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# Evaluation of Quality Teaching for English Learners (QTEL) Professional Development

ies NATIONAL CENTER FOR EDUCATION EVALUATION AND REGIONAL ASSISTANCE
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# Evaluation of Quality Teaching for English Learners (QTEL) Professional Development

# Final Report

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# Disclosure of potential conflict of interest

Regional Educational Laboratory West, housed at WestEd, contracted with Berkeley Policy Associates to conduct a third-party evaluation of the Program for Quality Teaching for English Learners, a WestEd intervention. None of the authors or other staff involved in the study from Berkeley Policy Associates and its subcontractors, American Institutes for Research, or any members of the Technical Work Group for the study, has financial interests that could be affected by the content of this report. The evaluation was conducted independent of WestEd staff, who developed and implemented the Quality Teaching for English Learners program.[1]

[1] Contractors carrying out research and evaluation projects for IES frequently need to obtain expert advice and technical assistance from individuals and entities whose other professional work may not be entirely independent of or separable from the tasks they are carrying out for the IES contractor. Contractors endeavor not to put such individuals or entities in positions in which they could bias the analysis and reporting of results, and their potential conflicts of interest are disclosed.

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# Executive summary

English language proficiency is critical to academic achievement in the United States. For several decades, educators and policymakers have explored strategies to ensure that English language learner students have access to rigorous academic content as much as non–English language learner students. Educating English language learner students is a challenge that has become a civil rights issue and a topic of federal legislation. In 1968, Congress passed the Bilingual Education Act, followed by the Equal Education Opportunity Act of 1974, which requires school districts to remove language barriers to instructional programming. More recently, the No Child Left Behind Act of 2001 mandated that all students, including English language learner students, demonstrate proficiency in English language arts and mathematics by 2014 (Abedi and Dietel 2004). This focus on academic success for all student subgroups is a priority in the Obama administration's *A Blueprint for Reform: The Reauthorization of the Elementary and Secondary Education Act* (U.S. Department of Education 2010).

The demographics of students in the United States have shifted significantly over the last few decades. The population has become increasingly diverse over the last 40 years in terms of race, ethnicity and linguistic background. According to U.S. Census figures, the proportion of children of immigrants among the school-age population grew from 6 percent in 1970 to 19 percent in 2000 (Capps et al. 2005). And the nation's overall K–12 school population grew less than 3 percent from 1995 to 2005, but the population of English language learner students increased 56 percent during that period (Batalova, Fix, and Murray 2007). It is important to note that the English language learner population includes students who are immigrants as well as U.S. born citizens who speak a language other than English at home.

The English language learner student population is growing, but its academic success is not (Working Group on ELL Policy 2009, 2010). Approximately half of English language learner students nationwide leave high school without a diploma (Hopstock and Stephenson 2003), compared with 11 percent for students overall (National Center for Education Statistics 2002). The No Child Left Behind Act of 2001 requires all students to master the same curriculum, regardless of their baseline English language proficiency; however, the diverse levels of academic preparation students bring to the classroom create complex pedagogical challenges for secondary teachers (August and Hakuta 1997; Parsad, Lewis, and Farris 2001; Ruiz-de-Velasco and Fix 2000; Walqui and van Lier 2010).

## Overview of Quality Teaching for English Learners

Quality Teaching for English Learners (QTEL), developed by WestEd, is an approach to improving the teaching of English language learner students at the secondary level. It aligns with the broader democratic goals of equal access and equal opportunity for all students (Walqui and van Lier 2010). QTEL targets the teachers of English language learner students classified as limited English proficient and those reclassified as fluent English proficient and placed in mainstream classrooms. By enhancing the ability of teachers to work with English language learner students, the intervention also seeks to increase the quality of instruction for all other students in the mainstream classroom.

QTEL is a nonscripted intervention tailored to the needs of particular schools, teachers, and students. Five fundamental principles guide all QTEL activities (Walqui and van Lier 2010):

1. Sustain academic rigor.
2. Hold high expectations.
3. Engage in quality interactions.
4. Sustain a language focus.
5. Develop a quality curriculum.

These principles permeate the three core components of QTEL: summer institutes, individualized teacher coaching, and collaborative lesson design meetings.

The summer institutes consist of seven days of professional development group sessions to provide a foundation for using new tools and processes for the academic and linguistic development of adolescent English language learner students. To promote continuity across school years, three days are offered at the end of a school year (June/July) and four days are offered before the start of the next (August/September).

Four to six cycles of individualized coaching are offered to teachers participating in QTEL each year. Coaches help teachers develop academically and linguistically rigorous lessons that implement QTEL principles, tools, and processes. These coaching cycles consist of a one-on-one lesson design meeting, an observation of the lesson's implementation, and a debriefing.

The collaborative lesson design meetings, a series of monthly planning sessions, are held at the school sites and facilitated by QTEL staff to provide support for QTEL implementation.

## The present study

The goal of this study was to determine whether QTEL is effective in improving academic outcomes for English language learners in U.S. middle schools. The results intend to inform policy decisions on professional development for teachers of English language learner students.[2]

The study is a school-level randomized controlled trial to test the effectiveness of QTEL using an intent-to-treat model. This model tests the effectiveness of offering an intervention rather than that of participating in it. Teachers eligible for the intervention included those of English language arts and English language development in the schools assigned to the intervention group. Teachers in the control group participated in non-QTEL professional development, as if not involved in the study. These professional development activities, and other implementation contexts, are discussed in chapter 3.

From a sample of 52 middle schools, Berkeley Policy Associates randomly selected 26 for the intervention group. Teachers in intervention schools were offered QTEL; teachers in control schools were not. The study team estimated QTEL's effects on student outcomes in English language arts and English language development, as measured by the California Standards Test

[2] In this study, *English language learner* includes students classified as limited English proficient and those classified as such in the past but have been reclassified as fluent English proficient.

(CST-ELA) and the California English Language Development Test (CELDT). The current study measured secondary impacts on teacher knowledge, attitudes, and practice. The sample included middle schools in urban and suburban areas of three Southern California counties, the English language arts and English language development teachers in these schools, and their students. The sample teachers and students included those who moved into the schools during the study. The study was conducted for the 2007/08, 2008/09, and 2009/10 school years.

Six primary research questions focused on students:

1. What is the impact of QTEL on students' standardized test scores in English language arts among all grade 8 students attending intervention schools at the end of Year 3 (2009/10)?

2. What is the impact of QTEL on students' standardized test scores in English language arts among all grade 7 students attending intervention schools at the end of Year 3 (2009/10)?

3. What is the impact of QTEL on English language learner students' standardized test scores in English language arts among all grade 8 English language learner students attending intervention schools at the end of Year 3 (2009/10)?

4. What is the impact of QTEL on English language learner students' standardized test scores in English language arts among all grade 7 English language learner students attending intervention schools at the end of Year 3 (2009/10)?

5. Focusing on the subgroup of English language learner students who were classified as limited English proficient in 7th grade in study Year 2 (2008/09) and who were still in intervention schools and took the CELDT in 8th grade (in the fall of study Year 3, 2009/10), what is the impact of QTEL on standardized test scores in English language proficiency (i.e., on 8th grade CELDT scores)?

6. Within the subgroup of English language learner students who were classified as limited English proficient in 6th grade in study Year 2 (2008/09) and who were still in intervention schools and took the CELDT in 7th grade (in the fall of study Year 3, 2009/10), what is the impact of QTEL on standardized test scores in English language proficiency (i.e., on 7th grade CELDT scores)?

Three secondary research questions focused on teachers:

1. What is the impact of QTEL on teacher instructional knowledge?

2. What is the impact of QTEL on teacher attitudes toward English language learner students?

3. What is the impact of QTEL on teacher practice, as measured by the Sheltered Instruction Observation Protocol (SIOP)?

## Sample characteristics

The analyses included test scores of students in grades 6, 7, and 8. These data included students who moved into the schools after the study started. The study began with test scores for 6,382 grade 6 intervention students and 6,000 grade 6 control students in Year 1. In Year 2, the sample included test scores for 9,230 grade 7 intervention students and 8,272 control students. In Year 3, the sample included test scores for 9,555 grade 8 intervention students and 8,625 grade 8 control students. Attrition occurred for both study groups; however, it was not statistically significantly different between the intervention and control groups.

For the teacher sample, the study began with 338 eligible (English language arts or English language development) teachers in the intervention group and 303 in the control group.[3] Teachers who moved into the target grades after the study started were included. Teacher mobility in and out of districts over the three years resulted in overall attrition of 41 percent for the intervention group and 38 percent for the control group; the differences in teacher mobility were not statistically significant.

## Data collection and analysis

The data included student standardized test scores and various teacher measures. To examine student outcomes for the primary research questions, California Standards Test for English Language Arts (CST-ELA) and California English Language Development Test (CELDT) scores were collected for students in grades 6, 7, and 8 in 2007/08, 2008/09, and 2009/10 (see chapter 2). To address teacher outcomes, a teacher survey was administered in the spring of 2008, 2009, and 2010. A teacher knowledge test was administered at these same times, but an administrative error precluded a link from Year 1 tests to teacher identifiers; thus, only data for Year 2 and Year 3 could be analyzed. The Sheltered Instruction Observation Protocol (SIOP) was used to rate classroom observations of teachers in spring 2007, 2008, 2009, and 2010. The SIOP is a measure of teacher performance designed to rate teachers on the delivery of instruction to English language learners in K–12 settings. It measures teacher performance along eight dimensions: lesson preparation; building background; comprehensible input; strategies; interaction ; practice/application; effectiveness of lesson delivery; and lesson review/assessment (Echevarria, Vogt, and Short 2004).

QTEL implementation for this study varied from the intended design. To accommodate 26 middle schools, QTEL coaches focused on one department (English language arts) and targeted only English language arts and English language development teachers. Usually, QTEL is implemented as a schoolwide intervention in which coaches work with teachers from all content areas, including mathematics, social studies, and science. Also, to reach the needed number of schools, implementation was staggered—focusing on grade 6 teachers in Year 1, grade 7 teachers in Year 2, and grade 8 teachers in Year 3. Ideally, QTEL coaches would work with the same teachers each year.

Various contextual factors also caused QTEL implementation to vary from the intended design. Budget crises and teacher layoffs were the biggest challenges to consistent implementation.

[3] The numbers of teachers in this paragraph refer to teachers of grades 6, 7, and 8 pooled together.

Non-QTEL-related reforms, changing academic calendars, professional culture, principal leadership, and teacher buy-in also contributed. Teacher participation in QTEL was generally low, and missing or incomplete implementation data contributed to an incomplete picture of implementation.

## Impacts

No significant effects were found on student achievement, as measured by the CST-ELA, or on English language development, as measured by the CELDT. That is, there were no meaningful or significant differences in academic performance or language proficiency skills, as measured by these assessments, between the intervention students and the control students.

No significant effects were found on teacher attitudes, teacher knowledge, or teacher practice, as measured by the teacher survey, teacher knowledge assessment, and the SIOP, respectively.

## Exploratory analysis

Exploratory analyses were conducted to more fully understand whether and how QTEL might have affected the intervention group. These analyses focused on the effects of QTEL on subgroups of teachers and students, additional outcomes (using a tool developed by Berkeley Policy Associates aligned with QTEL principles), and dose response.

Research questions for the effects of QTEL include:

1. Do impacts on students' CST-ELA scores vary by student English language learner status (English only, initially fluent English proficient, redesignated fluent English proficient, or limited English proficient)?

2. Do impacts on students' CST-ELA scores vary by teacher characteristics and baseline classroom quality?

    a. Does the impact of QTEL on student achievement vary by the level of experience of the teachers in their schools?

    b. Does the impact of QTEL on student achievement vary by the extent to which teachers in their schools have an advanced degree (master's or above)?

    c. Does the impact of QTEL on student achievement vary by the baseline quality of their school's English language arts and English language development classrooms?

Additional outcome questions:

3. Does QTEL improve areas of teacher practice expected to aligned with the QTEL program, as measured with the Program Aligned Classroom Observation (PACO) instrument?

4. Does QTEL improve different areas of teacher practice, as measured by subscales of the SIOP?

Dose-response analysis questions:

5. What is the potential effect on student achievement and other outcomes of extending teacher professional development to an additional 10 percent of teachers in middle schools in a district?

6. What is the potential effect on student achievement and other outcomes of extending intensive teacher professional development (at least seven days or more) to an additional 10 percent of teachers in middle schools in a district?

## Results of exploratory analysis

No statistically significant impacts of QTEL were found on the English language arts achievement of any of the four English language learner status subgroups in either grade 7 or grade 8.

For teacher characteristics, QTEL was estimated to have increased the test scores of grade 8 students who were in schools where more than 43.5 percent of the teachers had an advanced degree. The difference of 10.40 points translated to an effect size of 0.17 standard deviation in these scores. This impact estimate was statistically significant ($p = .027$) and statistically significantly different from the estimated QTEL impact on the test scores of grade 8 students in schools with less highly educated teachers (effect size = 0.01, $p = .167$). No other impact estimates related to teacher characteristics were statistically significant or differed significantly across the subgroups.

The exploratory analysis of the four subscales of the PACO instrument resulted in one statistically significant positive impact estimate: the intervention–control difference on the *student interaction* subscale translated to an effect size of 0.445 ($p = .005$). This subscale measures the degree of academically oriented student–student interaction within the classroom. QTEL had no statistically significant impacts on any Sheltered Instruction Observation Protocol subscales.

## Limitations

The internal validity of the findings is limited by the following:

1. Students and teachers left the schools between random assignment and when outcome data were collected. For example, as chapter 2 discussed, 29.5 percent of grade 6 students in 2007/08 were no longer in the grade 8 impact sample in 2009/10. For English language learner students, these grade 6–8 attrition rates differed between intervention schools (41.5 percent) and control schools (28.9 percent). If there are systematic differences between the expected outcomes of students and teachers who leave the intervention schools and those who leave the control schools, such differences would bias the resulting impact estimates.

2. Three schools (two intervention and one control) were consolidated during the study period. To maintain the integrity of random assignment, one-third of the teachers and students in the consolidated school were randomly selected and considered control group

members in the outcome analyses, even though they were treated as intervention group members by QTEL after the consolidation took place. As a result, any estimated QTEL impact on this school would likely be attenuated (biased toward zero), causing a small bias in the overall impact estimates across the entire study sample.

3. Teachers in the control group continued to have access to their regular professional development activities, as provided and prescribed by their school or district. The data on the control group are limited to survey responses from administrators and teacher self-reports. As a result, control teachers might have had undetected crossover exposure to QTEL or similar content.

4. Classroom observations were conducted using a convenience sample. The classrooms observed did not necessarily represent their schools and grades and observed classrooms in intervention schools might have differed from those in control schools, possibly biasing the findings based on these observations.

5. Nonresponse on teacher surveys might have caused nonresponse bias in estimates based on data from those surveys. That is, teachers who responded in intervention schools may have systematically differed from teachers who responded in control schools.

The external validity of the findings is limited by the following:

1. The sample of school districts and schools was not a random sample in the United States, California, or Southern California. There is no way to know whether the results generalize beyond it.

2. Schools and districts participating in the study volunteered for a study in which schools were randomized to receive QTEL or not to receive it. This means that the results may not be representative of schools that are fully committed to the QTEL intervention, in which case they may have avoided randomization and contracted for QTEL (or similar services) directly.

3. Participation in QTEL services was not universal. Most teachers eligible to participate did not receive all services as intended. Thus, the findings do not generalize to a setting in which all participants receive all intended services.

4. The fidelity of implementation was limited. The delivery of some QTEL services was compromised by school staffing and logistical issues, and tracking of service receipt by QTEL staff was limited. As a result, the findings do not generalize to a setting with complete implementation fidelity.

5. While the classroom observation instruments demonstrated acceptable levels of internal consistency[4] and interrater reliability, there is insufficient data available to establish external validity of either the SIOP or the PACO instrument. Prior research establishing the external validity of the SIOP was not available.

[4]We considered a Cronbach's alpha of 0.70 as the minimum acceptable for internal consistency for the classroom observation measures. The 30-item SIOP demonstrated a Cronbach's alpha of 0.94. The 22-item PACO demonstrated a Cronbach's alpha of 0.92.

Four data quality issues limit the reliability of the findings:

1. Program data on coaching and professional development attendance were incomplete and poorly documented. As a result, the description of implementation might be unreliable.

2. The main student outcome measures captured only part of the anticipated impact on student outcomes, because standardized test scores do not measure the full range of skills and competencies required for success in grade-level content area courses.

3. Baseline data on students and teachers were limited. Students entered grade 6 after random assignment. And no elementary school data were available to establish their baseline equivalence, both in grade 6 and after attrition in grades 7 and 8. Teacher baseline data were limited to classroom observations, which were not linked to individual teachers and could be used only to establish baseline equivalence at the school level.

4. Because teacher rosters were either unavailable or unreliable, individual students could not be linked to individual teachers. This prevented analyses of the direct relationship between a teacher's receiving QTEL services and that teacher's students' outcomes.

## Implications and future research

This study exemplifies the challenges in examining the effectiveness of a nonscripted professional development intervention tailored to participant needs. The study tested a version of QTEL implemented under specific conditions. These analyses did not detect significant impacts on student achievement, teacher knowledge, teacher attitudes, or teacher practice. Future research on schoolwide implementation of the more complete QTEL model would be beneficial.

The exploratory analysis suggests that QTEL might have differential effects on the students of teachers with different levels of education. It also suggests that there might be a positive relationship between QTEL and the amount of student–student interaction within classrooms, as measured by an observation instrument aligned with the intervention. These findings point to the need for more research on how QTEL interacts with teachers' prior learning and how it affects teacher practice.

In-depth case studies may be useful for improving QTEL implementation and offering the field promising practices. It is also possible that interventions like QTEL take more than three years to show impact on the achievement of English language learner students. Longitudinal studies may provide information about these potential effects.