

Although empirical studies are limited, we have some knowledge of the kinds of preparation that teachers need to be successful with linguistic minority students. This knowledge is based on qualitative studies and expert opinion. Syntheses of these studies find that the most successful teachers of EL students have identifiable pedagogical, language, and cultural skills and knowledge. We explore some of these below after a brief review of requirements for various EL instructional certifications.

EL Credential Requirements

The need for all teachers to have some level of expertise in EL instruction was recognized and sanctioned by policymakers in legislation that required the inclusion of

these skills and knowledge in the state education code (Ducheny, AB 1059, 1999) and that authorizes all teachers who received a single or multiple subject teaching credential after 2002 to teach ELs (see below)^{vii}. This was and is an important step. Nonetheless, anecdotal evidence suggests that like any relatively new policy, the degree of and capacity for implementing these changes is variable.

California requires that a teacher who is assigned to provide instruction in English to EL students^{viii} or instruction in students' primary language must hold an appropriate CCTC authorization.^{ix} The documents currently issued to new teachers by the commission that authorize this instruction include the multiple or single subject teaching credentials with English Learner Authorization mentioned above. This English Learner Authorization is based on requirements enacted via AB 1059 requiring all credential programs to embed EL course work. Once this requirement went into effect, the Culture, Language and Academic Development (CLAD) emphasis credential was superseded. Multiple or single subject teacher preparation programs with a Bilingual Culture, Language, and Academic Development (BCLAD) emphasis continue to be offered by several institutions, and this authorization remains both viable and desirable.

Teachers who already hold a valid teaching credential may earn a CLAD authorization via exam or coursework. The exam is the California Teachers of English Learners test (CTEL). The three competencies covered by the test include: 1) language and language structure, 2) assessment and instruction, and 3) culture and inclusion.^x Teachers may also earn this certification by completing a CCTC approved CLAD certificate program based on CTEL standards.

Teachers who do not earn a BCLAD^{xi} through a credential program with a BCLAD emphasis must meet two major requirements in order to earn this certification. They must first hold either a CLAD, an AB 1059 English Learner Authorization, or pass the CTEL and they must pass the BCLAD examination in areas 4-6. These areas of expertise are: 1) methodology for instruction in the primary language, 2) culture of emphasis (for example, Vietnamese, Spanish-speakers, etc.), and 3) language of emphasis.

While there is much discussion about skills of EL teachers, there is little consensus about what are the critical competencies—the essential skills they must have to successfully educate ELs. The California Commission on Teacher Credentialing has undertaken to validate the new CTEL-LOTE exam (Languages other than English) for certifying BCLAD teachers by updating the Knowledge, Skills, and Abilities (KSAs) included in the exam and correlating item passage with completion of an approved BCLAD program. The examination, however, suffers from some weak assumptions. One, there is no evidence that ability to pass a test of knowledge and skills is actually correlated with being able to do these things in a classroom, and two, the knowledge, skills, and abilities are generated from a literature that lacks much empirical evidence that these are indeed the essential skills needed. Moreover, we have seen in a recent study on the instruction of ELs in a very high performing district that although teachers were often able to articulate very well the kinds of effective practices they should use with EL students, they were not observed to employ these when confronted with a classroom of students with varying needs [77].

Teacher Skills and Knowledge for EL Instruction

Teachers in different contexts need different skills and abilities. Obviously, a teacher using a primary language in instruction needs a different set of skills than a teacher using English only. Likewise, a teacher of ESL or ELD needs different skills than a mainstream teacher who is teaching both English speakers and ELs. And, elementary teachers need some different skills than secondary teachers.

The professional organization, Teachers of English to Speakers of Other Languages (TESOL) recently developed overall standards for ELD teacher education in conjunction with the National Council for Accreditation for Teacher Education (NCATE). ELD teachers can be specialist teachers in some elementary schools, and are considered a separate discipline at the high school level. Nonetheless, given the interconnectedness of language and learning and a policy that places the majority of EL students in mainstream classrooms, every teacher who has an EL student in class is an ELD teacher. Therefore, we frame our discussion around these five standards^{xii}. It should be noted that the five TESOL standards are very similar to those included in the California Teachers of English Learners exam (see pp. 18-19) and to those designed by the National Association for Bilingual Education (NABE). After our discussion of these standards, we add two factors to the list that are not explicit in the TESOL standards and that we believe warrant specific inclusion.

The TESOL Standards

Language: Describing Language; Language Acquisition and Development

Teachers of EL students need extensive skills in teaching the mechanics of language,

for example, phonology, syntax, semantics, pragmatics, and writing conventions, and how language is used in different contexts and for different purposes [78,79]. They also need to know about first and second language acquisition [804]. Teachers require a deep understanding of language in order to help EL students learn academic English; to develop their skills to deal with new genres and tasks and to build from oral to written language [81].

Culture: Nature and Role of Culture; Cultural Groups and Identity

All teachers working with language minority students should possess the ability to incorporate the culture of students into the curriculum in order to build on what students know as a bridge to new and unfamiliar concepts and knowledge [76] and also to understand how “contextual factors in classrooms, schools, and communities influence learning and access to the curriculum for diverse learners” [82]. In addition, they need to teach in ways that build positively on culturally different ways of learning, communicating, and behaving [83].

Instruction: Planning for, Implementing, and Using Resources Effectively in ESL and Content Instruction

Strategies that can help teachers promote academic literacy among ELs in all subject areas include [76]:

- Examining curricula from a language perspective to determine the aspects of English that students need to know and apply;
- Planning language objectives related to key vocabulary, reading or writing skills, listening or speaking tasks, and making both the language and content goals explicit to students;

- Emphasizing academic vocabulary to include words crucial to conceptual understanding of a topic and giving students multiple opportunities to practice using these words orally and in print.
- Activating and strengthening students' prior knowledge and applying it to lessons or building background knowledge for EL students who may have different background knowledge than that of students whose primary language is English;
- Promoting oral interaction that can help ELs acquire literacy skills and access new information;
- Pointing out the key concepts and associated academic vocabulary in a lesson that EL students might miss because they can lose focus as they are constantly engaged in the mentally exhausting task of attending to a new language.

***Assessment: Language Proficiency
Assessment; Classroom-Based Assessment***

A major task of all teachers of EL students is to be able to distinguish between students' language proficiency and their competence in the subject matter being taught. Thus, it is critical that teachers have the ability to understand and implement ongoing meaningful assessment of students' English language and academic abilities in order to provide instruction aimed at an appropriate level above what students currently know [53,82,84] and to determine and integrate into instruction the students' mix of academic level and degree of English language proficiency [85].

Special education research highlights the importance of assessment knowledge as an essential teacher skill. Over-representation of culturally and linguistically diverse

students in special education is a well-documented problem [86]. Based on their research on such over-representation in 11 California school districts, Artiles et al. [87] found that patterns of over-representation vary by age group and language proficiency status and that school and classroom patterns often differ from statewide or even district statistics. They conclude that schools (and teachers) need to attend to the nuances of student need in order to monitor the possible mis-diagnosis and mis-placement of these students.

Professionalism: ESL Research and History; Partnerships and Advocacy

This includes teachers' ability and willingness to act as advocates for their students and the field of EL education in general [78] and to work cooperatively with colleagues and with small communities of inquiry designed to advance learning for ELs [82]. Milk, Mercado, & Sapiens [53] describe this as the ability to work with others at a school to collaborate on getting the best mix of services for EL students.

Ability to Communicate and Motivate

There are two areas not addressed by these standards that we feel are important particularly for secondary level ELs. These are the ability to communicate with students in their own language and the ability of teachers to motivate and engage students.

EL students can benefit from having teachers who can communicate with them; who speak their primary language and know about their home culture for all of the reasons addressed above. In California, teachers who hold the BLCAD specialist credential have such skill, knowledge, and understanding. The advantage to EL students of having these expert teachers is supported by research evidence from a study of the effect of the best-prepared teachers on

EL student learning conducted in the Los Angeles Unified School District. In this study researchers found that the students of teachers with specialized training and who spoke the students' language showed greater academic gains than those with teachers who lacked such preparation [88].

Ability to Motivate and Engage Secondary English Learners

Secondary level ELs face unique educational challenges that are often overlooked. Older children have less time to acquire both English and the academic skills they need to get ready for high school graduation and to prepare for post-secondary options, yet a curriculum that is too narrowly focused on English proficiency for these students is counterproductive. Callahan [89] found that when teaching basic English is the major focus of the curriculum, secondary EL students tend to achieve poorly, lose hope, and often drop out. Thus, teachers and schools are challenged to deliver a curriculum and instruction that is motivating and stimulating and that addresses both necessary content and students' English language needs that range from basic to advanced.

Issues of identity development and adolescent transitions also complicate educational motivation and focus among this age group. In addition, adolescent students are more likely to suffer embarrassment over their lack of competence in English [90,91]. Furthermore, secondary teachers often lack expertise in teaching basic skills such as reading, skills which may be necessary when working with older students who do not know how to read in English, or do not know how to read at all, nor are pedagogical strategies and educational materials used with younger children always appropriate for older students.

Based on their extensive review of the literature on both EL literacy education and adolescent literacy learning, Meltzer and Hamann [92] found that motivation is key to the effective teaching of literacy for ELs, especially at the secondary level. Given the limited curriculum offered to these students, the lack of preparation of most secondary teachers for instructing ELs, and the challenges of learning English, passing the CAHSEE, and meeting coursework requirements for graduation, these students often become discouraged and give up. Meltzer and Hamann summarized some aspects of instruction that keeps EL students motivated and engaged so they can learn.

Making connections to students' previous learning and experience—to what students already know, what they need to know, and what excites them—is critical to their academic success, but is often ignored in instruction for ELs. Therefore, teachers need to regularly assess students' interests as well as subject matter knowledge. And, while teachers need to scaffold new learning based on what students already know, they must also avoid assuming that things are universal for all students from a particular group. Teachers should also call on students' first language when possible and appropriate: students' first language can contribute to their advanced literacy in English because second language learners can produce more sophisticated second language text by doing some of the planning in their native language.

EL students need to feel safe and accepted in the classroom environment, especially since many already feel marginal to U.S. society and adolescents are often anxious about doing or saying the wrong thing, particularly in a new social environment for which they do not know the rules. Having a relationship of trust with a teacher contributes to their success. Therefore, establishing and fostering such relationships is an important

goal and schools need to build in the time for such relationships to flourish. For students who speak little English, this is likely to be a teacher who speaks their home language; thus, schools need to use teacher resources in ways that promote this. For example, schools may have bilingual and ESL resources that are untapped; they need to design instruction to use all the resources of the campus.

It is a decidedly difficult challenge to address the content and academic needs of older EL students. Many times these students are placed in tracks with the intention of providing access to the instruction that students need [83, p. 89]. However, evidence indicates that this limits students' possibilities for more complex interaction with peers, with the teacher and with text. Based on what they learned from their review, Meltzer and Hamann argue that EL students not be placed in curricular tracks without *great* caution because students in lower track classes have fewer chances to read, reflect on, ask questions about, and discuss a variety of text. They also note that writing and reading may be particularly useful for ELs because they lend themselves to review while oral language disappears in the moment of utterance. When a task is unfamiliar this ability to review textual information is helpful to ELs. They found that EL students need many opportunities to practice their English skills but are given few opportunities for this practice in mainstream classrooms.

Finally, the authors note that students who have limited background knowledge in content and English have a double challenge, as do their teachers. Therefore, professional development must focus on giving teachers the skills to help students meet this extra challenge.

What Kind of Sub-Group Specific Information Might Teachers Need to Help Them Be More Effective?

We have discussed some of the competencies necessary to meet the needs of diverse students and of ELs. But there are other students in our schools who need much more specific attention than they are currently receiving and who are often overlooked. For these students, it will be necessary for teachers to develop skill sets that are as specific as those needed for ELs. Immigrant students are often viewed as being virtually synonymous with ELs, and therefore primarily needing help only in learning English. However as Gershberg, Dannenberg, and Sanchez [93] have pointed out, the needs of the two groups can be quite different. The great majority of ELs are born in this country of immigrant parents, and while not having benefited from many of the American socializing practices that English-speaking students have, they nonetheless differ considerably from immigrant students with respect to what they know about American schooling expectations and routines. Many immigrant students have little understanding of how American schools operate, what is expected of them both academically and socially, and how they can fit into the new culture. For these students, newcomer programs that provide basic socialization in U.S. cultural and schooling practices can be very important, and it requires unique expertise to mount and teach in these programs, especially so that they meet the needs of students in different age groups and with different levels of exposure to formal schooling.

Standard English Learners include students who speak English but who come from different speech communities, such as African Americans, Chicanos, American Indians, and Hawaiian Americans [94]. Lemoine and Hollie [95] argue that these students should be considered under the

umbrella of linguistic minorities, but that the interventions they need are qualitatively different from those provided for ELs, as are the skills needed by teachers who teach these students. The Academic English Mastery Program (AEMP) developed by the Los Angeles Unified School District (see Smitherman [96]) is based on six instructional approaches, including ability to integrate knowledge of diverse linguistic varieties into instruction as well as to understand and appreciate the role and value of language varieties in the speech communities of the students. Teachers in the AEMP incorporate a strategy of contrastive analyses of language use in standard and non-standard English, infuse instruction with knowledge of history and culture of the language communities, and use culturally responsive pedagogy that incorporates knowledge of different learning styles or preferences. A number of researchers have developed specific strategies for addressing the learning needs of speakers of African American Vernacular English (AAVE) and argue that AAVE is systematic and rule-

governed like any other language, and that the linguistic features of AAVE must be understood in order to help Students Bridge to Standard English [97]. Lemoine [94] makes a powerful argument that the skills and knowledge required to successfully meet the instructional needs of non-standard English speakers are sufficiently different from those needed by teachers of EL students that specialized training is critical.

Secondary students have distinct needs from elementary students as well, but they are often overlooked in the design of curricula and in pedagogical strategies. Both the research and our own survey of 5300 teachers in California have found that diverse secondary students, especially ELs, need attention to motivation issues (see also pp. 22-24). Teachers must be able to encourage these students as they see themselves performing behind their classmates, and so the ability to communicate and knowing how to encourage students is a critical aspect of teaching successfully at the secondary level.

What Do We Know About the Best Ways to Prepare Teachers Overall?

Our notion of how teachers become effective professionals is one of a continuous rather than a finite process. Therefore, in this section on teacher preparation we will discuss the global teacher preparation trajectory: the in-service or fifth year, teacher induction, and professional development.

Research on High Quality Teacher Education Programs

A body of research on teacher preparation supports pedagogic knowledge as a critical ingredient in teacher and student success. Researchers propose that while it is important for teachers to master subject knowledge, they must also master

knowledge of how to teach this subject matter in order to be effective [98,99,100]. This view argues for teachers who receive their preparation through teacher certification programs because pedagogical knowledge forms an important part of the curriculum in such programs. Darling-Hammond [101] supports this view with evidence based on analysis of both quantitative and qualitative data that the percent of a school's fully certified teachers is strongly correlated with student achievement.^{xiii} Other evidence to support teacher certification comes from a survey of nearly 3000 beginning teachers that reported a stronger sense of efficacy and preparation and a greater likelihood of remaining in the

teaching profession among teachers in New York City who were trained in a traditional teacher certification program than those trained in an alternative certification program [102,103]. Both of these indicators are important given the research supporting the greater effectiveness of teachers who feel more capable and the importance of teacher experience as teacher quality indicators.^{xiv} Field experience is also considered an important aspect of teacher preparation. Brophy [104] argues that some types of knowledge cannot be learned in theory alone, but require direct experience in the classroom with candidates' observation of master teachers. An example he provides is that of classroom management. Teachers need to learn principles of classroom management as well as how to implement these principles, under what circumstances, and why. An additional argument for the importance of the field experience is the opportunity it provides for those in schools and schools of education to evaluate prospective teachers' skill [34].

Unfortunately, however, master teachers and university supervisors do not always have the ability to do this well and there are few opportunities for them to receive training to improve their evaluative skills [34,105]. Another aspect of field experience that we discuss below is the importance of situating teacher candidates' field experience in schools with the diverse students they will actually have in their classrooms when they become teachers, rather than in hypothetical lab situations or situations that don't reflect the diversity they are likely to encounter in the real world.

A Possible Dream [106], a report by the California State University Center for Teaching Quality, supports the argument for teacher credentialing programs that require both coursework and student teaching (field experience) as the best route to well-prepared teacher candidates. The report is

based on survey of close to 2000 current and former California public school teachers. The survey revealed that for those teachers who stayed in education and had been teaching for less than five years, their teacher preparation experiences were a main reason they remained in the profession and, they believed, a main contributor to their success. Fifty-eight percent of the respondents cited teacher preparation coursework and 48 percent noted positive student teaching experience as important factors. Conversely, the survey found that teachers who left the field seldom cited teacher preparation as contributing to their decision to do so. The researcher's conclusion, in agreement with above cited research, was that earning certification through teacher credential programs contributes to teachers' persistence in the field.

A number of researchers support alternative certification routes that loosen the criteria and demands of traditional teacher preparation [107,108,109,110]. They argue that to increase the number of qualified applicants to the teaching profession, many of the existing "barriers" to entry must be streamlined. Ballou and Podgursky [107] make a case against certification arguing that there has not been sufficient evidence of its benefits and that obstacles to entry stifle the potential market of qualified teacher candidates. It seems likely that some form and degree of alternative routes to certification is here to stay. As Zeichner [111] notes, "...all forms of teacher education include a wide range of quality from awful to excellent. Instead of continuing the debate over which is better...it would be more useful to focus on gaining a better understanding of the components of good teacher education regardless of the structural model of the program" [111, p. 506].

Evaluation of Teacher Education Programs

In addition to the need to provide opportunities for master teachers and university supervisors to increase their ability to evaluate prospective teachers, some research supports an argument for improving the quality of current approaches to evaluation of teacher education programs overall. For example, Wilson et al. [105] note that much of the research on teacher credential programs is based on teacher self reports, and that the wide variation in the focus and expectations of cooperating teachers during the field experience makes evaluation difficult. A model for such an improved system comes from a study of the Stanford Teacher Education Program (STEP) that included a multi-dimensional measurement framework for evaluation the program's success [99]. The framework included teacher interviews, surveys, pre- and post-tests, samples of student work, and longitudinal observations of clinical practice in order to capture not only the preparation experience but also how it prepared teacher candidates to apply their learning to the classroom. The results of this research provide an example of how teacher preparation institutions can refine program offerings and improve evaluation.

Teacher Induction Programs

Programs of support for new teachers are another part of the teacher education trajectory. The widespread implementation of these programs is fairly new, although some form of teacher induction has been in place in California since 1992. Margaret Olebe [112], who was instrumental in designing these programs in California, describes the hallmarks of induction programs across the U.S. as follows:

- Individualized teacher support: usually mentoring but it can also include

classroom visits, observations, reflective journals, formative assessments, and similar activities.

- Professional development activities: usually employer-sponsored but it may include teachers' collaborative networking, university coursework or conferences.
- Employer-sponsored programs: principally supported by local school districts sometimes with support from other agencies. New employee workshops, health and safety training, and procedural meetings can be part of this process.

There is increasing evidence that strong induction programs work. For example, Linda Molner Kelley [113] reports increased long-term retention among 10 cohorts of new teachers as a result of participation in a university/district partnership induction program. Smith and Ingersoll [114] analyzed data from the nationally representative 1999-2000 Schools and Staffing Survey and found that beginning teachers who were provided with mentors and who participated in collective induction activities, such as planning and collaboration with other teachers, were less likely to move to other schools and less likely to leave the teaching occupation after their first year of teaching. They also found that situations in which mentors and mentees shared subject matter or area of expertise specialization were particularly associated with teacher retention. This finding provides additional support for the need for teachers who are expert in EL and SEL instruction to serve as mentors to new teachers who have significant numbers of culturally and linguistically diverse students in their classrooms—and who thus need to become expert in this area.^{xv}

Research within California has shown success for induction as well. A study of

induction programs in three California school districts with a combined student population of approximately 150,000 students—a large percentage of them Latino^{xvi}—found greater achievement on SAT9 among students of teachers who participated in induction. Moreover, researchers found that these positive effects on achievement were greatest when induction programs maintained a mentor-novice ratio of 1:15 for two years [32]. This latter study did not focus specifically on the issue of induction for teachers of culturally and linguistically diverse students. However, the increased achievement of Latino (and other) students of induction participants flags these programs as promising with regard to promoting academic gains for cultural and linguistic minority students.

Professional Development

Current professional development research has two major strands: “reform-oriented” and “traditional” [115,116,117,118]. Traditional in-service professional development is a term used to describe single, one-time workshops that often happen in isolation. Reform-oriented professional development, on the other hand, represents in-depth engagement including mentoring and coaching, and participation in committees or subgroups [115]. There is general agreement in the educational research literature that the practical and specific is more helpful than the theoretical and general when seeking to make change in classroom practice a reality [119,120]. In California, a large-scale study that linked professional development with specific curricula found that this type of direct linkage to classroom practice was more effective than workshops that focused on general strategies in promoting change in teacher practice. In this survey study of 975 teachers throughout the state who were

engaged in professional mathematics education, teachers were asked to respond about their classroom practices, as well as their current professional development experiences. Researchers found, consistent with earlier studies, that most of the prior professional development experiences of teachers had been fragmented and removed from practice. They concluded that successful professional development must be grounded in deeper knowledge of the student curriculum, and that there must be adequate time for teachers to acquaint themselves with the new learning [121].

In summary, taken together the research suggests that successful professional development must examine important teacher issues in depth. Furthermore, to be effective professional development must include opportunities for practice and districts must invest time in the growth of teaching professionals.

How California Prepares Teachers: The Teacher Credentialing System

The California Commission on Teacher Credentialing (CCTC) [122] is the credential granting institution for authorization to teach in the state’s public schools and school districts. All prospective California teachers must have a Bachelor of Arts undergraduate degree and demonstrate academic preparation in the subject matter they will be teaching. In addition they must demonstrate pedagogical competence by completing a CCTC approved teacher preparation program—which may be a college, university or local education agency—and earning a recommendation from this program. Additionally, the state of California requires that teacher candidates pass two principal assessments: the California Basic Educational Skills Test (CBEST) or the California Subject Exams for Teachers (CSET) to satisfy the criteria for a basic skills requirement, and a test for

subject matter content dependent on the level and subject the teacher will teach (e.g., multiple subject elementary school or biology high school), and the Reading Instruction Competence Assessment (RICA). The above criteria are required for a teacher to obtain a 5-year preliminary credential in the state. Teachers who have met the above criteria and have a preliminary credential can earn a clear teacher credential via three options: completing the teacher induction program outlined in SB 2042, completing a 5th year program at an accredited college or university, or receiving National Board of Professional Teaching Standards Certification. Additional tests may be required for teaching certain subject areas or certain special student populations, such as ELs or Special Education Students [122].

The Commission regularly reviews and adopts new subject matter requirements for the various teaching areas and in 1998 (via Senate Bill 2042 Alpert/Mazzoni, 1998) adopted standards for teacher preparation to ensure that subject matter, preparation, and induction standards are aligned with the California academic content standards, which in turn explicitly state what students should be able to know and do by each grade level and in each content domain. SB 2042 included the following major reforms: 1) the creation of multiple, standards-based routes into teaching; 2) alignment of teacher preparation standards with state-adopted academic, content, and performance standards for students; 3) a new requirement that teachers pass a teaching performance assessment embedded in their preparation program prior to earning a preliminary teaching credential; and 4) a requirement that teachers complete an induction program of support and assessment during the first two years of teaching in order to earn a California Professional (Clear) Teaching Credential.

Beginning Teacher Support and Assessment (BTSA)

Recent legislation (SB 1209, Scott, 2006) made additional changes in a number of areas of teacher preparation. It required, beginning in 2007, additional mentoring support for new teachers and included new funds to provide for this. In an effort to streamline teacher preparation it allowed teachers to substitute other standardized tests for the California Basic Education Skills Test (CBEST). It also provided additional funding for alternative certification programs as long as interns are distributed evenly in a district and their numbers do not prevent small mentor-teacher ratios. And, it funded a system of teacher performance assessment (TPA)^{xvii} of teacher preparation programs. The TPA includes commission-established Teaching Performance Expectations that describe what teachers should know and be able to do in the following areas: 1) making subject matter comprehensible to students, 2) assessing student learning, 3) engaging and supporting student learning, 4) planning instruction and designing learning experiences for students, 5) creating and maintaining effective environments for student learning, and 6) developing as a professional educator.

The CCTC also serves as an accrediting body for teacher preparation programs. The CCTC has a partnership agreement with a national teacher preparation organization, the National Council on the Accreditation of Teacher Education (NCATE) which makes accreditation visits every five to seven years to institutions offering teacher preparation programs. The CCTC maintains Standards of Quality and Effectiveness for Professional Teacher Preparation programs, which include standards related to design, governance, preparation to teach curriculum and to teach *all* students in all California schools. In August 2007 when the

Commission’s Annual Report Card 2005-2006 was published, there were no teacher credentialing programs in California that were classified as low performing or as being at risk of being classified as low performing.

As mentioned above, the numbers of California teachers who are under-prepared—who do not have a preliminary or clear teaching credential but an authorization that is more provisional—have declined significantly in the last several years. Currently only about 5% of the teacher workforce is under-prepared. Nonetheless, these approximately 15,500 teachers and the 37,000 novice teachers are disproportionately working in schools with the lowest achieving students [34].

California Teacher Induction Requirements

California began implementing teacher induction programs in 1992. Currently the state spends over 80 million dollars on 150 different BTSA programs.^{xviii} In March 2002, the CCTC adopted standards that defined the expectations of the CCTC and the State Superintendent of Public Education for teacher preparation programs in the state. These induction program standards represent a continuum of learning for teacher education. Teachers may participate in an induction program at a local district, county office, or institute of higher education. The induction period follows the teacher preparation program. BTSA evaluations generally support its value. Findings from the 2002 West Ed BTSA review highlighted the ability of the program to retain teachers in the profession, citing a retention rate of approximately 93%. The evaluation also reported that better induction experiences (mentoring) were facets of stronger district BTSA programs (see pp. 26-27 for further evidence supporting induction programs). The most recent comprehensive review

[123] also found that BTSA documents high levels of retention among participants. However, the researchers caution that in interpreting these results it is critical to note that 40% of studied participants were not brand new teachers. Researchers also note a need for improvement in certain areas, including support for teachers of ELs. With reference to teacher attitudes toward BTSA training on EL issues they report:

We find a lot of interest [on the part of teachers] in the topics, but substantial concern that the training activities are repeating work already covered in pre-service training programs and not providing the new teachers with the depth of understanding or effective applications needed to turn their fledgling knowledge into professional skill [123, p. viii].

NCLB and California Teacher Credentialing

No Child Left Behind (NCLB) federal legislation requires a “highly qualified” teacher in every classroom who has demonstrated subject area competency and full certification [124]. A “highly qualified teacher” is one with full certification, a bachelor’s degree and demonstrated competence in subject knowledge and teaching. The act also calls for the recruitment into teaching of qualified professionals from outside the field and the provision of alternative routes to teacher certification for these professionals. In addition NCLB promotes developing and implementing hiring policies that ensure comprehensive recruitment efforts as a way to expand the applicant pool. Examples of such efforts include identifying teachers certified through alternative routes (such as Troops to Teachers) and using a system of intensive screening designed to find the most qualified applicants [125]. NCLB

accepts three types of California interns as compliant with federal credential requirements (see Appendix 2 for compliant and non-compliant credentials). The teachers are equitably distributed to all schools.

legislation leaves it to individual states to define and determine necessary pedagogical skill. Finally, NCLB requires that states demonstrate how they ensure that quality

Preparing Teachers to Work with Diverse Students

Approaches to Preparing Teachers for Diversity

There is both good news and bad regarding the state of teacher preparation for working with diverse students. The bad news is that looking across a number of reviews of research in the area, Hollins and Guzman [126] conclude that “there has been remarkable consistency in the conclusions of previous reviews: Basic changes in teacher education for diversity are necessary, but have not occurred despite 25 years of attention” [126, p. 479]. The good news, then, is that there is room for change. As discussed in Section I, most teacher candidates tend to be a homogeneous group who do not reflect the diverse profile of their students [127]. They have little experience of diversity and many have fairly negative attitudes and predispositions toward people from backgrounds unlike their own. Nonetheless, these mostly white, middle class, female, candidates from suburban or rural backgrounds often express a willingness to teach in urban environments [126]. Thus teacher education programs have the charge of preparing candidates who are most likely from homogeneous white, suburban, or rural backgrounds to teach children who most likely are not.

Teacher education programs take two general approaches to increasing the pool of teachers who are well-prepared to work effectively with diverse children: recruitment of candidates of color and activities to try and develop or change the attitudes and knowledge of white candidates

about working with diverse students [128]. The latter approach generally involves coursework and field experience.

In a review of this research Sleeter [128] found that most of the studies of recruitment strategies were program descriptions rather than evaluations of program success in preparing the recruits. The many studies did, however, “demonstrate that it is possible to recruit and prepare many more teachers of color than we do currently” [128, p. 96]. Two programs designed to recruit and prepare paraprofessionals to become teachers provide examples. The Norfolk State University prepared 83 participants in five years, most of whom were later employed as teachers. Graduates said positive aspects of the program were: 1) strong support services, 2) a good collaborative relationship between the university and the public school system, 3) a dedicated committed and accessible staff and advisors, and 4) an attitude of respect for the prospective teachers on the part of school district personnel and university faculty [129]. The University of Southern California Latino Teacher Project was smaller. It had a low attrition rate (as did Norfolk) and all but one of the graduates was teaching in local hard-to-staff schools [130]. Another recruitment strategy is to bring into the field individuals with personal profiles that might better prepare them to teach diverse students successfully. Haberman [131] has done a great deal of work in this area and has developed a teacher profile based on his research on the

attitudes and attributes of teachers who are likely to be successful with culturally and linguistically diverse students. This profile is of an individual who is not the traditional teacher education graduate: young, white, and middle-class. Rather, these individuals are often not white, either are in or have been from low-income circumstances themselves, and are likely to have attended urban high schools so they are familiar with the kinds of communities they will teach in and the students they will find there. These teachers are often preparing specifically with the intent to teach in urban schools.

A major strategy to prepare a white middle class population of prospective teachers to work with diverse students is through coursework, either stand-alone courses or courses that include field experience. Studies of these courses are virtually all small-scale and very often the researchers are the faculty members who teach them [128]. These courses usually center on a variety of activities designed to reduce prejudice. Based on their review of research reporting results of studies of prejudice reduction activities, Hollins & Guzman [126] report generally positive impacts on teacher candidates' attitudes and beliefs with variation in results depending on the "teacher candidates' experiential backgrounds, course content and pedagogical strategies" [126, p. 490]. Zeichner [47] provides a discussion of some of these strategies. A principal strategy that programs use is autobiography to help teacher educators develop and clarify their own ethnic and cultural identities as a necessary precursor to cross-cultural understanding. Another is the use of case studies and readings authored by people of color about their personal schooling experiences. Strategies to learn about historical and contemporary contributions of different ethnic groups to all aspects of life in the United States and about their unique

characteristics and learning styles are also frequently employed. However, McDiarmid's [132] work provides a caution about the importance of depth and sensitivity when designing such courses. His survey study of 110 prospective teachers revealed that their multicultural professional development courses reinforced previously held negative stereotypes. Zeichner [47] finds that programs that are successful in preparing teachers for diversity also provide teachers with knowledge about instructional and assessment strategies that enable them to draw on the knowledge and backgrounds of their students in order to design the most appropriate classroom experiences. These programs furnish teachers with knowledge regarding how to discover what students already know and how to use students' learning strengths, knowledge, and experience as a foundation for building new learning. Hollins and Guzman [126] conclude from their review of research that while such strategies for reducing prejudice can be successful, they can also be stymied by candidates' beliefs and attitudes.

Another major approach to preparing teachers for diversity is through fieldwork [133]. Generally, field experiences are short-lived with prospective teachers working in a school or other community situation, or longer and more intensive, involving relocation and immersion in an urban setting. The studies of shorter-term field experiences generally showed benefits including "a better understanding of diverse populations and learning how to communicate and build relationships with those from cultures different from their own" [126, p. 495]. While the longer and more intensive community field placements including relocation seem to show similar results, these authors expressed less confidence in these results due to methodological concerns.

The developmental nature of learning to be an effective teacher for linguistically and culturally diverse students, characterized as an ongoing process rather than a discrete learning period after which one is an expert, is an increasingly prevalent idea in the literature. This is not unique to teachers of culturally and linguistically diverse students but according to Zeichner [47], it may be even more critical. In his report on the role of coursework, field experiences, cooperating teachers, and university supervisors in preparing teachers for linguistic and cultural diversity, he comments:

The implication is that prospective teachers need to learn how to be and do all of the things that are discussed in this report by the time that they begin their first year of teaching. Given what we know about what student teachers bring to teacher education (e.g., the lack of interracial experience), and about the complexity of the process of teachers' learning to teach across cultures, this is probably an unrealistic expectation [47, p. 162].

Embedded Teacher Preparation for EL instruction in California

As discussed above, beginning in July of 2002, every teacher education program in California was to have embedded the content necessary to prepare teachers for EL instruction and since then every graduate of a single or multiple subjects credential program is authorized as an EL teacher. Standards of Quality and Effectiveness for Professional Teacher Preparation Programs include a standard on the preparation of teachers of ELs, Program Standard 13. This standard requires that candidates have systematic opportunities to acquire the knowledge, skills and ability to deliver appropriate instruction to EL students. In addition to learning about the state and

federal requirements for instruction, teacher preparation programs are to provide candidates with the philosophy, design, goals and characteristics of English language development, including their relationship to the state adopted reading/language arts standards and frameworks. The standard also requires that coursework and field experiences include: multiple opportunities to use instructional practices that promote English language development, opportunities to make grade level curriculum content comprehensible, understanding of the importance of family background and experiences, and understanding of how to interpret assessments of EL students including the California English Language Development Test (CELDT).

While stand-alone courses have the disadvantage of being one shot, out of context with regard to other teacher preparation content, and minimal, embedding attention to EL issues has problems as well. One major limitation is that many schools of education lack the teacher education faculty to be able to embed strategies and knowledge for working with EL students in all coursework. Thus, new teachers are expected to learn these complicated and critical skills from faculty who may or may not have expertise in the area. Moreover, learning everything discussed above without adding instructional units or time to credential studies—even when faculty are expert—is a challenging task, and when they are not—almost impossible. That they often do not is illustrated by an analysis of data from the statewide professional assignment report conducted by the Center for the Future of Teaching and Learning. The Center's researchers found that almost two-thirds of the new teachers who earned their credentials after this embedding of EL content and authorization were not aware

that they were authorized to teach ELs. “Despite the state’s efforts to embed EL training into every new teacher’s preparation program, there is some evidence that newly credentialed teachers are unaware or unaffected by this training. In 2004-2005 only 34% of first and second year teachers reported to CDE that they are EL certified” [134, p. 46]. Another problem is that without a specific course or set of courses, these issues can easily get lost as faculty choose among the many required competencies and concepts. Although there is as yet little supporting research, the possibility of restructuring teacher education programs by infusing multicultural content, especially in collaboration with schools that have strong culturally responsive teachers, is promising. But as Sleeter [128] notes, “partnerships between schools and universities with predominantly white staffs doing business as usual would probably produce more business as usual” [128, p.101].

With regard to authorizations to teach ELs, we found from our own research [135] that teachers who have specialized authorizations designed to prepare them for EL instruction (CLAD or BCLAD) are more confident in their professional ability. In fact, we found that the more extensive the preparation of the teachers, the more confident they feel of their ability to successfully teach ELs. This is important because there is a significant literature on the positive relationship between self-efficacy and instructional effectiveness [136,137,138,139,140, 141,142, 143], and on self-efficacy, optimism, and the will to create change [144,145].

Induction Content for EL in California

The requirements of the BTSA program as detailed in SB 2042 include induction program standards that address both diverse learners and ELs specifically. Program Standard 17: Supporting Equity, Diversity

and Access to the Core Curriculum, requires that the program provide for each participating teacher the knowledge, skills, and abilities that support learning for diverse students. The standard includes language that recognizes the need to examine the impact on learning of students’ diverse cultural backgrounds and to use instructional strategies that maximize student performance. Program Standard 19 requires teacher induction programs to include the knowledge and skills necessary to the delivery of comprehensive, specialized instruction for ELs. This standard details the additional information that must be mastered by the teacher including but not limited to English language development methods and providing access to the core curriculum subject matter while developing concepts and critical thinking skills. These standards detail the content to be taught to teachers through the induction process. Upon completion of the accredited induction program, teachers are granted the appropriate (for example multiple subject) preliminary credential with and English Learner authorization.^{xix} The New Teacher Center (NTC)^{xx} at the University of California at Santa Cruz is a national resource focused on teacher and administrator induction. It has a demonstrable record of achievement, with long-term new teacher retention rates as high as 95%, compared to a nationwide teacher attrition rate of nearly 50%. The NTC is founded on the Santa Cruz New Teacher Project (SCNTP), established in 1988, as a systematic, mentor-based teacher induction model. In working with new teachers and, more recently, new principals, the NTC induction programs help novices not only to survive their early years in the education field, but also to emerge as confident, skilled professionals. The NTC’s unique induction model helps novice educators maintain a strategic focus on

student learning and classroom instruction with the guidance of highly trained and supported mentors. The NTC works with new and veteran educators, researchers, and policy makers to support the development of strong induction models by providing resources and programs that address effective mentoring and supervision practices, issues of equity, using student data to improve instruction, and strategies for meeting the needs of ELs.

Professional Development for EL Instruction in California

There is some excellent professional development available in California that is designed specifically for helping teachers gain expertise in EL instruction. We mention a few efforts as examples but there are several others. A principal source of this professional development is through the fourteen bilingual teacher-training projects (BTTPs), run by County Offices of Education. These are major providers of professional development to prepare teachers to take the CLAD or BCLAD by exam. Some also provide expertise through coursework. These programs, established originally in 1980, have become critical centers of expertise on English Learner education and are key providers of high quality professional development in this area.

Another source of professional development designed specifically to improve teachers' skills for EL instruction comes from SB 472. The bill provided funding for teachers who had already completed professional development in math and/or language arts, to take an additional 40 hours of professional development. These additional hours were designed to help teachers gain expertise in the instruction of EL pupils in math and language arts. The bill also allowed for professional developers with expertise in EL instruction to apply and be

accepted as state-approved professional development providers.

Additional district support comes from Technical Assistance Centers (TACs). These centers have attempted to help schools and districts by providing data analysis and professional development among other assistance. There are several TACs available through the California Department of Education with different support focuses such as Title 1, 21st Century Community Learner Centers and After School Education and Safety Programs, and Reading First. An example of an outside agency TAC, the California Comprehensive Center at WestEd, provides assistance to the California Department of Education with three priorities: supporting those working to build the capacity of districts and schools to improve student achievement, building the capacity of the state and districts to support students with special needs, and disseminating research-based and promising practices [146].

There are several successful models of professional development for teachers of EL students in California. The WRITE Institute, Project GLAD, the New Teacher Center at the University of California Santa Cruz (see above), and The Quality Teaching for English Learners at WestEd provide examples. Professional development programs like these, that have a research base and evaluation history, are likely to help participating teachers increase their expertise in the instruction of linguistic and culturally diverse students.

The Writing Reform Institute for Teaching Excellence, (WRITE Institute), trains teachers in standards-based instruction and assessment primarily for ELs. WRITE^{xxi} provides tools to help teachers measure their students' growth in English and to inform instruction based on this assessment so that teachers can effectively promote the

acquisition of the academic English skills necessary to meet challenging state and national standards. The Institute indicates that over the past decade in districts statewide they have seen growth in English academic writing skills among EL students of WRITE participants. In addition, they cite preliminary data indicating that ELs who receive language arts instruction in both English and Spanish from teachers using WRITE techniques have higher English scores in writing and on standardized tests than those students who are instructed in English only.

Project GLAD, Guided Language Acquisition Design,^{xxii} provides professional development in language acquisition and literacy. The model and strategies promote English language acquisition, academic achievement, and cross-cultural skills. GLAD is a two-part model. During the first part of GLAD training, teachers explore the instructional strategies, theory and research that support the curriculum model, and learn to understand and use the curriculum model that brings these all together in the context of district and state frameworks and standards. The second part of the training consists of classroom demonstration sessions in which teachers observe and use the model with students.

Quality Teaching for English Learners (QTEL)^{xxiii} was created in 1999 by WestEd's Teacher Professional Development program. QTEL improves the capacity of teachers to support the linguistic, conceptual, and academic development of adolescent ELs, both immigrant and U.S.-born. QTEL is grounded in a body of research and provides an academic framework that offers intellectual challenges and supports to strengthen teacher knowledge, the ability to apply that knowledge in classes, and in turn to raise student achievement. QTEL's tools and

processes adapt Shulman and Gamoran's [147] six key domains from the Fostering Communities of Learners project: knowledge, vision, motivation, reflection, context, and practice.

Despite these important efforts, we have indications from our survey of over 5,000 California teachers of ELs [135] that the most prevalent professional development, that which is based on the state-adopted curricula, is lacking with regard to EL instruction. SB 472, discussed above, is just getting underway and may change this picture somewhat. Nonetheless, teachers in our focus groups cited examples of professional development associated with packaged curricula in which the trainer's only guidance on working with EL students was to refer participating teachers to page x or y of the manual.

We also found that teachers—at both the elementary and secondary level—who had professional development specifically focused on the teaching of ELs rate themselves significantly more able to teach these students both English language development and content than teachers without such training. Our data suggest that professional development can and does make a difference in assisting teachers to meet the challenge of teaching ELs. It appears more—and better—professional development makes a difference in teachers' sense of efficacy with EL students.

Unfortunately, however, we found that too few teachers had had professional development designed to help them work with EL students. For example, almost half of the teachers with 50 percent or more ELs in their classrooms had received only one in-service workshop that focused on the instruction of ELs (or none at all) during the last five years. Moreover, while this one in-service consisted of multiple hours for some teachers, for others it was limited to a single

after or before school workshop. Furthermore, only half of the brand new teachers in the sample, those required by law to participate in some EL focused in-service as part of their induction and progress toward a clear credential, did so. Earlier work indicates that teachers in California, on average, received only about two hours of in-service training annually that was focused on EL issues [148].

The difference between elementary and secondary teachers' regarding the

professional development subjects that they found most useful, provides a reminder that “one size does *not* fit all” for students is true for teachers as well as students. Over half of the high school teachers found a focus on cultural insights that helped them understand their students to be useful and elementary school teachers just as often cited professional development that provided practical classroom skills that could *realistically* be used with EL students as most helpful.

Additional Challenges

Recruitment

Haberman [56] describes the behaviors and ideologies of outstanding teachers in urban schools whose students demonstrate significant learning through test scores and work samples. Based on these he devised screening interview questions designed to select teachers who can be successfully prepared for the job of teaching in urban schools, because, he argues, the surest way to improve the schooling of students who are not doing well in our schools is to provide them with better teachers. Furthermore, his strategy stresses the importance of selection rather than preparation because, in his words, “Teachers’ behaviors and the ideology that under girds their behaviors cannot be unwrapped. They are of a piece” [56, p. 777].

The importance of recruiting teachers from the communities in which we have the greatest shortage of high quality teachers is underscored by research on teachers’ geographical preferences [1]. Since teachers prefer to work either in, near, or in areas that have similar characteristics to, their hometowns, and currently most teachers come from suburban or rural districts, we need to generate more teachers who are

originally from these urban areas. Currently the number of prospective teachers from urban areas falls far short of the numbers of teachers needed in urban schools, so these schools must attract teachers from other areas. This issue of teacher preference adds to the already heavy burden of urban schools that “must overcome these preferences in addition to addressing the considerations typically identified with recruiting teachers to difficult-to-staff urban schools, such as salary [and] working conditions...” [1, p. 127].

Restrictive Instructional Options

As noted earlier, the focus of this paper is not the controversy over which is “the best” way to provide instruction for English language learners. Nonetheless, we must address the fact that in the current environment, instructional options for these students are limited. Moreover, the potential for increased achievement of students who participate in programs that make use of their primary language is strongly supported by high quality studies using a range of research methods (see e.g., [73,74]). While primary language options are certainly not appropriate for all EL students nor in all learning situations, limiting proven educational strategies for students who are

not learning well in the current instructional environment may be counter-productive.

Conclusion

A tension exists between the preparation that every teacher needs for teaching students who come from a range of cultural and linguistic backgrounds and the preparation that individual teachers need to work with the specific diverse students in their classrooms. There are some general areas of expertise that can help every teacher address the needs of diverse students, and these are discussed in this paper along with the general kinds of knowledge that teachers might need about the specific subgroups of students in their classrooms. We support the need for every teacher in California to receive preparation for working with EL and Standard English learner students through teacher preparation programs and induction. Nonetheless, we believe that even these well-prepared teachers need extra support, as it is virtually impossible that all teachers could have deep expertise in all areas for all students in our diverse society.

We argue, therefore, for a school-wide perspective on addressing the needs of cultural and linguistic minority students; for viewing the school as a team that has within it the expertise to address the needs of these students. The foundation of this team consists of classroom teachers; teachers who will have varying degrees of expertise for working with CLD students even with professional preparation and induction. The team also includes some school experts who work with students and teachers to fill some of the inevitable “expertise gaps.” A key part of this team is a principal who knows about diverse students and their needs and who therefore knows what kinds of additional expertise are needed at the school and how to use this expertise. Since few principals currently have such knowledge,

this would have to be gained through certification as discussed in our recommendation #5. Another source of such expertise is bilingual teachers. These teachers’ specialized expertise in the instruction of EL students, their ability to communicate with parents and students, and to informally assess EL students, make them critical resources in schools regardless of the program of instruction. BTSA struggles to provide appropriately trained mentors for induction of new teachers who will be teaching EL students because there are so few teachers with the full range of skills to serve EL students. Bilingual teachers are critically needed in this capacity as well. Moreover, research shows that “the teacher next door” is often a more effective change agent than an educational consultant who is not as familiar with the school and its population.

This view argues for a local approach: the extra expertise at one school might be very different than what is needed at another. In addition, the professional development that teachers need is likely to vary by site, or perhaps groups of sites, within a district, and should be allowed to vary so that teachers gain the skills that will benefit them and their particular students. The approach also argues for developing additional teachers who have such deep expertise: teachers who may come from the same backgrounds as some of the students and who have deep personal and professional knowledge about working with those students.

Recommendations

This review of the knowledge base regarding the importance, availability, preparation, and distribution of qualified

teachers for diverse students leads us to a series of recommendations that we argue can make a difference in the academic outcomes for groups of students who currently underperform at significant levels.

- We consider the most urgent need in the state to be the recruitment of teacher candidates with both the disposition and preparation to become excellent teachers of diverse students, as well as the propensity to remain teaching in the communities where these students live. Inasmuch as the research has demonstrated that teachers from students' own communities are most likely to remain in schools in those communities, gaining important experience and expertise and providing critical continuity for students, it makes sense to recruit from these areas.

It cannot be assumed, however, that just because they come from the same community as the students that these teachers will be able to tap into the cultural and linguistic resources that they have. A recent study by the New Teacher Center at UCSC [149], in fact, calls this into question. The need for these teachers is unquestioned, but they must also be assisted both in their teacher preparation programs and induction experiences, to recognize and develop these resources.

Talented young people from communities of color, with college degrees and often with competence in additional languages, can usually find attractive jobs that pay better than teaching. Therefore it becomes necessary to provide attractive incentives for becoming a teacher. One such incentive would be to pay one year of a college education and teacher preparation (including a stipend for living expenses) for each year that a

person devotes to teaching in an underserved community. Recent projections from the National Center for Higher Education Policy indicate that California is on the cusp of a significant decline in per capita earnings due to an underproduction of college graduates. While high percentages of young people go on to college in California, relatively few actually complete their degrees and this is especially true for students of color—the majority of California's K-12 population. Analyses by Vernez, Krop, and Rydell [150] of the RAND Corporation show that the cost of educating African American and Latino students to the same levels as their Asian and white counterparts would more than outweigh the benefits in tax dollars collected. This, combined with the critically important service such individuals would provide to the education of youth argues strongly for a state program of total scholarships for teacher candidates from underserved communities.

- The numbers of teachers whose preparation for working with EL students via the English Learner authorization that is earned in multiple and single subject credential programs as a result of AB 1059 will continue to grow. This approach for preparing teachers has now been in effect for more than five years and we recommend that it is time for a comprehensive evaluation of its effectiveness and of the variation in instruction offered at different institutions. This evaluation should include the BTSA program role in augmenting new teachers' expertise with regard to ELs. Along with discovering strengths, weaknesses, and needs, such an evaluation would uncover exemplary practices that could serve as models for programs that are struggling.

- Evidence presented in this paper indicates that California requires deeper capacity to address the learning needs of the state's diverse students. California needs to learn what is essential for teachers of diverse students, and especially EL, SEL, and immigrant students to know and be able to do, and how to best provide these skills and knowledge to California's current and future teaching force. We recommend developing Centers of Teaching and Research Excellence that would be designed to help answer these questions, serving as incubators for teacher preparation and professional development with a focus on teaching culturally and linguistically diverse students. Centers could be sited at several campuses across the state using the expertise and resources from UC, CSU, and private colleges and institutions combined with some clustering of federal Title III funds, state help, and assistance from foundations. The most knowledgeable faculty, experts, teachers, and researchers would be assigned as "in residence" for a period of time. Research on critical issues that can be applied to teaching and teacher preparation would occur simultaneously with prospective teachers participating in preparation. Teachers might apprentice for six months working in an affiliate school and in the Center alongside highly skilled mentors. The Centers would also train professional developers who would share the Center-developed knowledge with other teacher training institutions, districts, and schools. In developing these Centers we would draw on the work previously done by others with regard to collaborations between universities and actual schools and districts such as the professional development schools (e.g., [151]).
- We recommend that the state undertake to define and categorize the critical competencies of teachers of ELs and other specific subgroups of students, and to suggest how these competencies could best be taught and measured. This work might be undertaken in the Centers for Teaching and Research Excellence discussed above. We think this could best be achieved by drawing on the expertise of professional development experts with strong research-based programs in universities, districts, and county offices of education. This codification of essential skills could provide a critical tool for teacher preparation and professional development, allowing for more consistency of training across the state. We view this endeavor as being separate from the CCTC's knowledge, skills and abilities (KSAs) validation process as it would draw on empirical evidence and would suggest how to measure these competencies in an empirically valid manner.
- We recommend that the state develop a certification procedure, and related preparation, for principals to develop much enhanced knowledge about diverse students, their needs, and the needs of their teachers in serving them. In our own research, many teachers note that lack of support and understanding from their principals hampers their efforts to successfully serve diverse students.
- We recommend that the state adopt a set of incentives for teachers to attain bilingual credentials, such as a state-administered stipend of at least 10 percent above normal salaries in each district. Regardless of the type of program provided by a school, there is strong consensus that the state needs many more bilingual teachers to be part

of the support team for diverse students in every school.

- We recommend that the role of “resident expert” on EL issues that these bilingual teachers currently take on, be formalized and remunerated at a similar level to specialists in special education, math, and science. Their specialized expertise in the instruction of EL students, their ability to communicate with parents and students, and to informally assess EL students, places bilingual teachers in high demand in schools regardless of the program of instruction. BTSA struggles to provide appropriately trained mentors for induction of new teachers who will be teaching EL students, in part because there are so few teachers with the full range of skills to serve EL students, and who are available to provide this service. Bilingual teachers are critically needed in this capacity. Moreover, research shows that “the teacher next door” is often a more effective change agent than an educational consultant who is not as familiar with the school and its population. But all of these duties run the risk of burning out the bilingual teacher. The purpose of this recommendation is to acknowledge the advanced skills of these teachers, to allow them opportunities to support their colleagues without having to do so at cost to their own time, and to provide an enhanced role that would be both challenging and rewarding. This could reduce the turnover of these teachers and encourage more to join their ranks.
- Currently in California there is a significant shortage of teachers at the secondary level who have skills in

teaching ELs. Moreover, teachers at this level say that they want more expertise in teaching these students [135].

Therefore, we recommend the design and adoption of a single subject specialist certification as an add-on for teachers in grades 7-12. There should also be a pay incentive for teachers to obtain this certification and the cost of obtaining it should be wholly subsidized either by the state or the district, or the two in collaboration. The content of this certification would be established by a group of experts in the field with input from teachers and administrators statewide through an online survey. Several other states—New York, Maryland, North Carolina, Florida, Oklahoma and Arizona—offer English Language Development (ELD)/English as a Second Language (ESL) single subject credentials for high school teachers. We recommend mandating CTC to create the standards for this type of credential.

- We recommend that the state do a detailed assessment of the existing infrastructure in the state—groups and individuals with deep expertise in various areas of professional development for diverse learners—and attempt to map the availability of such expertise so that it can be harnessed to deepen the teacher preparation infrastructure for California. It appears that there are many areas of the state that suffer from insufficient teacher preparation capacity in these areas of diversity, and investment must be made in training more faculty in the preparation of such teacher candidates.

APPENDIX 1

NCLB-Compliant Authorizations for Under-prepared Teachers

Route	Key Features	Status/Numbers
University Intern Credential	For enrollees of university-based teacher education programs <ul style="list-style-type: none"> • Prerequisite: subject-matter competency • Valid for 2 years, renewable for 1 additional year 	After several years of growth, dropped to 4,486 in 2004-05, a 1-year decline of 28%
District Intern Credential	For enrollees of district-based teacher education programs <ul style="list-style-type: none"> • Prerequisites: BA, subject-matter competency • Most commonly found in large, hard-to-staff districts • Valid for 2 years, renewable for 1 additional year 	Flat from 1998-99 to 2003-04 (around 900 per year). Dropped to 746 in 2004-05, a 1-year decline of 15%
Early Completion Internship	Option of bypassing teacher education coursework by passing the Foundations of Teaching assessment <ul style="list-style-type: none"> • Required completion of Teacher Performance Assessment, BA, and subject-matter tests Valid for 2 years	In 2005-06, 154 individuals passed the Foundations of Teaching assessment. Of the 154, 111 passed the multiple-subjects test, 24 passed the single-subject English test, and 24 passed the single-subject mathematics test.

APPENDIX 2

NCLB Noncompliant Authorizations for Underprepared Teachers^{xxiv}

Route	Key Features	Status/Numbers
Special Emergency Permit	Teachers have not demonstrated subject-matter competency Teachers may or may not be enrolled in teacher preparation courses Renewable annually, max of four renewals until '06	Numbers declining since 1999-2000. 7,766 issued in 2004-05, a 1-year decline of 24%. CCTC was phasing out the permits by June 30, 2006
Temporary Certificate	Replaces Individualized Internship Certificates, which have been voided Allows individuals who have completed subject-matter programs to enroll in college or university based teacher preparation programs while earning a credential Issued for 2 years and is not renewable Requires a BA and passage of CBEST	Has fluctuated yearly since first issued in 2002-03. 1,658 issued in 2004-05, a 1-year decline of 37%
Pre- internship	Teachers have not demonstrated subject-matter competency Teachers participate in a program designed to help them pass subject-matter tests and enroll in an internship program Only existing participants can renew; this option is no longer available to new applicants	Has declined since 2002-03. 319 issued in 2004-05, a 1-year decline of 91%
Waiver	Teachers have not demonstrated subject-matter competency One or more basic requirements have been waived Holder must demonstrate progress toward a credential Valid for 1 year, renewable on a case-by-case basis and subject to certain conditions, with usually no more than two renewals	Declined steadily between 1999-2000 and 2003-04 to 450. 475 issued in 2004-05, a 1-year increase of 4%
Provisional Internship Permit	Created in response to the phasing out of emergency permits. Used for anticipated hires when a credentialed teacher cannot be found Teachers have not demonstrated subject-matter competency Requires a BA and 40 units in subject matter for a multiple-subject permit or 18 units for a single-subject permit The district must provide a mentor and supervision, and sign an agreement with the applicant that outlines steps for completing subject-matter requirements/enrollment in an intern program Renewable annually for a maximum of 2 years	392 issued in 2004-05
Short-term Staff Permit	Created in response to the phasing out of emergency permits. Applies to unanticipated hires Requires a BA and 40 units in subject matter for a multiple-subject permit or 18 units for a single-subject permit Valid for 1 year, nonrenewable	278 issued in 2004-05

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Notes

- ⁱ The TECAT is a test given to teachers and administrators looking to renew their credential.
- ⁱⁱ Texas Educational Assessment of Minimum Skills (TEAMS) was the statewide student achievement test at the time.
- ⁱⁱⁱ Based on *Barron's Profiles of American Colleges* selectivity ranking.
- ^{iv} The teacher preparation section has a further discussion of the role of teacher certification.
- ^v Downloaded from California Department of Education on January 27, 2008: <http://www.ed-data.k12.ca.us/>
- ^{vi} For further information on successful classroom practice for diverse students see, for example [152].
- ^{vii} Additionally, as of July 1, 2003 the CCTC could no longer issue a teaching credential unless an applicant had satisfied the requirement for preparation for teaching ELs.
- ^{viii} Instruction in English language development (ELD) and specially designed academic instruction in English (SDAIE).
- ^{ix} More details about requirements for earning these authorizations at www.ctc.ca.gov/credentials/leaflets/cl622.pdf
- ^x www.ctc.ca.gov/credentials/leaflets/cl628c.pdf - 2008-01-01
- ^{xi} <http://www.ctc.ca.gov/credentials/leaflets/cl628b>
- ^{xii} For a detailed discussion of language, culture and assessment standards see Fred Genesee's paper in the TESOL website at http://www.tesol.org/s_tesol/bin.asp?CID=219&DID=3185&DOC=FILE.PDF
- ^{xiii} Data were from several sources including state surveys in all 50 states, case study analyses from several states, the 1993-1994 Schools and Staffing Surveys (SASS), and the National Assessment of Educational Progress (NAEP).
- ^{xiv} As cited earlier see, for example, [5,16,17,19,20,21].
- ^{xv} For information on the mentor knowledge base to support teachers see, for example [153].
- ^{xvi} The districts' student populations were: 26%, 81%, and 78% Latino.
- ^{xvii} Teacher performance assessment of teacher preparation programs was established in 1998 via SB 2042 but was unfunded [34].
- ^{xviii} Personal communication, March 7, 2007, Ellen Moir, University of California Santa Cruz New Teacher Center.
- ^{xix} To view CCTC program induction standards see <http://www.ctc.ca.gov/educator-prep/standards/Induction-Program-Standards.pdf>
- ^{xx} http://www.newteachercenter.org/about_the_ntc.php
- ^{xxi} <http://www.writeinstitute.org/write/index.html>
- ^{xxii} <http://www.projectglad.com/>
- ^{xxiii} <http://www.wested.org/cs/tqip/print/docs/qt/work.htm>
- ^{xxiv} Tables of NCLB compliant and noncompliant credentials from [154].