



The Relationship between Student Academic Gains and Teacher Credential Status

Executive Summary: Answering the Wrong Question

Why study teacher credential status. Every child deserves a "quality" teacher. The need is irrefutable. The answer to the question, what is a "quality" teacher poses, a thornier problem. What is the definition of "quality?" Saunders defined a "quality" teacher as one who improved student test scores. Darling-Hammond (2000) entertained a variety of definitions of "quality", each of which deserves study. Most policy makers equate "quality" with a teaching credential despite the fact that research lacks strong evidence that a credential makes a difference (Saunders & Rivers, 1996; Darling-Hammond, 2000; Berry, Thoreson, & Darling-Hammond, 2001). While we would agree that districts should aggressively recruit credentialed teachers, given current market conditions, many districts find themselves with a significant number of non-credentialed staff. This district, despite aggressive recruitment efforts, must open school each year with non-credentialed and/or inexperienced teachers. Given the public demand for "fully credentialed" teachers, we were anxious to know how our students fared with teachers who lacked credentials. Equally important, we needed to know if the support we were providing non-certified staff could make up for the lack of a credential.

What we studied. We looked at the relationship between credential status and student achievement in three different ways:

- 1) its impact on school API gains;
- 2) its impact on a variety of norm and criterion referenced measures for students who were in schools with extremely large numbers of credentialed or non-credentialed teachers due to bussing;
- 3) its impact on individual student pre-post test score gains.

Our data show that there is no relationship between credential status or years of experience and student achievement expressed as NCE longitudinal gains.

What we propose should be studied. Based on our studies, we propose that the teacher quality not be defined as having a teaching credential. Whether a student has a credentialed teacher is not the central issue for those interested in improving "teacher quality" as a precursor to improved student achievement. The more important issue is: *What is happening at schools successful in raising the achievement of poor, minority and English Language Learner students that enables all teachers to be successful?*

This broader question focuses on *school quality*¹: leadership, curriculum, instructional focus, progress-monitoring systems, and classroom instruction. Although teacher "quality", and holding a credential, is a component in school quality, credential status alone is not a predictor of student achievement. While describing what teachers do is a much more difficult task than taking a census of how many teachers hold credentials, it is the first step toward a useful definition of teacher quality.

We do not say that a credential program is not important preparation for teaching. What our studies suggest is that the training and support teachers have at both the school and district level has a stronger relationship to student outcomes than credential status. Further, we believe that strong school leadership and teacher support is necessary for *all* teachers if we wish to see achievement gains for our most underprepared students and should be the focus of further research.

¹ Please see the final section of this report and Appendix__ for the teachers' perspective on how to improve student achievement.



Context for the Long Beach Unified School District Teacher Credential Studies

A commitment to hiring credentialed teachers. Before we present our data about the relationship between credential status and student achievement gains, we would like to clarify the context for these studies. We mount year long and creative recruitment efforts to hire fully credentialed teachers. Long Beach Unified hires from 400-600 new teachers a year. Due to class size reduction and increasing student population, as well as competition with local suburban districts for teacher candidates, we have been unable to staff all classrooms with a credentialed teacher.

It is our goal to have all of our teachers fully credentialed. Emergency permit teachers are enrolled in a pre-intern or intern program that leads to a full credential. Table 1 and Graph 1 on following pages provide a 5 year perspective on our efforts to staff all classrooms with fully credentialed teachers.

- The percentage of newly-hired teachers possessing full credentials has nearly doubled in the past five years while the percentage of emergency permit teachers has declined by half.
 - ◊ During the period 1997-2001 the percentage of new hires with credentials increased from 27.3% to 62.6%.
 - ◊ During the period 1997-2001, the percent of new hires with emergency permits declined from 62.9% to 34%.
- The pre-intern program, designed to move emergency permit teachers into credential programs, is reducing the number of emergency permit holders.

Table 1
Credential Status of New Hires to LBUSD: Five Year History

Credential Status		1997-98	1998-99	1999-2000	2000-01	2001-02
Full	%	27.3%	41.2%	41%	44.7%	53.2%
	N	165	238	247	285	280
University Intern	%	5%	3.8%	1.5%	3.1%	2.3%
	N	30	22	9	20	12
District Intern	%	4.8%	1.6%	1.2%	1.7%	2.3%
	N	29	9	7	11	12
Pre-Intern	%	0	0	6.3%	6.8%	8.2%
	N	0	0	38	43	43
Emergency	%	62.9%	53.5%	50.1%	43.6%	34%
	N	380	309	302	278	179
Total	N	604	578	603	637	526



Chart 1 shows that the percent of emergency permit teachers is declining at a steady rate. The increase of credentialed teachers is more uneven. There was a big jump between the 1997-98 and 1998-99 school years (14.9%) and another between 2000-01 and the 2001-02 school years (8.5%).

Chart 1
Credential Status of New Hires: Five Year History



Extensive professional development for all teachers. Teacher preparation and support, a broader concept than credential status, has historically been valued in Long Beach. District sponsored professional development provides teachers both with staff development and professional coaches. A teacher new to the district participates in one or more of the following programs:



- The New Teacher Institute
- Essential Elements of Effective Instruction
- Literacy Institutes

In addition, the district provides both credentialed and non-credentialed teachers with coaching in the following areas:

- Literacy coaches (K-10)
- Academic coaches (high school)
- Mathematics coaches (K-12)
- Beginning Teacher Support and Assessment (BTSA) (all)
- Support for Teachers Seeking National Board Certification (19 teachers received NBPTS Certification last year).

The commitment to staff development extends to the site level. Addams, for example, participates as a demonstration site for the Los Angeles County Schoolwide Literacy Project. Washington Middle School works several days a year with a nationally-known reading consultant. Jordan and Cabrillo High School Teachers participated in staff development through America's Choice and the CSU Long Beach HSOAP grant. Every school in the district has a similar list of school-specific staff development initiatives.

As you review our findings, we hope you will do so remembering that we believe that "teacher quality" is a function of appropriate training, support and opportunities for professional development, be they preservice or inservice, and effective school leadership.



Investigation 1. The Relationship of API Growth to Credential Status

Consistent with statewide trends, schools having 30% or more non-certificated teachers had significant percentages of low socio-economic and English Language Learner populations. We were concerned about the impact of credential status on API gains in our schools serving high percentages of ELL and low income students. What we found was contrary to current conventional wisdom:

- Schools with the highest percentage of non-credentialed teachers gained on the average 10 API points more than those with the most credentialed teachers
- The relationship of API gain to credential status appears to be nonexistent ($r=.02$).

Table 2 below presents the API gains for schools having high percentages students assigned to credentialed teachers compared to schools with students assigned to the and low percentages (about 70% or fewer). The table shows API gains as well as losses for schools in both categories. Data for all elementary schools appear in Appendix 1, Exhibit 1. The table highlights the differences between schools with extremes in teacher credential status. The schools with 90% or more credentialed teachers have approximately double the teaching experience, about one third the number of English Language Learners and 40% fewer students receiving AFDC. They have initially higher API scores, and three are above 800 where it is more difficult to show large API gains.

Table 2.

	Elementary Schools with Students Assigned to the Most Credentialed Teachers				
	<u>API Gain</u>	<u>Credential</u>	<u>Experience</u>	<u>AFDC</u>	<u>ELL</u>
NAPLES	29	100.0%	11.70	33.0%	13.2%
KETTERING	35	98.1%	18.05	46.3%	13.4%
TWAIN	38	94.5%	13.01	24.8%	4.5%
MONROE	47	94.1%	16.62	62.4%	39.4%
FREMONT	45	93.4%	18.47	44.9%	8.0%
PRISK	-36	92.4%	12.50	43.1%	16.2%
GANT	18	91.9%	17.37	19.8%	6.4%
LONGFELLO W	27	91.7%	17.11	38.2%	8.3%
BRYANT	47	91.5%	8.44	80.7%	19.3%
CARVER	59	91.1%	14.57	57.0%	19.7%
MANN	37	91.0%	16.44	87.3%	18.6%
BUFFUM	24	90.3%	13.53	64.3%	18.8%
LOWELL	-6	89.3%	14.82	24.1%	3.7%
	28	93.0%	14.8	48.1%	14.6%

	Elementary Schools with Students Assigned to the Fewest Credentialed Teachers				
	<u>API Gain</u>	<u>Credential</u>	<u>Experience</u>	<u>AFDC</u>	<u>ELL</u>



BIRNEY	11	56.9%	7.98	73.3%	23.7%
KING	-29	55.9%	5.02	88.9%	48.9%
INTERNATIONAL	56	53.7%	5.30	46.5%	60.4%
GARFIELD	65	53.6%	5.18	91.6%	52.0%
BARTON	19	52.8%	5.66	89.2%	26.1%
MCKINLEY	106	51.6%	6.85	74.5%	48.9%
LAFAYETTE	23	50.2%	3.66	81.0%	53.6%
LEE	16	47.2%	7.25	52.0%	69.5%
WEBSTER	35	41.8%	9.68	43.7%	33.2%
WHITTIER	43	38.8%	7.03	53.4%	76.5%
ADDAMS	36	37.1%	3.17	93.2%	52.2%
	34.6	49.0%	6.1	71.6%	49.6%

The correlation between API gain and credential status for the entire set of elementary schools is -.05 which is a correlation of "0". The complete correlation matrix among all variables, API Gain, Credential Status, Experience, AFDC and ELL status, appears in Table 3. The correlation matrix for teacher assignment to individual students shows that API gain is not correlated with credential status, teacher experience, student socioeconomic status or language proficiency status. It also shows that teachers with less experience and/or no credentials are assigned to larger numbers of poor and ELL students (the negative correlations between credential status and experience with AFDC and ELL).

Table 3. Correlations between API Gain, Credentialed Teacher Status and Student Demographics (Individual Student Level)

Variable	API Gain	Credential	Experience	AFDC	ELL
API Gain	1				
Credential Status	.02	1			
Experience	-.16	.7	1		
AFDC	.06	-.43	-.34	1	
ELL	.10	-.56	-.75	.32	1



Investigation 2. Eastside Feeder School Study

Long Beach is experiencing a steady enrollment growth which is unevenly distributed throughout the city. Our overcrowded schools are located in lower income neighborhoods on the Westside and downtown sections of the city. These schools serve more low income, ELL and minority students than schools in the more suburban Eastside. Many of the students in our most crowded schools are transported to empty classrooms on the Eastside. In addition, the teaching staffs of sending downtown and receiving suburban schools differ significantly. Table 4 compares the credential status of teachers in the downtown "sending" schools versus those teaching in Eastside "receiving" schools.

Table 4
Credential Status of Teachers in Eastside Schools Compared to Teachers in Downtown Schools

Student Group	Number of Students	Average Experience of Teacher	Percent Credentialed Teachers
Remain Downtown or on Westside	5315	8.4	59.1%
Transported to Eastside	4097	13.9	74.9%
Local Eastside students	4572	16.6	86%

Table 5 shows the correlation between student demographics and teacher credential status. These correlations capture the difference between the school staffs of "sending" and "receiving" schools. The correlations show that low SES and ELL students are less likely to have fully credentialed and experienced teachers.

Table 5
Correlations between Student Demographics and Teacher Credential Status

	Free/Reduced Lunch	ELL	Full Credential
Percent ELL	.37		
Percent Full Credential	-.50	-.55	
Average Years Teaching	-.42	-.75	.74

We compared the performance of students who remained in their downtown or Westside home schools to transported students on three measures:

- 1) the Stanford 9 (Appendix 2, Exhibit 1),
- 2) district Benchmark books (Appendix 2, Exhibit 2), and
- 3) district End of Course Mathematics tests (Appendix 2, Exhibit 3).

Regardless of the measure, there was no significant achievement advantage for students transported to schools with high percentages of credentialed teachers.



Investigation 3. Relationship between Credential Status and Stanford 9 Gains

Our third study investigated the relationship between credential status and individual student pre-post test score gains on the Stanford 9. The credential status of the 4800 study participants appear in Table 6 below.

Table 6
Number and Percent of Credentialed Teachers by Level in 2000-2001

Level	Total Number of Teachers	Number Credentialed	Percent Credentialed	Number w/o Full Credential (interns, emergency, waiver)	Percent w/o Full Credential
Elementary	2546	1880	73.8%	692	27.1%
Middle	781	570	73%	241	30.2%
K-8 Schools	390	278	71.3%	121	31%
High School	1084	885	81.6%	231	21.3%
Total	4801	3613		1285	

Note: There is a "double count" of 97 teachers who appear as both credentialed and non credentialed due to the fact that these teachers hold a credential but are teaching out of level/subject on a "waiver" or "emergency" permit.

Correlations. We first examined the simple correlations between having a credential and individual student SAT9 Reading and Math NCE gains. These correlations were not significantly different from "zero" at all levels. Table 7 presents the actual correlation coefficients by level. These data show that we cannot expect to see a relationship between a teacher holding a credential and individual student's test score increases.

Table 7
Correlation between Credential Status and SAT9 NCE Pre-Post Gains: Full Credentials v. Emergency, Waiver, and Intern Teachers

SAT9 NCE Gain	Elementary Teachers with Credentials	Middle and K-8 Teachers with Credentials	High School Teachers with Credentials
Reading NCE Gain	.027	-.038	.055
Math NCE Gain	.033	.014	-.003

Regression analysis. We next looked at the effect holding a credential had on test score increases when we controlled for student demographics, (i.e. socioeconomic status and language proficiency, credential status). We used a multivariate regression analysis to calculate a series of linear regression prediction equations for Stanford 9 Reading and Mathematics NCE² gains at elementary, middle and high school.

The most useful statistic from the regression analysis is the R² Change statistic. R² Change tells us the percentage of variation in test score gain attributable to having a full credential when controlling for student SES and language proficiency. Table 8 summarizes the R² statistic for each of the multivariate

² An NCE is a converted percentile rank score used for statistical analysis purposes. NCE scores have a scale of 1-99 with a median/mean of 50 and a standard deviation of 21.06. The NCE scale converts the rank-order percentile rank scores to an almost equal-interval scale.



regression equations. As with the simple correlations between credential and NCE gains, the amount of variation in test scores attributable to teacher

credential and experience is "zero." The prediction models and complete regression results appear in Appendix 3.

Table 8
R² Statistics from Predictions of the Relationship between Credential-Experience and Test Score Gains

SAT9 NCE Gain	Elementary Teachers Credential-Experience	Middle and K-8 Teacher Credential-Experience	High School Teacher Credential-Experience
Reading NCE Gain	.001	.001	.005
Math NCE Gain	.002	.001	.000

Distribution of Gain Scores by Credential Type. The regression results, which show that holding a credential does not contribute to student test score gains, are more clearly shown in the box and whisker plots following. Box and whisker plots are used to compare test score distributions. Our plot compare "Not Fully Credentialed" teachers with "Fully Credentialed" teachers. The box contains the interquartile range from the 25th to the 75th PR of the distribution of NCE gain scores. The line across the middle of the box shows the 50th PR or median point of the score gain distribution. The top "whisker" of the box is the highest gain score; the bottom "whisker" is the lowest gain score. Because these plots allow a visual comparison of the two credential statuses, we can see if the distributions are very different or if they overlap to a large degree. If credential status makes a difference in student pre-post score gains, the two boxes would be far apart. If credential status does not make a difference in NCE gains, the two distributions will overlap to a large degree.

What the box plots show is that the distribution of NCE gains in Reading and Mathematics for students with fully credentialed teachers is indistinguishable from gains posted by students whose teachers do not have full credentials. The results hold true for both reading and matematics and for all levels, elementary, middle and high school. The only small differences we find between credentialed and non-credentialed teachers is in the interquartile range (the size of the box). In Reading is the interquartile range is a bit larger (more variation in gain scores) for Credentialed teachers. In Mathematics, the interquartile range is a bit larger for the non-Credentialed teachers. Statistically these differences have no practical significance.



Summary and Recommendations

Our investigations show that students fare as well with non credentialed teachers as with fully credentialed teachers. More specifically, the credential status of the teacher had no impact on either a school's Academic Performance Index or an individual student's pre-post Stanford 9 test score gains. In the case of transported students, credential status has no impact on a variety of state and local measures. While these findings may differ from conventional wisdom, the strength of district teacher support programs was probably an important factor in our findings. We also suggest that school leadership variables not captured by the credential status of teachers have much to do with student achievement.

These findings raise important questions for policy makers and legislators invested in requiring schools to have most or all of their teachers credentialed in a very short time or face sanctions.

- How should we define teacher quality?

In most political discourse, "teacher quality" has been defined as teachers holding a credential. This discourse ignores other definitions of "quality" (Darling-Hammond, 2000) that might have a clearer relationship to student performance. Given the teacher supply and the length of time it will take for all schools in the state to have fully credentialed staffs, a viable interim solution must be found. Extensive teacher support, inservice, coaching, and intern programs, are one possible route.

- What aspects of school leadership and climate are linked to student achievement gains?

Our review of the relationship between API gains and credential status clearly points out the importance of the culture and leadership of individual schools when considering student achievement. Schools with like percentages of credentialed (and non-credentialed) teachers had very disparate achievement results. Why? What happens at these high achieving schools that nullifies the effect of teacher credential status and experience, either in positive or negative ways?

The lesson learned is that "one size fits all" mandates do not address the challenge of educating urban, poor or minority students. Schools must have the ability to work on creative, innovative, and flexible solutions in helping students meet state standards. The focus needs to be school and classroom level variables reflecting what adults "do" with the education and training a credential represents.

7 Correlations between Reading and Math NCE Gains and Teacher Credential Status: Elementary Schools

	Reading NCE Gain	Math NCE Gain	Teacher Credential Status
Reading NCE Gain	--	.323 N=17637	.027 N=17794
Math NCE Gain		--	.033 N=18272
Teacher Credential Status			--

** Correlation is significant at the 0.01 level (2-tailed)



8 Correlations between Mathematics NCE Gains, Credential Status, and Experience: Secondary Schools

Middle School

	Math NCE Gain	Teacher Credential Status	Years Teaching
Math NCE Gain	---	.014 N=17510	.022** N=17510
Teacher Credential Status		---	.544** N=17804
Years Teaching			---

**Correlation is significant at the .01 level (2-tailed)

High School

	Math NCE Gain	Teacher Credential Status	Years Teaching
Math NCE Gain	---	-.003 N=12889	-.010 N=12889
Teacher Credential Status		---	.564** N=13428
Years Teaching			---

**Correlation is significant at the .01 level (2-tailed)



9 Correlations between Reading NCE Gains, Credential Status, and Experience: Secondary Schools

Middle School

	Reading NCE Gain	Teacher Credential Status	Years Teaching
Reading NCE Gain	--	-.038** N=17358	-.025** N=17358
Teacher Credential Status		--	.544** N=17804
Years Teaching			--

**Correlation is significant at the 0.01 level (2-tailed)

High School

	Reading NCE Gain	Teacher Credential Status	Years Teaching
Reading NCE Gain	--	.055** N=12642	.062** N=12642
Teacher Credential Status		--	.564** N=13428
Years Teaching			--

**Correlation is significant at the 0.01 level (2-tailed)



10 Regression of Reading NCE Gain (Rgain) on Teacher Credential Status (FullCred): Elementary Schools

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	FullCred ^a	.	Enter

a. All requested variables entered.

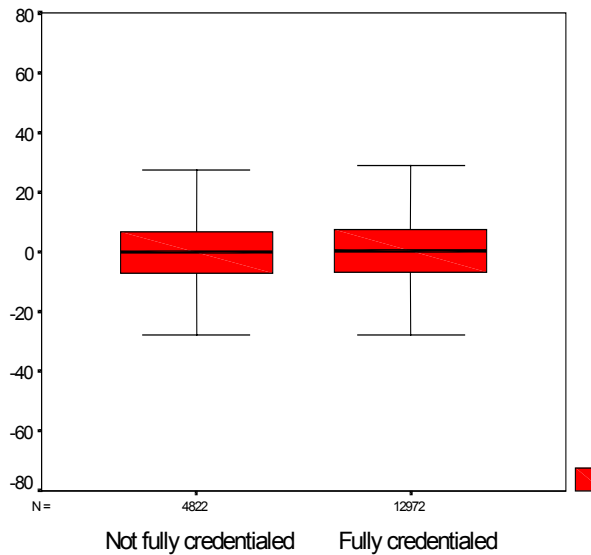
b. Dependent Variable: RGain

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.027 ^a	.001	.001	10.9030

a. Predictors: (Constant), FullCred

11 BoxPlot of Reading NCE Gains by Credential Status: Elementary Schools



12 Regression of Mathematics NCE Gain (MGain) on Teacher Credential Status (FullCred): Elementary Schools

Variables Entered/Removed^b

Model	Variables Entered	Variables Removed	Method
1	FullCred ^a	.	Enter

a. All requested variables entered.

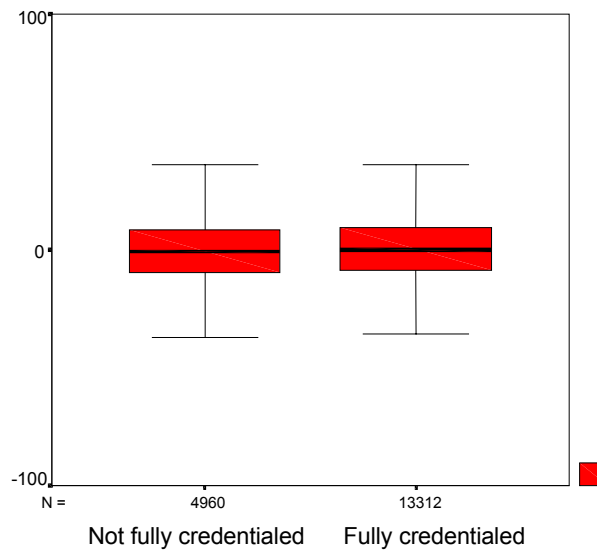
b. Dependent Variable: MGain

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.033 ^a	.001	.001	14.2611

a. Predictors: (Constant), FullCred

13 BoxPlot of Mathematics NCE Gains by Credential Status: Elementary Schools





14 Regression of Reading NCE Gain on Teacher Status Variables: Secondary Schools

Middle School

Variables Entered/Removed ^{b,c}

Model	Variables Entered	Variables Removed	Method
1	yrs_teach _a fullcred	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: rgain
- c. School Level = Middle School

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.038 ^a	.001	.001	10.1216

- a. Predictors: (Constant), yrs_teach, fullcred
- b. School Level = Middle School

High School

Variables Entered/Removed ^{b,c}

Model	Variables Entered	Variables Removed	Method
1	yrs_teach _a fullcred	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: rgain
- c. School Level = High School

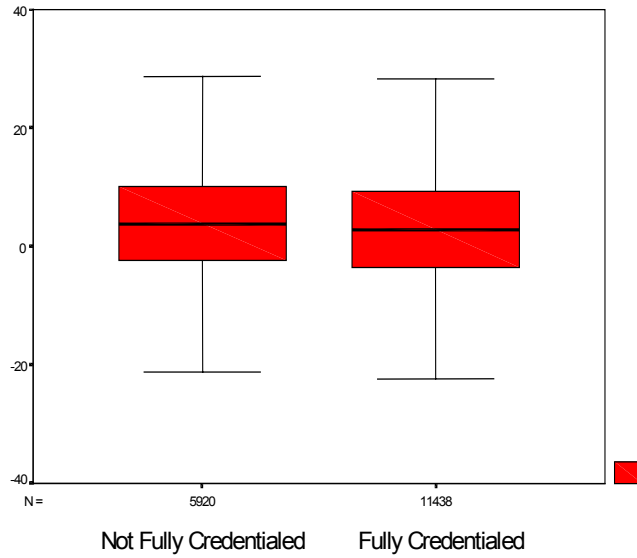
Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.066 ^a	.004	.004	10.4012

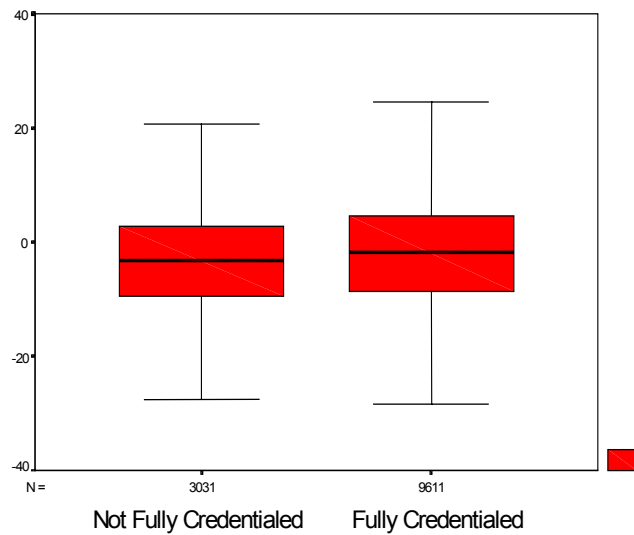
- a. Predictors: (Constant), yrs_teach, fullcred
- b. School Level = High School

15 Secondary Schools BoxPlots of Reading NCE Gains by Credential Status:

Middle School



High School



16 Regression of Mathematics NCE Gain on Teacher Status Variables: Secondary Schools

Middle School

Variables Entered/Removed ^{b,c}

Model	Variables Entered	Variables Removed	Method
1	yrs_teach _a fullcred	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: mgain
- c. School Level = Middle School

Model Summary ^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.022 ^a	.000	.000	11.1579

- a. Predictors: (Constant), yrs_teach, fullcred
- b. School Level = Middle School

High School

Variables Entered/Removed ^{b,c}

Model	Variables Entered	Variables Removed	Method
1	yrs_teach _a fullcred	.	Enter

- a. All requested variables entered.
- b. Dependent Variable: mgain
- c. School Level = High School

Model Summary ^b

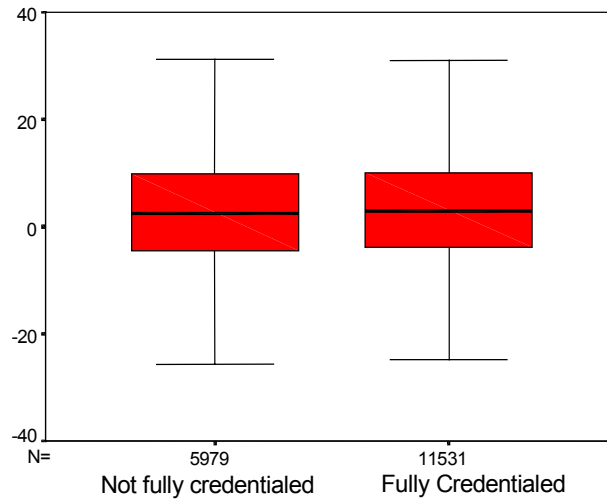
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.011 ^a	.000	.000	11.8624

- a. Predictors: (Constant), yrs_teach, fullcred
- b. School Level = High School

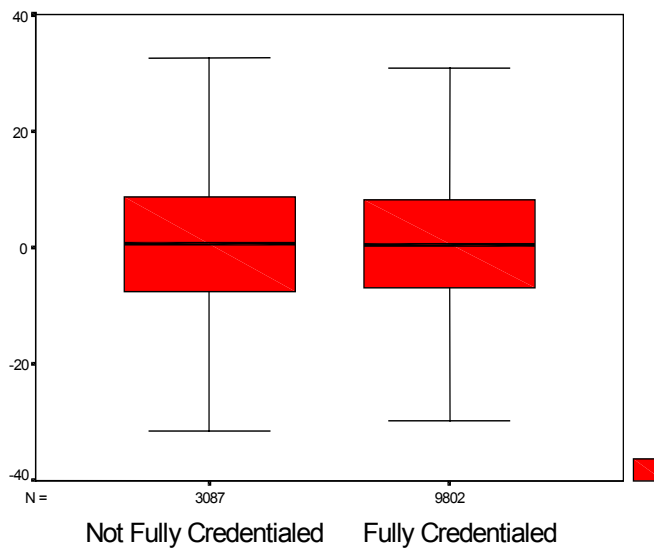
17 BoxPlots of Mathematics NCE Gains by Credential Status: Secondary Schools

Middle School

N



High School





“I am still learning.” –Michelangelo in his 87th year

Teachers Barbara Hansen-Rust and Ken Zavala

New teacher Ken Zavala and veteran teacher Barbara Hansen-Rust bring different skills to the classroom, yet both excel at teaching students to read. Recently the two teachers attained more than double the school district’s target for improving reading skills among lower performing students. Here’s how they did it.

Ken Zavala isn’t sure what to think of all this attention. Ever since his students’ 2001 state reading scores arrived, his phone’s been ringing. Colleagues want to know how a brand new teacher achieved such dramatic results.

“It was my first year, so I was a little apprehensive about hearing the results,” the Lindbergh Middle School teacher said.

All four of Zavala’s reading classes far surpassed the school district’s goal of increasing Stanford 9 reading scores by seven NCE points, or normal curve equivalents, used to measure growth on standardized tests. While seven points is considered statistically significant, his classes jumped 11 to 14 points.

“I’m still taking all of this in,” Zavala said.

Across town at Butler K-8 School, veteran teacher Barbara Hansen-Rust posted similar results. Her three reading classes showed average gains of 9, 10 and 15 NCE’s. In one class, students surged from the 18th percentile to the 34th. The class did exactly what the middle schools’ literacy initiative was designed to do for kids whose skills ranked among the bottom fourth of their peers, those in the 25th percentile or below. The students moved closer to grade-level reading, and they did it quickly.

Hansen-Rust and Zavala were among dozens of Long Beach Unified middle and K-8 school teachers who exceeded reading improvement goals in 2001. They taught Reading Development courses offering specialized materials and smaller class sizes of about 20 students. Like many reading teachers, Hansen-Rust and Zavala also showed progress in other areas, such as district and state writing tests, and the Stanford 9’s language arts section. But the latest reading scores are the most striking after a year of intensive literacy instruction.

Just as striking is the difference between the two teachers’ resumes. Zavala never planned to be a teacher. Hired with an emergency credential, he is still earning his regular credential at Cal State Dominguez Hills, where he received his undergraduate degree in Communications in December 1998. He originally hoped to attend graduate school at Temple University in Philadelphia before pursuing a career in broadcast journalism. He worked as an intern at Channel 11 News, Channel 9 Sports and Black Entertainment TV, then began working temporarily as a substitute teacher at Lindbergh. His plan was to leave for graduate school after three months. Before he could leave, his 35-year-old brother died in a car accident, leaving behind three young children. Zavala, who grew up in Lakewood and Long Beach, decided to stay nearby to help raise his brother’s kids.

“It just didn’t feel right to leave,” he said.

Soon his temporary job at Lindbergh became permanent. A reading teacher showed him the ropes for a month before taking her maternity leave toward the end of the 1999-00 school year. The following school year, Zavala became a full-time teacher. After his first full year on the job, his students made remarkable gains.

By contrast, Hansen-Rust always wanted to be a teacher, just like her grandmother. She spent 14 years teaching elementary school in Long Beach before moving to the middle grades. Today she’s a reading department head and a 23-year veteran with a master’s degree in reading from Cal State Long Beach. She was among the first group of seven graduate students to earn the reading master’s degree in May 2001 as part of the university’s stepped up reading education efforts in cooperation with the Long Beach Unified School District.

Despite wide differences in experience, the two teachers share some common ideas about patience, high expectations and proven teaching methods. Both say they are constantly learning.



Classroom Climate

A steady stream of students stops in after school to visit Zavala. He works with them quietly and patiently.

“Did you show me your reading log today?” Zavala asks a student departing for home.

“No.”

“Then you know I’m going to check it tomorrow, right?”

“Yes.”

Repetition, motivation and mutual respect are key, both teachers said.

“I’m really strict about the students keeping that home reading log,” said Hansen-Rust, who requires students to read at home for 20 minutes each day, five times a week. She diligently cross checks the minutes and number of pages, and offers a special treat or celebration to the class that reads the most. After years of teaching in urban schools, she still relishes the thrill of boosting achievement among lower performing students.

“I really do like the kids here,” she said. “They’re a challenge, but maybe I stay because of that challenge. These are the kids who need us most.”

Zavala requires 25 minutes of home reading each day and offers extra credit for weekend reading. His students write regularly about what they read. He posts the names of students who complete three-week reading logs, and students briefly applaud each other for outstanding work.

For Zavala, discipline is second nature. He attended the Southern California Military Academy from kindergarten to ninth grade before enrolling at Jordan High School in Long Beach. He creates a “serious but relaxed environment” where no student is allowed to laugh at another because of reading deficiencies. Zavala, who is African American and Mexican, speaks Spanish and can communicate easily with the school’s many Spanish-speaking parents. The students know this.

“Especially during the first month, I keep the students quiet and on task,” Zavala said. He bars students from using slang words like “ain’t” or “yeah,” explaining to them that eighth grade is a time for them to act like professionals.

“We talk about how seriously they need to take life,” Zavala said. “Through constant communication, my students have come to understand the importance of reading. I ask them what they plan to do in the future, where they want to live, what kind of life they want. Then I reinforce the importance of reading in everyday life. I always relate it back to reading.”

Reading Between The Lines

Once the rules are established, both teachers dissect the reading process in detail. Their comprehension-focused classes push students to clarify, summarize, determine the main idea of a passage, and question and predict. Hansen-Rust said she works on teaching these strategies – skills that fluent readers take for granted – in very explicit terms. Her students often work in smaller groups, asking each other questions about reading material.

“Did your prediction come true?” they ask. “How do we know it happened? What do you think will happen next?”

At the beginning of the year, Zavala’s students read aloud, but no more than two paragraphs at a time without stopping to answer the question, “OK, what just happened here?” The students move on to three paragraphs and eventually two pages at a time.

Both teachers take time to attend school district training sessions, and they seek help from colleagues.

“Attending district training sessions helped to ease my anxiety as a first-year teacher,” said Zavala. He participated in the school district’s Essential Elements of Effective Instruction training and a language arts institute for first-year teachers. The training did not end there.

“Our principal and other teachers visited my classroom regularly,” Zavala said. “It was nice to know I wasn’t alone.”

Zavala and Hansen-Rust use an array of tests and assessments to track each student’s progress. Hansen-Rust rattles off a list of assessments she uses: “spelling, running records, district benchmarks,



CBMs, Jerry Johns...” She and specialists from the school district’s central office tested students to pinpoint what they knew, then took care to place them in the right reading course at the beginning of the year.

“The tools we’re using are well-grounded in research, and that comes from the university, where our professors have us read the research and learn to apply it,” Hansen-Rust said.

Zavala uses some of the same methods, many learned by talking after school with his veteran colleagues, especially his school’s reading department head.

“The first few months were tough,” Zavala said. “I’d go home thinking that I just couldn’t handle this. I knew if I didn’t get help, I’d be cheating the students.”

The two teachers also give their students an edge by boosting their reasoning skills, especially those required by the state Stanford 9 test. They help students pick apart paragraphs, sentences and words. Zavala’s students discuss content clues, plot, fact and opinion, synonyms and antonyms. They read short passages and answer 10 questions, which helps them become accustomed to the Stanford 9 format. Hansen-Rust’s students examine word parts, learning common Greek and Latin roots to articulate the meaning of similar words like *inspection*, *spectacle* and *spectator*. Her students practice breaking words into syllables. She creates multiple choice tests based on reading passages from various genres – fiction, nonfiction, advertisements or recipes -- to give students a feel for the Stanford 9 exam. She said these exercises level the playing field for low income students, who often lack the test practice skills found among students from wealthier families. Parents of her students often can’t afford to pay for expensive test prep classes and materials to help with college admission.

“The middle and upper classes do that for their kids,” she said. “Why can’t we do that for inner-city kids?”

Continual Self-Improvement

Hansen-Rust is considered to be such an expert that she coaches new teachers at Butler, yet even after all these years, she’s still learning. That’s why she returned to the university for her master’s degree more than two decades after completing her undergraduate work.

“I’m always reflecting and working with others to try to improve,” Hansen-Rust said. “Reading instruction has changed since 1979 when I began teaching. We know more now. Every year, I change and do something a little different.”

Zavala knows that his first year’s success doesn’t make him an expert. He’s the first to tell his students about his inexperience.

“I tell them that I’m going to make mistakes, and they’re going to make mistakes,” he said. “I try to be honest.” Zavala shows students some of the reading material from his university credential courses.

“I tell them I’m still going to school, too, which they find hard to believe. I let them know that as an adult, I face some of the same issues that they do. I sometimes have to read things two or three times before I understand,” Zavala said.

“We’re all in the same situation, but at different levels.”



Footnotes

See Kuppermintz, Shepherd and Linn, "Teacher Effects as a Measure of Teacher Effectiveness: Construct Validity Considerations in TVAAS" for serious limitations in the value-added studies.

¹ Darling-Hammond, Berry, Thoreson, "Does Certification Matter?" Educational Evaluation and Policy Analysis, Spring 2001, vol.23,no1 pp 57-77

¹ See the issues raised by Goldhaber and Brewer in "Evaluating the Evidence on Teacher Certification: A Rejoinder", Educational Evaluation and Policy Analysis, Spring 2001, vol. 23, no 1 pp79-86