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A Leader's Evaluation and Analysis Development (LEAD) Tool: a statistical analysis of variables that measure progress toward staffing every classroom with an effective teacher in the Los Angeles Unified School District

Justo Avila

Pepperdine University

Graduate School of Education and Psychology

A LEADER'S EVALUATION AND ANALYSIS DEVELOPMENT (LEAD) TOOL: A STATISTICAL ANALYSIS OF VARIABLES THAT MEASURE PROGRESS TOWARD STAFFING EVERY CLASSROOM WITH AN EFFECTIVE TEACHER IN THE LOS ANGELES UNIFIED SCHOOL DISTRICT

A dissertation submitted in partial satisfaction

of the requirements for the degree of

Doctor of Education in Organizational Leadership

by

Justo Avila

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Jack McManus, Ph.D. – Dissertation Chairperson

This dissertation, written by

Justo H. Avila

under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

Doctoral Committee:

Jack McManus, Ph.D., Chairperson

Robert Barner, Ph.D.

DeWayne Davis, Ed.D.

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DEDICATION

My parents, Manuel Avila and Victoria Avila, came to this country from humble beginnings, with not only a hope of just surviving, but a dream of thriving and have a better life. Destiny brought them together to marry, and live and raise a family here in Los Angeles. Their selflessness and hope to provide the best they could for their three children gave me the foundation to pursue what had eluded them in life: an education. For this beautiful gift, I shall remain forever grateful and thankful.

The continuing cycle of life brought forth our three wonderful children, Elena, Raquel, and Diego. The final pursuit of this doctoral degree was something I had to do for myself, but probably even more importantly, to set the example of finishing what they began. I can only hope that this act holds some meaning for them too, as they hold the most sacred of place in my heart.

And to my wife Grizel, who is my best friend, my partner in life, and my most ardent supporter in all ventures, sacrifices, and pursuits. I would not have finished this dissertation without her patience and motivation. She has always believed in me, and that makes all the difference in the world. I am a fortunate man.

ACKNOWLEDGEMENTS

It's our choices that show what we truly are, far more than our abilities.

– J. K. Rowling

The Pepperdine University Graduate School of Education experience has developed a reflective and determined leader, who desires to make a difference in the educational lives of our students. The opportunities, my professors, and Pepperdine's influence shall continue onward in my thoughts, words, and actions.

To my Human Resources staff and my colleagues, you make a grand difference everyday on behalf of LAUSD students and schools. And a special thank you to Inocencia Cordova and Janice Lasmarias who were instrumental to pave the way with data and helping me create the LEAD Tool.

Thank you to both Dr. Dewayne Davis and Dr. Robert Barner, whose expertise, kindness and positive energy always served as a help and light along this at times dark path. Your gift of serving on my committee has been truly a much-esteemed honor. I shall pay your kindness forward at every opportunity.

And to Dr. Jack McManus, this has been a long journey, and you were there every step of the way. Your guidance, sense of humor, stories, and occasional trek for fish tacos helped me attain my goal. Jack, you make a grand difference, and I value you greatly. Thank you.

VITA

Education

PEPPERDINE UNIVERSITY Ed.D. in Organizational Leadership, 2016
Dissertation: A Leader's Evaluation and Analysis Development (LEAD) Tool: A Statistical Analysis of Variables that Measure Progress towards Staffing every Classroom with an Effective Teacher in the Los Angeles Unified School District

UNIVERSITY OF SOUTHERN CALIFORNIA Chief School Business Officer Program, 2009

CALIFORNIA STATE UNIVERSITY, LOS ANGELES Master of Arts in Educational Administration, California Administrative Services Credential, 1992

CALIFORNIA STATE UNIVERSITY, LOS ANGELES Teaching Credential in Elementary Multiple Subjects (Bilingual Certificate of Competence – Spanish) 1988

CALIFORNIA STATE UNIVERSITY, LOS ANGELES Bachelor of Arts Degree in Mexican American Studies, 1984

Summary of Relevant Professional Positions

July 2014 to Present	Chief Human Resources Officer, Los Angeles Unified School District (LAUSD)
February 2014 – June 2014	Interim Chief Human Resources Officer, LAUSD
2008 – 2014	Deputy Chief Human Resources Officer, LAUSD
2007 – 2008	Administrator, Personnel Services and Research Branch Human Resources Division, LAUSD
2004 – 2007	Administrative Coordinator, Personnel Services and Research Branch Human Resources Division, LAUSD
2002 – 2004	Director, Salary Allocation, Human Resources Division, LAUSD
1996 – 2002	Assistant Director, Certificated Recruitment and Selection Human Resources Division, LAUSD
1994 – 1996	Coordinator, Certificated Recruitment and Selection Human Resources Division, LAUSD
1993 – 1994	Specialist, Certificated Recruitment and Selection Human Resources Division, LAUSD
1984 – 1993	Teacher and Categorical Program Coordinator, LAUSD

Summary of Qualifications

Effective Leadership Skills: Serves as a well-regarded, knowledgeable, and successful Human Resources Division (HR) leader with a strong commitment to excellence and high customer responsiveness and service. Motivates HR team leaders and staff to collectively set goals, implement strategies and measure results that will ultimately transform our certificated workforce into the most dynamic educational force in the nation that excels in preparing all our students to be college graduates and workforce ready. Possesses a wide range of experiences that encompass the following skills and areas:

- Extensive experience and knowledge of Human Resources best practices and policies; strategic workforce planning and engagement; and executing strategic human capital projects to continually effectuate district-wide improvements and enhancements to our certificated workforce effectiveness.

- Creates a proactive and responsive service-oriented HR Division team that delivers the most ideal level of service that benefits our students, teachers, administrators, principals, support service personnel and ESC and central leadership teams.

- Data Driven HR leader that continually draws upon data to measure successes, realign internal services, inform the field, and rethink and guide new goals and direction, and celebrate staff accomplishments.

- Cultivates relationships and works effectively with our labor partners, Educational Management Organizations, our local Universities and Colleges, the City of Los Angeles, Central Office and Division leaders and staff, senior staff members, Board Members, and the LAUSD school community.

- Extensive experience in advising Board members, Superintendents and Senior Staff on matters related to key strategic HR issues, practices, strategies and options that ultimately lead to creating and sustaining the most effective teaching and school leader workforce for our students.

- Excellent advocate and liaison to school employees, community representatives, Board member staff, governmental agencies, and civic organizations to focus on the resolution of issues and developing a positive communication cycle for future collaborative work together.

Human Resources and Capital Management

- Administers the operation and improvement in all areas of Human Resources for the second largest school district in the nation with a workforce of approximately 30,600 fulltime certificated employees, including 25,000 teachers, 2,100 administrators, and 3,500 certificated support staff and personnel.

- Created and implemented the District's new Leaders Analysis and Evaluation Development (LEAD) Tool to measure the percentage of teachers that are designated as effective at each school site.

- Negotiated with Labor Partners, American Civil Liberties union (ACLU), Public Counsel, Mayor's Partnership of Los Angeles Schools, and others to reach a landmark new focus to implement strategic staffing and strategies to address high teacher turnover and low student graduate rates in 37 of LAUSD's most challenging middle and senior high schools, our Investment Schools.

- Led multiple Human Capital Talent Initiatives focused to accelerate workforce quality, improvement, and diversity strategies throughout the school district such as our work on the newly available Human Capital Data Warehouse (HCDW) tool.

- Improved all Human Resources processes and customer service by streamlining and redirecting resources into the acquisition of technological tools such as an online teacher application process and certificated performance evaluation system.

- Served on District negotiating teams with both certificated unions: United Teachers of Los Angeles (UTLA) and the Associated Administrators of Los Angeles (AALA).

- Chaired the LAUSD/UTLA District Living Contract Committee and Teacher Task Force Legislative Subcommittee.

- Facilitated the Superintendent's Compensatory Advisory Council.

- Recruited and hired top-level senior management for past Superintendent's executive team.

Budget and Finance Management and Experience

- Managed approximately 300 staff members, a myriad of teacher quality grants and programs that collectively combine into a $80 million dollar budget that continually focuses on teacher and administrator quality improvement.

- Implemented the District's first Early Declaration Incentive Program to assist with workforce planning in anticipation of budgetary reduction needs.

- Negotiated and managed the District's early retirement incentive program (2008-09).
- Advised District budget planning group in certificated staffing, and compensation matters, Early Retirement Incentive Programs, and Reduction in Force implementation.

- Negotiated with the eight unions as part of the Coordinated Health Benefits Bargaining and settled with no cost increases.

- Utilized workforce management data and analysis to create strategies on behalf of the Superintendent to plan for Reduction in Force, budget planning, negotiations, strategic planning, evaluations, and continuous workforce quality improvement efforts.

Professional Recognitions and Awards

2011	Association of California School Administrators (ACSA) Region 16 Personnel Administrator of the Year
2008	University of Southern California (USC) Chief Business Officer Program Training Scholarship
2007	Association of California School Administrators (ACSA) Region 16 Personnel Administrator of the Year
2007	Los Angeles Unified School Board of Education Commendation Payroll Process Improvement
2006	Los Angeles Unified School Board of Education Commendation Enhanced Customer Service through Technology

Recent Presentations, Committees, and Trainings

Keynote Speaker at the Office of Improvement and Innovation (United States Department of Education) Urban Teacher Residency and Transition to Teaching Programs Regional Meeting (May 19, 2014) held at California State University, Dominguez Hills

Pepperdine University, Education Credential Program Advisory Committee Member: Provide input and feedback related to the design, implementation, and quality of Pepperdine University's teacher and administrator education programs (2014)

California State University, Los Angeles Charter School of Education Assessment Advisory (AAC) Committee Member: Assessment of Teacher Performance and the role of institutions of higher education in shaping and contributing to these assessments (2013)

Los Angeles Educational Research Institute (LAERI) Symposium panelist at University of California, Los Angeles (UCLA): Teacher Employment Patterns in LAUSD, Findings from Harvard's Strategic Data Project (2012)

Association of California School Administrators (ACSA) Personnel Institute Presenter: LAUSD Pilot Study on Teacher Evaluation and Development Part II (2012)

The Urban Schools Human Capital Academy participant: USHCA provides a dynamic environment focused on urban school districts' human resources and human capital leaders.

Academy participants address mission-critical issues such as recruitment, retention, principal and teacher quality, and many others through a series of sustained interactions over a three-year period (2012-2014)

Association of California School Administrators (ACSA) Personnel Institute Presenter: Evaluation and Development (Value-Added Teacher Evaluations), LAUSD Supporting All Employees (2011)

Teacher Effectiveness Task Force Member: Comprised of internal and external school district stakeholders, formed to recommend ways for LAUSD to accelerate student success by bolstering the effectiveness of its teachers, administrators and support personnel (2010)

Teacher Effectiveness Task Force: Chairperson for Legislative Sub Committee that developed recommendations for legislative proposals to address teacher quality enhancements to the California State Education Code (2010)

Association of California School Administrators (ACSA) past leadership roles:

- Human Resources Council Member
- Vice President, Legislative Affairs
- Equity, Achievement, and Diversity for Success Committee

ABSTRACT

The Leaders' Evaluation and Analysis Development (LEAD) Tool provides the Los Angeles Unified School District (LAUSD) with a data set to measure the level of teacher effectiveness at every school site. The LEAD Tool data variables also provide teacher, principal, and schools with data that may have a relationship with a school's overall academic growth. This quantitative study explored the relationship between the school growth data variables and various teacher, principal, and school data variables contained in LEAD Tool data for the 2012-13 and the 2013-14 school years. The study analysis examined LEAD Tool data for 437 elementary schools within LAUSD.

Quantitative research methods were used to analyze the data, and the findings were presented in narrative format. The variable analysis findings were consistent with those found in literature review and some revealed statistically significant correlations. The analysis also found statistically significant relationships between variables that are not readily available in the literature. The findings suggest that specific variables, such as a school's Concentration of Teachers with LEAD Indicators (CTLI) that has more influence on school academic growth and Academic Performance Index (API) ranking than other data variables found in the LEAD Tool. The findings also suggest that a school's principal turnover, principal experience and Concentration of Teachers with Lead Indicators (CTLI) demonstrate statistically significant relationship with variables such as API rank, teacher turnover, and teacher evaluations completed at schools.

The study provides insights into the LEAD Tool's potential as a guiding resource for LAUSD leaders to examine, plan, and implement strategies that may result in an increase in school achievement. The data correlations and subsequent analysis from this study provided a

foundation to better understand the relationships found among the LEAD Tool data variables. Utilizing these findings may help school leaders to better utilize LEAD Tool data in a strategic effort to emphasize specific school improvement efforts.

Chapter One: Introduction

Background and History

The Los Angeles Unified School District's (LAUSD's) *Educating and Innovating Our Way to the Top: All Youth Achieving 2012-15 Strategic Plan* (Deasy, 2012) set several goals. One of these goals requires that by the beginning of the 2016-2017 academic year, all teachers will be identified as effective teachers. In this All Youth Achieving plan, former LAUSD Superintendent John Deasy (2012) set forth multi-year goals to assure the LAUSD teaching workforce will meet student needs, stating that, "At LAUSD, we believe that one of the greatest levers for accelerating student success is the quality of teachers who work with students and leaders who work with the teachers and students everyday" (p. 13).

LAUSD has developed and utilizes a data set of teacher quality and performance variables, collectively identified as *A Leader's Evaluation and Analysis Development* (LEAD) Tool, to measure progress toward staffing every classroom with an effective teacher by the start of the 2016-17 academic year. The LEAD Tool, created by the LAUSD's Human Resources Division under the direction of the Deputy Chief Human Resources Officer at the time, identifies a quantifiable category of teachers who cannot be deemed *effective*. Under the new LAUSD teacher evaluation system, teachers who obtain a final evaluation level of effective or higher would be considered among the top LAUSD teachers. Although LAUSD is still in the midst of developing a final teacher evaluation system, the LEAD report helps to identify teachers that have variables in their records in various LAUSD data systems that research correlates with negative student achievement and growth. The variables captured by the LEAD Tool include whether a teacher has received an overall *Below Standard Evaluation*, if a teacher received an overall *Meets Standard* evaluation but has two or more sub evaluation areas marked as *Needs*

Improvement, if a teacher has been absent in excess of 13 or more days in the previous year, if the results of their Academic Growth Over Time (Value-Added test date) results ranked in the lowest two quintiles of effect on student achievement, and/or if they do not have an official evaluation on file within the previous 5 school years.

The LEAD Tool brings together data from disparate LAUSD computer systems into a simple dashboard for school leaders to facilitate easier teacher staff data analysis and strategic planning for discussions with principals. As part of a Teacher Incentive Fund (TIF) grant awarded to LAUSD, Human Resources has made the LEAD Tool available online through the District's Human Capital Data Warehouse portal, known as MyTeam. The LEAD Tool provides Educational Service Center (ESC) Instructional Superintendents, their Instructional Directors, principals, and district central office leadership with easily accessible online information and data regarding their school-by-school LEAD Tool data and respective percentages that quantify how many teachers at a given school site cannot be considered effective. Instructional Superintendents, Instructional Directors, and principals can now utilize the LEAD Tool to review teacher effectiveness data at each school and analyze and formulate plans to target teacher improvement efforts based on specific school-by-school data.

This LEAD Tool was created to measure progress toward the All Youth Achieving goal to have an effective teacher in every classroom. The LEAD Tool measures the district's overall progress in gauging each school's percentage of teachers with LEAD Indicators who cannot be considered effective. The underlying school level LEAD Tool data provide respective administrators the ability to measure progress toward achieving an all-effective teacher workforce. The LEAD Tool data variables can enable administrators to plan and target specific

strategies and interventions for individual teachers to help them improve, and for those who do not improve, identify appropriate next steps.

The LEAD Tool provides school and central office administrators with data about the school itself, such as Academic Performance Index (API) ranking (deciles 1-10), teacher turnover rates, principal turnover rates, number of teachers on campus, and number of teachers evaluated officially in the previous year, as well as other key school information. In addition, the LEAD Indicators contained in the LEAD Tool detail specific data regarding current teachers on the campus. The LEAD Tool then pinpoints the percent of classroom teachers at a specific school campus identified as needing to improve, as determined by LEAD Indicators, and compares to the overall classroom teacher population at the same school site.

At school A, for example, the LEAD Tool may identify 15 out of 100 teachers at the school as having LEAD Indicators. The identification of these teachers, 15% of the overall faculty, would require the principal and school administrators to plan a course of action to create strategies to assure each teacher improves his/her performance. The LEAD Tool thus identifies the percentage of teachers at each LAUSD school site who must improve so that they can be re-categorized amongst the effective teacher ranks. The LEAD Tool rolls-up school data so Local District Superintendents can monitor and track their respective school data. Each of the six Local District Superintendents can then analyze the overall LEAD Indicator percentage at every school and sort the data by overall percentage of a school's LEAD Indicators. An Local District Superintendent can rank schools by the LEAD Indicator percentage and then strategize with his/her Local District leadership team each school's principal to plan next steps in an effort to reduce the LEAD Indicator percentage on each campus and improve the teacher effectiveness percentage overall.

The LEAD Tool's identification of teachers on a school campus who need to improve in order to be re-categorized as effective teachers can cause school principals and Directors to discuss and plan specific strategic actions that will cause teachers to improve. If teachers do not improve, the LEAD Tool data should guide school leaders to determine and plan steps to exit individuals from the classroom accordingly.

The LEAD Tool provides school principals and district leaders data to analyze and address plans to assure every school includes only effective teachers. The analysis of LEAD data may guide a more focused dialogue, enhance goal setting, and aid in the development of strategies that can help principals and school leaders work toward achievement of 100% effective teachers at each of the schools under their direction. In addition, the LEAD Tool provides the Superintendent, Local District Superintendents, Directors (principal leaders), Human Resources, and the Office of Curriculum and Instruction staff access to data that can measure each school's growth toward having all teachers at a site categorized as effective teachers. The LEAD Tool provides an opportunity for LAUSD school leadership teams to analyze and utilize LEAD data objectively to examine school level concentrations of teachers that may not have a positive impact on student achievement. Understanding how varying concentrations of teachers with LEAD Indicators may impact a school's overall efforts to improve student achievement was one of the underlying goals of this study.

The LEAD Tool provides school leaders an opportunity to work together and analyze the following teacher LEAD Indicators: (a) teachers who received an overall *Below Standard* rating on their latest performance evaluation results; (b) teachers who received an overall *Meets Standard* rating on their latest performance evaluation results, but had two or more sub evaluation areas marked as *Needs Improvement*; (c) teachers whose 3-year average Academic

Growth Over Time (AGT), also referred to as value-added measures (VAMs), standardized test measurement results indicated a *Far Below* or *Below* teacher effect on student learning; (d) teachers who have not had a formal evaluation during the last 5 years in their official records; and (e) teachers with 13 or more absences (does not include absences protected under state or federal laws) during the previous school year. Under the district's new teacher evaluation protocols, teachers who have LEAD variables are required to be included in the teacher evaluation cycle during the specific school year to assure improvement and achieve demonstrable growth toward becoming an effective teacher.

The LEAD Indicators create a focused data set for school leaders to introduce targeted discussions and interventions that seek specific improvements. These improvements may lead to an increase in the number of schools with a teacher work force that is eventually composed of all effective teachers. The LEAD Indicators should factor into strategic dialogues among various levels of school leaders, and this study attempted to measure correlations of teacher LEAD Indicators, school campus variables, and student achievement data.

If school leaders work to address the areas of improvement pinpointed by the LEAD Tool Indicators, this collaborative effort may, in time, contribute to a reduction in the number of teachers on each campus with LEAD indicator(s) and decrease the overall percentage of teachers at their schools with LEAD variables. The LEAD Tool data are intended to enable the measurement of a steady and continuous decrease in the number of teachers with LEAD Indicators at each school. For example, in a school where the LEAD Tool currently indicates that 25% of teachers are identified as having LEAD Indicators, the goal would be for principals and respective school leaders to collaboratively reduce this percentage to 0%. The LEAD Tool helps schools quantify their year-to-year progress toward having a school with 0% of their teachers

with LEAD Indicators. If every principal could guide the necessary work to have few or no teachers at any given school campus with LEAD indicators, then all students may benefit from arguably the most important factor in their academic success: an effective teacher in every classroom by the 2016-17 academic year.

Need for Research

LEAD Tool. The LEAD Tool data allow schools to better understand specific teacher and school variables that may correlate with improved student achievement. Whether variables identify a teacher as not effective due to the results on their current evaluation, or their value-added data results, or because they are absent too often, the principal must be able to address each improvement area and help teachers improve. The LEAD Tool pinpoints these issues, and school leaders must be ready to tailor the strategy and guidance so their teachers can ultimately improve. The LEAD Tool data goal is intended to help a school district measure change in teacher LEAD Indicator levels at schools to assure that each teaching staff is mainly composed of effective teachers. In schools where the LEAD Tool indicates that 25% of teachers are identified as having LEAD Indicators, the goal would be to reduce this percentage to as close to 0% of teachers with LEAD Indicators as possible by the start of the 2016-17 academic school year. Clearly, it is important to establish whether the LEAD Tool variables correlate with improved school achievement, and as such, this task was the focus for this study.

The following three tables display a sample set of data for the LEAD Tool: School Profile and LEAD Indicators for Schools and Local Districts based on data available on September 13, 2013. Tables 1-3 provide the various LEAD Tool component data elements provided to LAUSD School principals and Instructional Directors, as well as other central office leaders.

Table 1 illustrates a sample LEAD Tool dashboard of data detailing a school's profile, including the school's respective Local District to which it reports, and the last API recorded for the school. As of the 2013-14 academic school year, the State of California has discontinued the use of the California Standards Test (CST) in public schools. Future versions of the LEAD Tool will continue to carry the last API Index score for reference data only. The LEAD Tool displays data that correspond with numbered columns, as follows:

1. API: The school's 1-year growth in API points.
2. API: The school's 3-year growth in API points.
3. These data provide insight into how long a principal has remained at this particular school since the 2005-06 school year (an 8-year period).
4. These data provide the percentage of teachers who have left the school from the cohort of teachers at the school 3 years earlier.

4a. These data provide the percentage of teachers who have left the school from the cohort of teachers at the school 1 year earlier.

5. Enumerates how many classroom teachers were at the school on Norm Day at the beginning of the previous school year.
6. Enumerates how many classroom teachers were at the school on Norm Day at the beginning of the previous school year and were evaluated officially by the end of the school year, followed by the percentage of the teachers evaluated at the school.

Table 1

LEAD Tool: School Profile and LEAD Indicators for Schools and Local District (1-6)

School	LD	API Rank	(1) API Growth 1-Year	(2) API Growth 3-Year	(3) Average Years of Principal Duration since 2005-06 (8 Years)	(4) 3-Year Teacher Turnover	(4a) One-Year Teacher Turnover	(5) Cert Staff Norm Day 2012-13	(6) Evaluations Completed in 2012-13	%
School A	NE	10	5	38	2.00	9%	0%	21	12	57%
School B	W	10	5	12	8.00	20%	5%	22	15	68%
School C	E	N/A	N/A	N/A	0.33	13%	17%	20	8	40%
School D	S	4	23	31	2.67	33%	9%	67	2	3%
School E	W	3	-9	12	2.67	18%	13%	36	5	14%
School F	NW	4	-15	38	2.67	31%	17%	39	21	54%
School G	E	9	4	10	4.00	23%	4%	24	3	13%
School H	C	5	5	78	0.33	19%	8%	134	46	34%
School I	W	7	-12	13	8.00	65%	8%	13	4	31%
District Totals:					3.42	31%	11%	33,303	10,587	32%

Table 1 also includes overall district total or overall percentages reflective of all LAUSD schools. Schools can then compare their relative ranking with overall district totals or percentages. As an example, School B has a 1-year teacher turnover rate of 5%, whereas the district overall teacher turnover rate stands at 11%. School B is well under the district's average 1-year teacher turnover rate. In contrast, School F has a 1-year teacher turnover rate of 17%; this means School F is 6 percentage points over the District 1-year average for teacher turnover. Each set of figures would encourage different dialogues between Directors and principals with regard to strategies and focus points for goals to improve human capital dynamics at these two schools for which the data demonstrate distinct issues and challenges to be addressed.

Table 2 displays LEAD Tool data columns 7-11a, which provide data regarding principal and teacher evaluation information as follows:

7. Displays the name of the principal in the *previous* school year
8. Displays the name of the principal in the *current* school year.

9. Displays the years of principal experience for the current principal indicated in column 8.

10. Indicates the total number of teachers as of Norm Day September of 2013.

(10a) Indicates the total number of non-permanent teachers as of Norm Day September 2013.

11. Indicates how many current teachers were evaluated in the previous school year (2012-13 evaluations).

(11a) Indicates how many current teachers are in the evaluation cycle during the current academic school year.

Table 2

LEAD Tool: School Profile and LEAD Indicators for Schools and Local District (7-11a)

School	(7) 2012-13 Principal	(8) 2013-14 Principal	(9) Years of LAUSD Principal Experience	(10) Current K-12 Teachers Sept 2013	(10a) Current Non Perm K-12 Teachers	(11) Current Teachers Evaluated in 2012-13	(11a) TGDC Teachers Being Evaluated (2013-14)
School A	N/A	N/A	0.4	22	1	12	2
School B	N/A	N/A	19.9	21	0	15	4
School C	N/A	N/A	4.4	20	0	9	5
School D	N/A	N/A	0.9	56	1	2	7
School E	N/A	N/A	2.4	34	2	5	4
School F	N/A	N/A	4.4	36	2	19	1
School G	N/A	N/A	26.9	24	2	4	7
School H	N/A	N/A	1.9	111	5	39	20
School I	N/A	N/A	11.0	16	2	4	5
District Totals:	One Year Retention: 81%		6.21	25,810	1,307	9,853	5,593

Table 2 also displays the district overall numbers and percentages corresponding to each column for comparison purposes. Of special note, beneath columns 7 and 8, the district shows which schools had the same principal from one year to the next year. In this case, the district retained 81% of principals at the same school when comparing 2012-13 principal positions with 2013-14 principal positions.

Table 3 displays the data referred to as the LEAD Indicators, that serve as the basis by which to define the percentage of teachers at each school site that cannot be deemed effective. Columns 12-8 are considered the LEAD Indicators, and column 19 describes which teachers with LEAD Indicators are being evaluated during the current evaluation cycle. This final table of the LEAD Tool displays data that correspond with the numbered columns, as follows:

12. Displays the total number of teachers at the school who received an overall *Below Standard* evaluation during their last evaluation cycle.
13. Displays the total number of teachers at the school who received an overall *Meets* evaluation, but had at least two or more sub areas that require improvement.
14. Displays the total number of teachers at the school who are rated in the lowest two quartiles of performance as measured by the district's AGT data that measures the teacher effects on student learning using a value-add formula developed by the district.
15. Indicates the total number of teachers at the school who have not participated in an official performance evaluation cycle during the previous 5 years.
16. Indicates the number of teachers at the school site who had more than 13 absences during the previous school year. Absences protected by state and federal law are not reflected in this total.
17. Provides an unduplicated count of employees at the site who have one or more LEAD Indicators reflected in the data.
18. Provides a percentage of teachers at the school with LEAD Indicators, as compared with the total number of teachers at the school.

19. Provides data that displays how many teachers at the school with LEAD Indicators are being evaluated during the current school year.

Table 3

LEAD Tool: School Profile and LEAD Indicators for Schools and Local District (12-19)

	LEAD Indicators					Employees to Evaluate 2013-14		
School	(12) BSE	(13) NI	(14) Student Growth Over Time	(15) No Performance Evaluation for the past 5 school years	(16) 13+ Days Absent	(17) Total	(18) %	(19) Teachers with LEAD Indicators in TGDC (2013-14)
School A	0	0	0	0	0	0	0%	0
School B	0	0	2	0	0	2	10%	0
School C	0	0	1	0	2	3	15%	1
School D	2	0	6	1	4	13	23%	2
School E	0	1	3	0	4	8	24%	0
School F	1	2	5	0	1	9	25%	0
School G	0	0	0	6	1	7	29%	3
School H	0	6	17	19	6	48	43%	12
School I	0	0	2	4	1	7	44%	2
District Totals:	311	774	2,792	1,457	1,869	7,203	28%	1,459

Of important note, the LEAD Tool gives weight to the LEAD Indicators as they progress from columns 12 through 16. A teacher is only counted once at this level of the LEAD Tool in the overall school totals. As an example, the district first populates column 12 with any employees with the overall *Below Standard* evaluation. Once employees are tabulated in column 12 data, they do not appear in columns 13-16. Next, the district populates column 13 with any employees not captured previously in column 12 and that have an overall evaluation result of *Meets Standard* with two or more areas marked for improvement. Once an employee is captured in either column 12 or 13, he/she does not appear in the remaining columns 14-16. The progression moves forward with employees captured under the first column where they have LEAD Indicator data in the left to right progression of the columns. In the end, at this level, schools have an unduplicated count of employees with LEAD Indicators displayed, and an

overall percentage of teachers at their school with LEAD Indicators. These employees should be part of the evaluation cycle or part of a plan of action for improvement.

Table 3 also includes overall district totals and percentages. As an example, schools can compare their percentage of LEAD teachers with the overall district average percentage. Table 3 indicates that School F has 25% of teachers with LEAD Indicators, as compared to a 28% average across the district. School F currently has a smaller percentage of teachers with LEAD Indicators than the district average. The School F principal should engage in setting goals to move the percentage of teachers with LEAD Indicators from 25% to as close to 0% as possible.

As background, it is important to understand the LAUSD administrative leadership structure, as expectations and accountability at each level can influence the outcomes with regard to work around the LEAD Tool data. LAUSD K-12 schools are distributed among six geographical Local Districts throughout LAUSD boundaries. The Local Districts are geographically assigned and reflect schools located in the East, West, Northeast, Northwest, Central, and South area of the school district. Each Local District (East, West, Northeast, Northwest, Central, and South) is led by its respective Local District Superintendent. Each Superintendent is responsible for the progress schools make toward student success as measured by various goals, and having an effective teacher in every classroom is one of the LAUSD's key goals.

Each Local District Superintendent has a team of Instructional Directors who are assigned a group of schools that operate under their guidance and support. The number of schools under each Director is based on the Local District priorities, total number of schools located within the Local District, and budgetary allowances. The number of schools under each Local District Director's accountability and supervision can thusly range from as few as 10-15 in

to as many as 15-30. Each Director serves as the official supervisor for the principals under his/her guidance and responsibility.

Whether newly assigned or experienced, school districts expect principals to be ready to support, guide, and assist teachers to improve their performance in the classroom. This guidance extends to helping teachers that: have received an overall *Below Standard* evaluation on their last evaluation, have received an overall *Meets Standard* evaluation with two or more areas marked as requiring improvement, need to improve their attendance, have AGT (value-add) data performance in the bottom two quartiles, and/or do not show an official evaluation on file during the previous 5 school years. Any one of these single LEAD Indicator factors alone presents a complex improvement process for principals to engage with the teacher(s) to create instructional and professional progress. Principals are even more greatly challenged in this improvement process with teachers when teachers exhibit multiple LEAD Indicators, and the principal must guide them to improve potentially in various areas at once. Some principals may already possess the skills to meet this challenge and readily guide teachers to improve, whereas others may have varying abilities on the spectrum of skill levels to help teachers improve.

The LEAD Tool provides LAUSD school leaders an opportunity to analyze and plan improvement targets for specific individuals on each campus on a school-to-school basis. In order to create a positive change in LEAD Tool Indicator data at each school site, principals must be able to plan a strategic course of action and have the skills and abilities to guide teachers to improve. This study sought to gain a better understanding of whether the LEAD Tool data variables correlate with school achievement. Understanding the impact of teachers with LEAD Indicators may influence schools to emphasize and achieve a reduction in teachers with LEAD indicators. Understanding if the variables do or do not correlate with school achievement data

can influence the focus of improvement efforts by principals and other district leadership staff. In a recent study, Corcoran et al. (2012) found that professional development offered to principal supervisors did not provide a deep understanding of how to identify and support high quality instruction. Although LEAD Tool data may provide principals and their supervisors the data to focus on specific improvements required by the specific employee level, formulating and putting a plan of action into operation may not be a simple task. Assuring that employees improve or that appropriate disciplinary procedures take place is critical in reaching the all-effective teacher goal by the 2016-17 school year. Incorporating school-wide data indicators, such as teacher turnover, principal duration (turnover), and other LEAD Tool data variables into improvement efforts may also influence school growth and progress. This study also sought to examine the degree of correlation among varying percentages of teachers with LEAD Indicators at schools with school academic growth data.

Statement of Problem

At this point, little research has illuminated the effects of having high concentrations of teachers with LEAD Indicators at schools. More key, research has shed little information on how varying concentrations of teachers with LEAD Indicators can influence school success. The research does indicate that certain school variables contained in the LEAD Tool, such as teacher and principal turnover, teacher absences, principal experience, etc., can correlate with increases and decreases in student/school growth and achievement. The LEAD Indicators represent the dependent variables that were the focus of this study as follows: teachers with overall *Below Standard* evaluations, teachers with overall *Meets Standard* with multiple sub areas requiring improvement on their evaluation, teachers with 13 or more absences in the previous year, and/or scoring in the bottom two quartiles of performance on their AGT data (value-added). Each

LEAD Indicator represents a singularly difficult issue regarding which a principal must provide concrete guidance to a teacher so he/she can improve. A teacher with multiple LEAD Indicators can represent a complicated combination of improvement challenges that a principal must facilitate and document expertly. Ultimately, however, principals must be able to create improvement based on their interventions. An analysis of the LEAD Indicators is required in order to understand if varying concentrations of teachers with LEAD Indicators (CTLIs) at schools have a correlation with school characteristics, such as: teacher turnover and retention, principal turnover, principal years of experience, California API ranking or growth, or the number of employee evaluations completed. This analysis can also demonstrate if schools with higher CTLI percentages tend to be focused in specific geographical regions of the district. This study's analysis can potentially provide guidance and influence data based decision making regarding teacher and school staffing policies.

Statement of Purpose

As LAUSD seeks to meet the specific goal outlined in *Educating and Innovating Our Way to the Top: All Youth Achieving 2012-15 Strategic Plan* and achieve the goal of an effective teacher in every classroom, measuring progress toward the goal becomes the critical primary function of the LEAD Tool. LAUSD school leaders must understand the LEAD Tool data, set achievable goals, and have the ability to work collaboratively to realize the goal of having an effective teacher in every classroom by the 2016-17 school year. The LEAD Indicators create a lens through which to gauge the degree of effective teachers at each school across the LAUSD. Understanding the effect of varying CTLIs on schools can encourage school leaders to embark upon a more collaborative effort to measure, understand, and diagnose if CTLI is changing toward the positive and the potential relative benefit that may occur. This study's goal was to

perform a thorough and carefully constructed analysis to demonstrate if a correlation exists between LEAD Tool data variables and school's API growth percent.

This study examined the correlation of school API growth percent (dependent variable) with various school characteristics (independent variables) contained in the LEAD Tool data. The study may provide insight into whether a school's growth correlates with a school's teacher turnover/retention or principal turnover/retention, or if it can vary with the principal's experience level. The study also explored if a school's CTLI, API rank, or teacher evaluations completed correlate with a school's overall API growth percent. Conducting this analysis and understanding the results may prove helpful in order to understand if current efforts to increase the percentage of effective teachers at each school may ultimately contribute to having an effective teacher in every classroom.

This study applied statistical analysis to examine a correlation exists between school API growth percent and the various LEAD Indicators (independent variables) captured in the LEAD Tool. This study sought to analyze whether the LEAD Tool data identifies performance variables that can influence a school's overall degree of growth and student achievement. The results of the study may be useful to help guide the work of school leaders to quantitatively measure data and progress toward having schools staffed with only effective teachers and to understand where sustained focus may make a greater difference.

Research Questions

This study sought to examine whether the LEAD Tool data identifies teacher performance variables that can influence a school's overall degree of growth. The analysis examined the correlation of LEAD Indicators (dependent variables) with various school characteristics (independent variables). The LEAD Tool Indicators highlight teacher variables

that preclude the district from categorizing a teacher amongst effective teachers. The LEAD Tool Indicators are based on the following data variables: (a) teacher final performance evaluation results; (b) teachers who have not been formally evaluated and therefore lack final official performance evaluation results during the previous 5 years, and thus cannot be quantified as effective; (c) teacher individual AGT effects on student growth as measured by standardized test results; and (d) teachers with 13 or more days of absence during the previous academic year.

In past studies, Chetty, Friedman, and Rockoff (2012), Donaldson (2009), Haycock (1998), and Hanushek and Rivkin (2010b) provided insight into specific teacher quality and performance variables or indicators that statistically measure the effect of these variables on student learning. Other studies that have focused on examining teacher absence—such as those conducted by Cantrell (2003), Duflo and Hanna (2005), Hubbell (2008), and Miller, Murnane, and Willett (2007)—have correlated greater numbers of teacher absences with lower student achievement. However, few studies have measured the cumulative or synergistic effects that one or more of these specific LEAD Indicators may have on student learning. Additionally, past research has not focused specifically on the impact that high concentrations of teachers with LEAD Tool Indicators may have on a school campus, as may be demonstrated by overall API growth. Ultimately, understanding how the LEAD Indicators and CTLI may correlate with student achievement may be helpful for school leaders to make decisions utilizing data to guide resources distribution in order to address the performance of teachers more strategically. The LEAD Tool data analysis, a secondary data set, has the potential to affect whether all students have an effective teacher leading their learning. The research questions addressed by this study were as follows:

1. Does a school's 1-year or 3-year API growth percent correlate with API rank?

2. Does a school's 1-year or 3-year API growth percent correlate with teacher turnover?
3. Does a school's 1-year or 3-year API growth percent correlate with principal turnover?
4. Does a school's 1-year or 3-year API growth percent correlate with principal years of experience?
5. Does a school's 1-year or 3-year API growth percent correlate with annual teacher evaluation completion percent?
6. Does a school's 1-year or 3-year API growth percent correlate with the Concentration of Teachers with LEAD Indicators (CTLI)?

Significance of the Study

Every school district in the nation is responsible for assuring that each student is taught by an effective teacher. Recent Federal efforts under H.R.1, the No Child Left Behind Act, and numerous studies conducted since—such as those done by Clotfelter, Ladd, and Vigdor (2007), Goldhaber and Anthony (2004), Gordon, Kaine, and Staiger (2006), and Hanushek and Rivkin (2003)—have sought to locate teacher factors that correlate with improved student achievement by identifying specific variables that affect the degree of student learning. Previous research also recognizes both teachers and principals as the most significant contributors to student achievement and success.

This study sought to gain insight into the teacher performance variables in the LAUSD LEAD Tool. The LEAD Tool data reflect variables in the research that have been found to associated with student and school academic performance. This study conducted a series of correlations to ascertain the degree and relation between the LEAD Indicator dependent variables and school characteristic independent variables.

The purpose of this dissertation was to examine how changes in school growth correlate with changes in various school achievement and employee performance data. The analysis may serve to underscore and validate each LEAD Tool data variable as a potential key measure to utilize in assuring every student in LAUSD is taught by an effective teacher.

Delimitations and Limitations

This study focused solely on the relationships among LAUSD elementary school growth data and their respective employee and school data. Because the LAUSD is utilizing this unique data set, validation of the relationship among these variables can be accomplished at this time because of the existence of these data, but the findings may not be able to be generalized or applicable to other schools or school districts. Additionally, the study only included data variables for those teachers with LEAD Indicators as the focus for improvement efforts, and does not include other potential data that may exist to inform on other teachers' effectiveness.

Limitations of this study were as follows:

1. Only teachers with LEAD Indicators were determined to not be effective for purposes of analysis in this study.
2. The study relied on secondary data about employees and schools located in the LAUSD, the second largest school district in the nation.
3. Only elementary schools were included in this study, so any findings or results may not be replicable or applicable to teachers serving in other school teaching levels or settings.
4. The data set was reliant upon various LAUSD data sets and could include some data errors.

5. The study utilized LAUSD performance evaluation data results that may not be applicable or generalized to other school districts, their performance or evaluation criteria, or their practices.
6. The LAUSD AGT teacher effects data (i.e., VAM) are specific to LAUSD methodologies and criteria and may not be reflective of other value-added methodologies that exist and are utilized in other school districts or measured in other VAM methodology included in varying research studies.
7. The LEAD Tool secondary data set contained employee and school data that are specific to LAUSD practices and results and may not be applicable to other school districts or studies seeking similar data comparisons.

The data selected to be part of the LEAD Tool data may cause limitations and/or potential weaknesses in this study that may limit the validity of the results. The LEAD Tool data reflect data that were available through various LAUSD data sets that were compiled and incorporated into the LEAD Tool. The selection and inclusion of the various LEAD Tool variables may limit the study's ability to be replicated or applied in other school districts, as the data sets may not exist in other school districts to the same degree or design. The overall purpose is not to generalize the significance of this specific data set to other school districts or human resources operations, but to identify if teacher performance variables correlate with school success. Future studies may benefit by addressing more specific areas or to focus on Human Resources practices, principal or central office school leader practice and actions that may influence school growth, or performance variables similar to those contained in the LEAD Tool.

Definition of Terms

The following key terms and concepts that support the foundation for this dissertation will be utilized throughout the course of this study.

- Academic Performance index (API): Measurement of academic performance and progress of individual schools in California that is the main component of the Public Schools Accountability Act passed by the California legislature in 1999. API scores range from a low of 200 to a high of 1000, and the statewide performance target for all schools is 800.
- API Growth Percent (1-Year and 3-Year): The percent of API growth based on a school's growth points from one year to the next year or from 3 years ago to the target data year.
- Adequate Yearly Progress (AYP): Under the federal No Child Left Behind Act (NCLB, 2002), a measure of yearly progress toward achieving state academic standards. It is the minimum level of improvement that states, school districts, and schools must focus on achieving each year.
- California Standards Test (CST): The State of California's K-12 student testing program that ended in 2013. Measures students' progress toward achieving California's state-adopted academic content standards in English language arts (ELA), mathematics, science, and history/social science, which describe what students should know and be able to do in each grade and subject tested. Students in grades two through 11 took multiple-choice CSTs for various subjects.
- Concentration of Teachers with LEAD Indicators (CTLI): Represents the percent of teachers with LEAD Indicators at a given school site. This figure is expressed in the

LEAD Tool as a percentage of the faculty with LEAD Indicators. A percentage of 45% would indicate that 45% of the classroom teachers at that specific school site have one or more LEAD Indicator variables and need improvement.

- LEAD Tool: Under the direction of the researcher, then Deputy Chief Human Resources Officer for the LAUSD, the Human Resources Division developed the Leaders Evaluation and Analysis Development (LEAD) Tool. The LEAD Tool provides LAUSD leadership teams with objective data to analyze school level concentrations of teachers that may not have a positive impact on student achievement. The LEAD Indicator data displays teacher factors that include: whether they have been evaluated officially during the previous 4 years, if they received an overall *Below Standard* evaluation result, if they received an overall *Meets Standard* evaluation but had two or more areas that indicated improvement is required, AGT value-added results (value-added teacher effects estimates), and attendance data. The LEAD Tool also provides other data for inclusion in an overall analysis, including school API, teacher turnover percentages, administrator turnover data, and prior teacher evaluation completion data for teachers on a specific campus. The LEAD Tool also provides various other data regarding teacher and principal turnover ranks and other performance indicators for school leaders to utilize in order to formulate strategies and goals for school improvement efforts.
- California Commission on Teacher Credentialing (CCTC): This agency is the legal entity that approves, implements, and enforces teacher credentialing policies; monitors the teacher credentialing process; and issues California teaching credentials.

- Credential or Certification: These terms will be used interchangeably to refer to a teacher who has completed an approved teacher preparation program and earned a regular teaching credential.
- Effective Teacher: An effective teacher is defined by the researcher of this study as a teacher who does not have any LEAD Indicators identified in the LEAD Tool.
- Highly-Qualified Teacher: Under NCLB, a highly-qualified teacher possesses a requisite teacher credential and has proven subject matter competence by various means as described by the law.
- HR 1, The No Child Left Behind Act (NCLB): Reauthorization of the Federal Title I program that requires states and school districts to improve disadvantaged children's education through improved teacher quality, enhanced student performance, and focusing on accountability.
- Human Capital Data Warehouse: The LAUSD received a federal TIF grant that allowed LAUSD to develop an employee and school data warehouse. The LEAD Tool has been incorporated into the data warehouse tool and is available online to school leaders when needed.
- Teacher with LEAD Indicators (TLI): TLIs are unable to be considered effective teachers in the LAUSD teacher workforce. These teachers have one or more LEAD Indicators demonstrated in the LEAD Tool and would need to improve based on: their latest performance evaluation result, AGT value-added effects on student learning, having 13 or more days of absence, and/or lacking a performance evaluation on file during the past 5 years.

Summary

American society and its educational community are currently focused on test scores and improving student achievement. Ingersoll (1995) wrote that the quality of teachers and teaching is undoubtedly one of the most important factors shaping students' learning and growth. Previous research has sought to measure the relationship among various teacher performance and quality variables and student learning. The ability to study and examine the challenges of school district work required to enhance student academic improvement dynamics, set strategies, assure a focus on data analysis, and influence a change in the data may ultimately engender the changes that will increase students' access to effective teachers.

Although previous studies have demonstrated effects of specific and isolated effects of teacher and principal performance and quality variables that correlate with an enhanced or negative impact on student learning, there is minimal research available that analyzes the synergistic impact of having a high concentration of school teachers at a given school site with multiple or varying performance and quality variables. Little research is available that studies the impact of high concentrations of teachers with performance variables, specifically such as those captured by the LEAD Tool Indicators. The concentration of teachers with LEAD Indicators may impact a school's overall ability to drive student academic achievement and success as measured by their API growth benchmarks. There is even less research available that studies school district use of data-driven processes or tools to analyze and correlate the degree of change in school staffing that may affect overall achievement at the school. Examining the degree of teacher LEAD indicator levels at schools may help school districts achieve an improved equitable distribution of teacher quality on a campus-by-campus basis. The analysis of the data in this study may help school leaders focus on an effective strategy that increases the equitable

distribution of effective teacher across all district schools. The focus of the study, to validate the LEAD Tool data variables, examined the relationship between school growth and LEAD Tool data variables.

LAUSD has developed the LEAD Tool, which identifies the number and degree of teachers at schools that cannot be categorized as effective teachers. The need still exists to understand if the LEAD Tool data correlates with school growth data and can be utilized to plan the work required to help schools improve by focusing on key areas correlated with school growth. The analysis of this data is critical to improve the learning environment for schools and students in every classroom. The school, teacher, and principal quality and performance variables in the LEAD Tool can help inform their underlying correlation with a school's overall achievement. There also exists a need to determine if the LEAD Tool is a useful data set for school leaders that are accountable for school success. If teachers are the most influential factor in the academic success for every student, then the teacher performance data contained in the LEAD Tool may be influential in the work of ensuring that every classroom in every LAUSD school has a teacher that is effective and able to help students achieve academically.

Chapter Two: Background and Related Literature

Overview

This chapter provides a review of the literature to build a foundation for exploring whether LAUSD school leaders can use an LAUSD experimental design data tool to guide and influence the variance in effectiveness among the LAUSD teacher work force at any given school. The development of the LEAD Tool is one example of an effort in utilizing data to pinpoint specific areas for improvement and to measure change. Using the LEAD Tool or other types of data-driven tools may help school districts implement various plans to ensure that every student in every classroom is taught by an effective teacher.

The experimental design LEAD Tool draws together data from various disparate LAUSD computer systems into a single data set in an effort to measure the degree to which every one of LAUSD's more than 25,000 classrooms is led by a teacher that is considered effective. The LEAD Tool data is being shared with principals, Directors, Local District Superintendents, and other central office administrators. The LEAD Tool creates the opportunity to hold strategic operational and instructional dialogue around a school's respective percentage of teachers who need to improve based on specific LEAD Tool indicators. The LEAD Tool may initiate key LEAD Tool data dialogues and may help school leaders and principals to plan specific interventions and strategies that may bring about instructional and behavioral improvements in teachers in order to close the teacher effectiveness gap within and across district schools. Utilizing VAMs, Hahnel and Jackson (2012) described the teacher effectiveness gap in LAUSD as follows:

> We also found that teachers are unevenly distributed across the district. Schools comprised predominately (more than 50 percent) high value-added teachers tend to be

> concentrated in the northern parts of the city, while schools with more than half their teachers deemed low value-added are clustered in the central and southern parts. (See Figure 7.) Students in LAUSD's eight smaller, local districts do not have equal access to top teachers. The schools employing most high value-added teachers are clustered in Local Districts 1 and 4, whereas many of the schools made up of mostly low value-added teachers are found in Local Districts 7 and 8. (p. 10)

The literature review will examine the potential underlying correlation between the LEAD Tool data indicators or variables and student and school achievement. Understanding the relationship that teacher underperformance, as represented by each LEAD Tool Indicator category, may have on student performance is critical and the focus on this literature review. The LEAD Tool Indicators represent a district-wide set of metrics that measure the degree of persistence, relative improvement, and change in a subset of teachers with LEAD Indicators within LAUSD's 25,000+ classroom teacher workforce in LAUSD. The LEAD Tool may lend visibility to improvement work and efforts by various levels of administrators in the hierarchical chain of shared accountability in the school district. Research findings will underscore the relevance of the underlying LEAD Tool Indicator data. In their examination of urban school district practices Corcoran et al. (2012) found:

> It is a promising development that many of the school districts we visited identified school performance gains as an emerging component in the evaluation of principal supervisors. In Gwinett County, for instance, area superintendents are evaluated using the same weighted school assessments that are used to evaluate principals. These weighted school assessments look at performance indicators including student performance on state tests and graduation rates. Zone superintendents in Charlotte-Mecklenburg are also

> evaluated using an instrument that includes a student achievement measure based on components such as graduation rates, growth and proficiency on state tests, student attendance, suspension rates, and other measures. These measures are based on individual school performance goals, and are aligned with the district's strategic plan. (p. 32)

The LEAD Tool Indicators reflect research findings that correlate the effects of teacher quality, performance variables, and effectiveness with student learning and achievement. The research will also provide insight into the Instructional Director's role to guide improvement and performance of school principals.

The experimental design data tool, *A Leader's Evaluation and Analysis Development (LEAD) Tool*, provides a data-focused synopsis of information gathered from various disparate LAUSD technology systems and sources to deliver a dashboard now available to principals and Instructional Directors through the newly created LAUSD Human Capital Data Warehouse (the LEAD Tool is downloadable as a spreadsheet). The LEAD Tool Indicators consist of teacher quality and performance variables that research findings indicate may be correlated with student achievement and progress. The LEAD Tool assembles the data into a school profile that provides school leaders with focal points regarding a school and their respective teaching staff. The LEAD Tool contains approximately 20 data points that principals and other school leaders can utilize to plan various targeted interventions and strategies to support school staff improvement. This study focused on the five specific teacher quality and performance data points in the LEAD Tool that make up the LEAD Indicators that attempt to measure the percentage of effective teacher at each school. The data displayed in the LEAD Tool as LEAD Indicators can serve as the nexus to plan and set goals around teacher observations, evaluations, and interventions that may result in individual teacher improvement. In specific scenarios where a teacher does not

demonstrate improvement, then the LEAD Tool also can measure the number of underperforming teachers that potentially leave or exit the school system.

The LEAD Tool gives school leaders the opportunity to work together and analyze the following teacher LEAD Indicators: (a) the number of teachers who received an overall *Below Standard* rating on their latest performance evaluation results; (b) the number of teachers that received an overall *Meets Standard* rating on their latest performance evaluation results, but had two or more sub areas marked as *Needs Improvement*; (c) 3-year average AGT, also referred to as VAM, standardized test measurement results indicating a *Far Below Standard* or *Below Standard* teacher effect on student learning; (d) teachers who have not had a formal evaluation during the last 5 years; and (e) the number of teachers with 13 or more absences (does not include absences protected under state or federal laws) during the previous school year. The LEAD Indicators create a focused data set for school leaders to introduce targeted discussions and interventions that seek specific improvements. These improvements may lead to an increase in the number of schools with a teacher workforce that is eventually composed of all effective teachers. The LEAD Indicators should factor into strategic dialogues among various levels of school leaders, and the research findings presented in this chapter will underscore the relevance and importance of gauging each LEAD Indicator and its degree of presence among the teacher workforce at each school campus.

First, this chapter will review what the literature reflects regarding the demand for quality teachers. The literature review will also examine how teacher credentials, degrees, and other teacher quality variables factor into teacher quality and improved student achievement. The research will also review whether teacher performance results correlate with improved student achievement, as measured through performance evaluations. The literature review will also

examine findings regarding one of the latest developments to intrigue the educational community: teacher effects on student learning, as measured by value-added standardized assessment data analysis. The literature review also informs whether teacher and principal turnover have an effect on student or school academic growth. This research review will then explore whether teacher absences have an effect on student achievement and learning. Hahnel and Jackson (2012) wrote that:

> Few of today's education debates produce as much controversy as the one over how to define and measure teacher effectiveness. In the past, policymakers often resorted to the use of easy-to-observe qualifications such as teaching certifications and advanced degrees as proxies for effectiveness. Now, the national conversation has shifted toward a search for measures that more meaningfully connect teacher performance to student learning outcomes, including academic progress, mastery of standards, and the demonstration of higher order thinking skills needed to apply knowledge. To be sure, there are a variety of ways to determine whether teachers are having this impact. In California, a number of local efforts are underway, including in LAUSD through its Teacher Effectiveness Task Force, to develop new, more robust teacher evaluation systems that can help measure teacher effectiveness and lead to more meaningful teacher support, development, and recognition. (p. 4)

Each of the following sections seeks to reflect the current literature's findings regarding the relationship of various teacher quality and performance variables on student academic achievement. The literature review should also provide a foundation by which to identify the significance of the each LEAD Tool Indicator, and the how each LEAD Tool Indicator represents a barrier to student achievement.

Demand for Credentialed and Highly Qualified Teachers

To conceive of a systematic methodology or create a tool that can quantify and be utilized to assure that every student and every classroom is led by an effective teacher remains a daunting and unfinished task across the U.S. During the late 1990's through about 2007, the education community had created various policies and programs hoping to make certain that all students have great teachers. Over 30 years ago, in 1986, the publication of *A Nation Prepared: Teachers for the 21st Century* proved to have a monumental impact on all educational reforms since then (Carnegie Forum on Education and the Economy, 1986). The publication drew focus to the continuing growth in student enrollment and that the resulting varied needs of students demanded well-prepared teachers. *A Nation Prepared* sought to direct the collective educational community's attention toward the impending ills and generate the best thinking and action. The report underscored the need to focus on urban schools and students:

> Yet another factor has widespread educational implications: growing numbers of disadvantaged students – from low-income families, non-English speaking backgrounds, and single-parent households. All youngsters need teachers with a more sophisticated and complete understanding of their subjects, but the need of these children is greatest. These children, many of them the product of generations of poverty, find little in their environment outside of school that matches the affluent youngsters' push for academic success and the belief that it will pay off. Leaving aside for the moment the need to improve school performance greatly, the demographic realities just described alone pose an impressive problem for education policymakers. Taken together, a steep increase in demand for teachers, and a declining supply of well-educated applicants constitute a challenge without precedent. (p. 32)

In California and across the nation, throughout most of the 1990s and the first decade of this new century, school districts continued to struggle to staff every classroom with a fully trained, credentialed teacher. Throughout the 1980s and 1990s, a school district's teacher quality was generally measured by the percent of credentialed teachers versus the percent of non-credentialed teachers. Darling-Hammond and Post (2000) highlighted that this disparity in the percentage of teacher quality was more apparent in urban school districts.

According to Gándara and Maxwell-Jolly (2000), the consensus on American students is that they are ill prepared for both the educational and economic challenges of society. Haycock (1998) asserted that educators and educators-in-training are constantly receiving the message that due to poverty and neighborhood conditions, poor and minority students enter school behind other students, and that these deficits continue to accumulate. Haycock further wrote that:

> If we but took the simple step of assuring that poor and minority children had teachers of the same quality as other children, about half of the achievement gap would disappear. If we went further and assigned our best teachers to the students who most need them, there's persuasive evidence to suggest that we could entirely close the achievement gap. (p. 4)

Gándara and Maxwell-Jolly pointed to factors affected by the quality of teacher education and factors that affect the quality of a student's academic success:

> There is a clear and persistent correlation between poverty, ethnicity, and the quality of education that students in California receive. Teachers and teaching conditions are a critical link in this equation. In addition to the academic challenges that these students face and that their teachers must address, teachers in high-poverty schools are more likely to report problems of student misbehavior, absenteeism, and lack of parental

> involvement. Yet the teachers who teach in these schools, on average, have less preparation than teachers in suburban schools and are therefore less well prepared to successfully address all of these issues. (p. 6)

The impact of a credentialed well-trained teacher on student academic success has been the subject of numerous research studies. According to Haycock (1998), a clear relationship exists among low standards, low-level curriculum, under-educated teachers, and poor results. Haycock also contended that a number of large-scale studies provide convincing evidence that what teachers do in education does matter and that schools, and especially teachers, make a difference. Haycock asserted:

> Parents have always known that it maters a lot which teachers their children get. That is why those with the time and skills to do so work very hard to assure that, by hook or by crook, their children are assigned to the best teachers. (p. 4)

In attempting to bind the intuitive and observational knowledge of parents with the emerging data at the time, Haycock wrote:

> Recent research from Tennessee, Texas, Massachusetts and Alabama proves that parents have been right all along. They may not always know which teachers really are the best, but they are absolutely right in believing that their children will learn a lot from some teachers and only a little from others-even though the two teachers may be in adjacent classrooms. "The difference between a good and a bad teacher can be a full level of achievement in a single school year," says Eric Hanushek, the University of Rochester economist notorious for macro-analysis suggesting that virtually nothing seems to make a difference. (p. 4)

This difference in achievement by students, specifically the loss of a full level of achievement within an academic year, is the crux of the matter. Can the effect of a teacher on student achievement be measured and quantified properly? The Southeast Center for Teaching Quality (2002) published a report of findings as part of their regional Title II Teacher Quality Enhancement Grant Initiatives. In the report the authors confirmed:

> The new research on teaching quality, which drives the assessments of the National Board for Professional Teaching Standards (NBPTS), indicates that effective teachers are those who know their subject matter, and also know their students well. They know how to manage classrooms, understand how students learn and can assess their learning, and know how to use diverse teaching strategies that enable their students to reach higher academic standards. (p. 8)

A 2001 Harris Poll indicated that the American public viewed the following selected teacher qualities as important: 91% indicated *Manage classrooms* as the most important quality, 90% selected *Know subjects*, 89% advocated *Understand how students learn*, 88% chose *Trained to teach*, 82% indicated *Assess student learning*, and 35% viewed teachers having a *Liberal arts education* as most important.

In the 1990s, the California State Department of Education (1990) revealed some troubling facts, stating, "The long-heralded shortage of classroom teachers has arrived. Assuming that pupil teacher ratios remain constant, California will need 37,500 new elementary teachers through 1994-95" (p. 85). The U.S. Department of Education projected total public and private school enrollment to increase 1% from the year 1998 through 2010, primarily due to the baby boom echo. The U.S. Department of Education's projection of increased student enrollment from 52.5 million in 1988 to 53.5 million in 2005 required national, state, and local education

policymakers' continued focus on delivering more qualified teachers over the next decade. In California, Gándara and Maxwell-Jolly (2000) indicated that the total public school enrollment in 1987-88 was 4.4 million students; in 1997-98 the California student population mushroomed to 5.6 million. Based on data available through the California State Department of Education, student enrollment during the 2000-01 school year surpassed 6 million students, and increased to 6.2 million for the 2011-12 school year.

During the 1990's through 2007, various educational institutions and initiatives in California have sought solutions to the shortage of credentialed teachers. In the mid-1990s, in a rebound from a period of financial downturn, California began showing positive signs of revitalization as measured by the flow of dollars into state coffers. In 1996, the governor of the State of California, Pete Wilson, unveiled a plan to utilize Proposition 98 funds to rapidly implement a Class Size Reduction initiative in primary grades (K-3). By earmarking Proposition 98 funding, California school districts entered into a frenzied search for a continuing non-existent entity: fully trained, credentialed teachers. Faced with the impact of Senate Bill 1777, the Class Size Reduction Program, California encountered as many challenges as it did benefits under the new legislation. The impact was felt across the state, with few credentialed teachers available to meet the demands of this initiative. California's only option at that point was to continue to hire, in ever-larger numbers than before, teachers who had not completed a teacher credential program. Utilizing non-credentialed teachers was not a new phenomenon in California. McKibbin and Giblin (2000) from the California Commission on Teacher Credentialing (CCTC) wrote:

> It is not surprising that alternative routes are seen as ordinary ways of doing business, rather than something that requires explanation. Prior to the current recession, California

> School Districts hired approximately 15,000 new teachers per year. Despite the fiscal crisis facing all school districts, approximately 10,000 teachers are still being hired annually in the state. About one third of these novices are in the areas that have been in short supply for more than thirty years such as mathematics, science, special education, and bilingual education. Teacher shortages have been very durable problems in California. (p. 34)

In 1995, the State of California issued approximately 5,000 new teacher credentials. This figure left districts scrambling to find an additional 5,000 teachers under alternative certification routes. In 1995, prior to class size reduction legislation, the state issued approximately 6,200 multiple subject emergency permits. After the implementation of class size reduction in the 1996-97 school year, the CCTC issued nearly 11,000 elementary emergency permits, doubling the amount from the previous year. As a result of the effects of class size reduction in California, Gándara and Maxwell-Jolly (2000) maintained that:

> Today, while many are in smaller classes, they are also much more likely to be taught by a teacher who has received no training to teach them and does not speak their language. It remains an empirical question whether many of these students would have fared better had the same dollars been spent to attract and train more qualified teachers for their classroom. (p. 4)

This trend was not restricted to any one school district, but manifested itself as a common symptom across California. An example of this troubling trend is demonstrated by the percentages of full time contracted emergency permit teachers (teachers who have not completed a teacher education program and do not possess a teaching credential/certificate) reported by some of the Los Angeles County school districts after implementation of class size reduction for

the 1996-97 school year: Beverly Hills Unified (7%), Monrovia Unified (15.5%), Long Beach Unified (21%), Pomona Unified (25%), Bassett Unified (30%), Pasadena Unified (30%), Paramount Unified (32%), and Compton Unified (35%). These figures clearly indicated that California could not deliver a pool of credentialed teachers and that school districts had to educate students and improve test scores with teachers who had not completed a teacher credential program.

This dearth of credentialed teachers continued to be a factor in California schools and classrooms, and data provided by the Educational Demographics Unit of the California Department of Education's indicated that for the 83 school districts/agencies within Los Angeles County, over 50% of the school districts were functioning with 20% or more non-credentialed teachers. Of the 292,977 full time equivalent (FTE) teachers statewide, approximately 14% were not fully credentialed.

Ongoing efforts across the nation and in California to attract and increase the availability of credentialed teachers included: scholarships to prepare teachers, reform measures, internships, professional development support programs, improved working conditions, plans to attract qualified teachers in hard to staff schools, stipends and incentives, contract signing bonuses, and other creative approaches and plans. Funding at both federal and state levels infused hundreds of millions to billions of dollars into a variety of solutions, including: reducing class sizes; tapping pools of paraeducators; increasing beginning teacher salaries; providing financial incentives to attract teachers; statewide Internet teacher recruitment websites; advertising campaigns; military service to teacher programs; competitive grants focused on research-rich studies; and funds tied to increased accountability and data measurement, such as Race to the Top Grants (RTTP), Innovation (I3) grants, and other federal and state funding opportunities.

The Center on Teaching and California's Future (2003) reported that approximately $152 million in teacher recruitment initiatives and incentives were approved during the 1999-2000 California legislative session to address the shortage of teachers in the state. Gándara and Maxwell-Jolly (2000) reported that:

> The 1999-2000 California State education budget of $44.5 billion dollars, a $3.9 billion dollar increase over the prior year, included efforts to address both the quality and quantity of teachers in California schools. Several budget items allocated funds to efforts focused on teacher preparation, improving teacher quality, and/or increasing the quantity of teachers prepared to work in the state's schools. These included a more than four-fold increase in the funding for Beginning Teacher Support and Assessment (BTSA) induction programs; the Teacher Peer Assistance and Review program to provide assistance to teachers who request it, or who are deemed by a review team to need it; a $100 million allocation to increase beginning teacher salaries to $32,000; funding for institutes to prepare teachers to teach reading; $160.7 million allotted to expand the class-size reduction in two courses in grade nine; and $50 million for one-time performance awards to teachers and other certificated staff in underachieving schools that demonstrate significant improvement in student's academic achievement. (p. 17)

Despite these funding efforts and additional resources, some school districts continued to experience difficulty in staffing schools with credentialed teachers. The Center on Teaching and California's Future (2003) reported that some schools had no or few non-credentialed teachers, whereas other schools had more than 20% of their teaching staff composed of non-credentialed teachers. Simultaneously during this same timeframe, the impact of the federal government's newly imposed regulations that also sought to improve teacher quality was felt among school

districts across the nation. In January 2001, the federal NCLB mandate put states and school districts on notice that federal funds could be removed if classrooms serving Title 1 students were not staffed by Highly Qualified Teachers (HQTs). This legislation required that teachers hired after July 1, 2002 and teaching in Title 1 classrooms meet the federally mandated HQT requirement. Losing federal funds was not a an option for most school districts, especially in a time of shrinking state funds, as experienced in California and the LAUSD commencing with the 2007-08 school year.

NCLB caused states and school districts to rewrite standards for staffing schools across the nation. In California, previous minimum requirements allowed California districts to contract full time classroom teachers on emergency permits that were based on candidates holding a baccalaureate degree and passage of the California Basic Educational Skills Test (CA Senate Bill 1225, 1983). Under NCLB, such credentialing requirements were no longer deemed compliant with the NCLB *Highly Qualified (HQ)* standard. As part of the NCLB mandates, new teachers hired after July 1, 2002, were required to: possess an earned degree; meet subject matter competency through a rigorous examination or have a major in the subject taught; and, in California, qualify minimally for a university or district intern certificate or already have earned a teaching credential. By the end of the 2005-06 school year, all teachers serving in classrooms with Title 1 students had to meet this NCLB HQ status requirement.

An examination of the LAUSD's annual teacher demographic teacher indicates significant gains in transforming the classroom teacher workforce from 70% credentialed in the 2006-07 school year to over 99.5% credentialed and approximately 99% HQTs in the 2012-13 school year. These auspicious statistics in the second largest school district in the nation had been driven by various factors, including aggressive recruitment strategies; incentives and

bonuses to new and existing teachers; budgetary reductions in the overall number of teaching positions district-wide; and various district, state, and federal initiatives. Subsequently, the CCTC disclosed through their annual *Teacher Supply in California (2008-09) Report* that the number of fully credentialed teachers in California had increased to 97.4%. The CCTC's most recent report indicated that 98.4% of all public school teachers in 2011-12 were fully credentialed. Similarly, LAUSD reported that 99% of its classroom teachers were fully credentialed in 2011-12, and that in the 2012-13 school year, 99.5% were fully credentialed. Both the data from the CCTC and LAUSD may have benefitted from the relative success of the various initiatives implemented during the preceding decade. In the 2011-12 school year, school districts all across California had mostly transformed themselves into a workforce comprising nearly all credentialed teachers and HQTs.

As California school districts, and LAUSD specifically, were now reporting that nearly 100% of classroom teachers were fully trained and credentialed, the efforts of the previous 25 years had seemingly been accomplished. But the paradigm began to shift, with various researchers and studies beginning to examine the effect of each credentialed teacher on student learning. Being a fully credentialed teacher—the focus of laws, substantial work, and efforts during the preceding decades—was no longer to be the sole measure of determining teacher quality. Instead, researchers and school districts have begun to focus on how teachers can affect student learning and achievement. The addition of value-added teacher effects based on standardized test results, as well as other research involving teacher performance variables, has refocused the analysis and debate on specific teacher effects on student learning and achievement.

Teacher Credentials and Certification Quality

Does teacher quality matter, and can a school district with 100% of all classroom teachers designated under NCLB as a HQT and credentialed based on CCTC requirements be considered to meet the highest teacher quality benchmark? The research now reflects that traditional modes of quantifying teacher quality, credentials, certifications, and degrees, among others, may not be the ultimate measure of whether they have a positive effect on student learning. The research indicates that the effects of a high quality teacher can mean up to an additional full year's gain in learning growth for students over the course of a single school year. As a an important variable in discerning teacher quality, Goldhaber and Anthony (2004) wrote that:

> For example, teacher attributes that are commonly used for certification, recruitment, screening, and selection of teachers—i.e., certification status, degree and experience levels—are not strongly correlated with student learning gains (Goldhaber and Brewer 2000; Hanushek 1986, 1997). In other words, teachers clearly matter, but teacher quality is not strongly related to observed teacher credentials. (p. 5)

Goldhaber and Anthony (2003) indicated that teacher effectiveness has the single most important effect on student achievement. According to the authors, educational research utilizing holistic measures of effectiveness that includes observable and unobservable attributes has shown the overall impact of teacher quality to be the most important predictor of student achievement among school related variables. Hanushek (2010) wrote in his examination of the economic value of teacher quality that:

> The general finding about the importance of teachers comes from the fact that average gains in learning across classrooms, even classrooms within the same school, are very different. Some teachers year after year produce bigger gains in student learning than

> other teachers. The magnitude of the differences is truly large, with some teachers producing 1.5 years of gain in achievement in an academic year while others with equivalent students produce only ½ year of gain. In other words, two students starting at the same level of achievement can know vastly different amounts at the end of a single academic year due solely to the teacher to which they were assigned. If a bad year is compounded by other bad years, it may not be possible for the student to recover. (p. 467)

In examining teacher performance impact on nearly 150,000 LAUSD grades three though five students in 9,400 classrooms from 2000 to 2003, Kane and Staiger (2005) found no statistically significant difference in achievement for students assigned to certified and uncertified teachers. Their study found few differences between the two groups' overall impact on student achievement. However, their study also showed that great differences within each group, and that effectiveness varied substantially among certified teachers as well as among uncertified teachers. Hanushek, Rivkin, Rothstein, and Podgursky (2004) contended that:

> The overall weight of the evidence suggests that existing credentialing systems do not distinguish well between good and bad teachers. Because many people teach even though they do not have standard credentials, teachers with and without certification can be compared – and little evidence shows that existing hurdles provide much information about performance in the classroom. (p. 19)

Goldhaber and Anthony (2004) suggested that to truly gain an understanding of a teacher's quality, his/her classroom actions must be assessed as opposed to simply checking credentials. Goldhaber and Anthony studied the effects of elementary teachers that have earned National Board Professional Teaching Standards (NBPTS) Certification as measure against

teachers that do not hold the certification. His study found that NBPTS certified teachers who must demonstrate that they bring effective practices to the classroom tend to produce gains in student learning more effectively. In another study, the Strategic Data Project (2012), which analyzed LAUSD teacher and student performance data, found that:

> After controlling for experience, NBC elementary math teachers have effects that are 0.07 standard deviations higher, on average, than teachers without National Board Certification (Figure 12). NBC elementary ELA teacher effects are 0.03 higher on average. These effects are roughly equivalent to two months of additional math instruction and one month of additional ELA instruction. (p. 12)

A report published by the LAUSD Program Evaluation and Research Branch (Cantrell, 2003) studied the effectiveness of teachers who had passed the Multiple Subjects Examination for Teachers (MSAT) versus teachers who were credentialed after completion of a subject matter waiver program (planned coursework completion option versus passing the MSAT). The study results showed that teachers who had demonstrated subject matter competency through the MSAT in contrast to having completed coursework yielded no statistically significant differences in student achievement gains.

Shields et al. (1999) surveyed teachers with a credential and those without a credential regarding their perceived level of preparedness to teach their assigned classrooms. In each case, elementary teachers without a credential reported feeling less well prepared than reported by their credentialed teacher counterparts. Teacher perceptions at the secondary high school level showed similar results; credentialed teachers perceived themselves to be better prepared than their non-credentialed teacher counterparts. Another aspect of the study reviewed how new teachers rated the impact of their teacher preparation program on their readiness to teach. Shields

et al. found that, “On the statewide teacher survey, new teachers generally gave their preparation programs moderate ratings when asked how well the programs prepared them to master the pedagogical skills drawn from the California Standards for the Teaching Profession” (p. 67).

Both teachers and administrators interviewed as part of Shields et al.’s (1999) study were critical and skeptical of the degree to which teacher training programs prepared teachers to be successful in their classrooms. Shields et al. wrote, “This study did not set out to examine the quality of teacher preparation programs in depth. We are struck by the generally moderate to negative perceptions of preparation programs by teachers and administrators” (p. 68).

An analysis by Goldhaber and Brewer (2000) indicated that teacher certification has no significant impact on student achievement. Later that year in repudiation of Goldhaber and Brewer’s analysis, Darling-Hammond, Berry, and Thoreson (2001) conducted a review of the prior work and analysis in the field. The latter study found a significant relationship between underlying certification factors that had been previously overlooked. Darling-Hammond et al. further reviewed and analyzed Goldhaber and Brewer’s data findings:

> Second, the regression estimates include a number of other variables that are highly correlated with certification status. In particular, bachelors’ and masters’ degree fields are highly correlated with each other and with certification status. Teaching experience is also highly correlated with certification status. The fact that certification status is found to be a significant predictor after these effects are parsed out underscores the strength of the relationship. In addition, the fact that certification status has a stronger influence on student achievement than having a subject matter degree in the field (which shows a positive but non-significant influence on student achievement in mathematics and a negative influence in science) suggests that the process of preparation it reflects may add

> value to teacher's subject matter competence and may add important information to judgments about a teachers' qualifications than might be made from factors like degree status alone. This finding reinforces findings from other studies that have found stronger influences on teachers' demonstrated skills and effectiveness associated with the amount of education training they have than with the measures of their subject matter alone (Ashton & Crocker, 1986, 1987; Darling-Hammond, 2000; Druva & Anderson, 1983; Evertson, Hawley, and Zlotnick, 1985; Ferguson & Womack, 1993; Guyton & Farokhi, 1987; Monk, 1994). (p. 5)

Importantly, the initial stages of teacher quality discernment to assure that the practice in the classroom correlates with gains in student learning occur at the beginning of a teaching career. Staiger and Rockoff (2011) reported on the degree of improvement of teachers in their first few years in the classroom:

> In both Los Angeles and New York, teacher effects on student achievement appear to rise rapidly during the first several years on the job and then flatten out. This finding has been replicated in a number of states and districts (Rivkin, Hanushek & Kain, 2005; Clotfelter, Ladd, & Vigdor, 2006; Harris & Sass, 2006; Jacob, 2007). When assigned to a first-year teacher, the average student gains .06 to .08 standard deviations of achievement less than observably similar students assigned to experienced teachers. However, as the achievement gains of students assigned to second-year teachers lagged those in more experienced teachers' classrooms by only .01 to .04 standard deviations. In Los Angeles, students of third-year teachers saw gains comparable to those of more experienced teachers, while there was a small difference for third-year teachers in New York (.01 to .02 standard deviations). (p. 7)

As teachers gain experience in their early careers in the classroom, their effect on student learning increases. Beginning teacher performance can vary greatly, and recognizing the difference in quality early in a new teacher's career can make a difference in student learning and academic performance over time (Hanushek & Rivkin, 2007). Hanushek and Rivkin (2007) wrote, "The studies that most clearly identify the importance of teacher experience find that the quality of instruction tends to increase substantially during the first few years of teaching but not in subsequent years" (p. 79).

Teacher credential requirements include various educational unit and degree hurdles and specify which coursework must be taken to qualify for a credential. However, do these requirements assure that a teacher is effective in the classroom? Hanushek and Rivkin (2003) examined the relationship between teacher experience and education and student learning, noting the following:

> But education and experience simply do not appear to have a strong effect on student achievement. Research has found little or no evidence of a systematic relationship between teacher value added to student achievement and a graduate education (master's degrees and above). (p. 79)

Miller and Roza (2012) studied the role of a master's degree in teacher compensation and student achievement, stating:

> Although teachers with master's degrees generally earn additional salary or stipends – the so-called "master's bump" – they are no more effective, on average, than their counterparts without master's degrees. The more nuanced evidence suggests that master's degrees in math and science do confer an instructional advantage on teachers in those subjects, yet approximately 90 percent of master's degrees held by teachers come form

education programs that tend to be unrelated to or unconcerned with instructional efficacy. (p. 1)

Although the research on whether teacher preparation, certification, and other professional variables correlate positively with student academic learning and achievement gains has shown varying results and conflicting findings, overall there still remains variance among teachers that is not explainable solely by traditional teacher quality measures. The use of standardized test results to measure student growth and teacher effects on that growth has recently been examined further in the form of studies and data analysis known to the education field as Value-Added measures (VAMs). The use of test scores to examine student academic growth in 1 year and multiple years has yielded a better understanding of the variances of teacher effects on student learning gains. Hahnel and Jackson (2012) reported that a low-income student is 66% more likely to have a low value-added teacher in mathematics, as compared to a higher income student who is 39% more likely to have a high value-added teacher. This type of data helps provide school leaders a better understanding of potential impacts of an unequal distribution of effective teachers within schools.

Teacher Effects and Value Added Data

Teacher effects as measured by the LAUSD's AGT data, LAUSD's version of VAM, is included as one of the five LEAD Tool Indicators. The development of VAM estimates of teacher effectiveness has become a key and at times controversial set of data for school districts to understand and utilize as part of their human capital data set. Value-added models, known as AGT in LAUSD, are statistical models used to gauge a teacher's contributions to a student's test score gains. By utilizing a student's prior achievement results on standardized tests, a prediction or estimate of student achievement can be made and then compared to actual student gains.

Attempting to describe VAM teacher-effect estimates, McCaffey, Lockwood, Koretz, and Hamilton (2003) purported to measure a teacher's contribution to student learning as thusly:

> In lay terms, the teacher causes the effects. Conceptually, the teacher effect on a student is defined as the difference between the student's achievement after being in the teachers' classroom compared with his/her achievement in another plausible setting, such as with a teacher of average effectiveness. (p. 10)

Haycock (1998) reviewed studies of teachers' effects on student achievement conducted in Tennessee, Dallas, and Boston. She wrote that in regard to the Tennessee data,

> Tennessee is one of the few states with data systems that make it possible to tie teachers to achievement in their classrooms. Moreover, the state's value-added approach for assessing student achievement allows observers to look at gains students make during a particular school year. (p. 4)

The Tennessee research study, conducted by William L. Sanders, showed the effect that teachers from various quintile groupings (effective teachers to least effective teachers) have on low performing students. The study indicated that the least effective teachers yield on average a 14-percentile point gain on student test scores during the academic school year. The most effective teachers tended to yield on average a gain of approximately 53 percentile points per academic school year. Similarly, differences in percentile gains for students with higher levels of achievement persisted, with students assigned to more effective teachers making stronger percentile gains during the academic school year.

The Dallas research, according to Haycock (1998), revealed more validating study results indicating teacher effect on student performance on assessment examinations. Regarding reading scores, Haycock wrote:

> In sharing their findings, Robert Mendro, the district's executive director of institutional research, said, "What surprised us was the size of the effect." For example, the average reading scores of a group of Dallas fourth graders who were assigned to three highly effective teachers in a row rose from the 59th percentile in fourth grade to the 76th percentile by the conclusion of the sixth grade. A fairly similar (but slightly higher achieving) group of students was assigned three consecutive ineffective teachers and fell from the 60th percentile in fourth grade to the 42nd percentile by the end of the sixth grade. (p. 5)

Similar results held constant for student scores in mathematics. The impact of teacher effectiveness over a 3-year period in the academic career of students studied revealed a causal link in rising student academic test scores.

The effect a teacher can have on students was a primary factor reviewed in this study. Other researchers have provided further examination of teacher quality and its measurable impact on student achievement. In a related study, Hanushek (1992) corroborated that difference in teacher quality can make a one grade level difference in student achievement. Hanushek wrote regarding effects on student achievement:

> More important, the estimated difference in annual growth between having a good and having a bad teacher can be more than one grade level equivalent in test performance. Students who have a "run" of good or bad teachers can thus end up in very different achievement positions after just a few years of schooling. (p. 107)

Hanushek found that a student with a high quality teacher receives a learning gain of 1.5 grade level equivalents, and that a student with a low-quality teacher achieves only a gain of 0.5 grade level equivalents during one school year.

In a report published by the Program Evaluation and Research Branch of the LAUSD, Cantrell (2003) examined to what extent experience, education, credentials, and attendance were related to student performance. The study found a significant relationship between a teacher's experience and education and student performance outcomes. Cantrell wrote,

> For novice teachers with 5-8 years of experience, the difference in student performance in mathematics and language for students taught by teachers with many salary credits was roughly 2 NCEs (Normal Curve Equivalents) better than that for teachers with few salary credits. For more experienced teachers, the gap between students taught by teachers with many versus few salary credits was roughly 4 NCEs in math and 3 NCEs in language. (p. 7)

Hanushek (1992) wrote "that 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" (p. 113). The variables related to teacher quality continue to receive attention from researchers studying various possible influencing factors. Hanushek, Kain, O'Brien, and Rivkin (2005) analyzed economic impacts related to teacher quality and student learning. Their study indicated that one standard deviation increase in teacher quality raises standardized assessment gain by 0.22 standard deviations. A student who has a teacher at the 85th percentile can expect annual achievement gains of at least 0.22 standard deviations above a student who has the median teacher. Their analysis underscores that these teacher quality variations can accumulate, leading to huge impacts on ultimate student achievement.

In *Learning Denied*, an Ed Trust-West report by Hahnel and Jackson (2012), based on value-added models developed by Pete Goldschmidt to review teacher effectiveness, focused on an analysis of teacher quality in the LAUSD. Hahnel and Jackson's analysis found that teachers

designated as HQ under the NCLB Act, did not necessarily correlate with student learning advancement as measured by standardized test scores:

> Unfortunately, – and consistently with other research – our data from LAUSD reveal that a teacher can be well qualified without being a strong teacher, as measured by value-added data. In fact, 92 percent of bottom-quartile English language arts and math teachers met the "highly-qualified teacher" HQT standard in 2009. Top-quartile teachers were slightly more likely to be categorized as HQT, with this difference more pronounced in ELA than in math. In 2009, 97 percent of top-quartile ELA teachers were "highly qualified" while 95 percent of top-quartile math teachers met this standard. (p. 9)

In a survey of more than 10,000 teachers, the *Primary Sources* study, conducted by Scholastic and the Bill & Melinda Gates Foundation (2012) found that teachers overwhelmingly agree that student growth over the course of an academic year is the most important metric in measuring their performance; 85% of teachers say this should contribute a great deal or a moderate amount to measuring their performance, with 43% giving this a rating of a *great deal* of importance. Although responses in the survey found that teachers felt strongly about measuring student growth over a given year in their classroom, they also indicated that other measures such as professional educator reviews and student and parent surveys should be combined together to provide an overall evaluation of teacher performance.

A recent analysis conducted as part of the Strategic Data Project (2012) by Harvard University utilizing AGT data for teachers in LAUSD, found that for both math and ELA, teachers saw the largest gains in terms of teacher effects during their first 5 years of teaching, and these gains were found to continue to improve over time. Importantly, the study also demonstrated that novice teachers who ranked in the top quartile after the first 2 years continued

to demonstrate larger teacher effects on student learning into their third year than teachers ranked in the three lower quartiles.

Teacher Attendance Impact on Student Achievement

Teacher absence is one of the five LEAD Tool indicators, and helps school administrators to pinpoint specific teachers at schools who may have 13 or more absences in the previous school year. The LEAD Tool quantifies the total number of teachers with 13 or more absences (absences protected under state or federal law are not included in this total) on a given campus, and can rank campuses under their supervision on this LEAD Indicator. The research examines the effect that teacher absences can have on student achievement, fellow colleague morale, and schools.

Utilizing the Civil Rights Data Collection dataset released in 2012, Miller (2012) examined teacher absences and found that:

> On average, 36 percent of teachers nationally were absent more than 10 days during the 2009-10 school year based on the 56,837 schools analyzed in the dataset. The percentages reported by individual schools range from 0 percent to 100 percent, with 62 percent of the variation in the measure occurring between districts and a third occurring within districts. The latter statistic is significant because all schools within a given district operate under the same leave policies, and teacher absence levels well above a district average may be a symptom of a dysfunctional professional culture at the building level. (p. 2)

Research indicates that certain teacher qualities may correlate with improved student achievement during the span of a student's academic career (Darling-Hammond et al., 2001; Hanushek, 1992; Haycock, 1998). In a study of public school data in North Carolina, Clotfelter,

Ladd, and Vigdor (2009) found that every 10 days of teacher absence was associated with a decline of 1.7% of a standard deviation in math achievement and 0.9% standard deviation in reading. Their findings in this same study also documented that elementary students fared worse on standardized tests when assigned to teachers who take more absences. The effect of teacher absences on short and long term student achievement gains and success underscores the value of having data available easily in the hands of Instructional Directors and principals to assure that absences can be mitigated. The ability to mitigate teacher absences may thusly hold tremendous value in the daily instructional success of students. Additionally, to the extent that mitigating teacher absenteeism can be accomplished in high poverty and struggling schools, the focus on these data becomes increasingly important. For example, Clotfelter et al. found that:

> We show that the pattern of absence-taking across schools in North Carolina has a disproportionate impact on low-income students. When schools are ranked by the fraction of students receiving free or reduced-price lunch, teachers in the lowest quartile average almost one extra sick day per school year, compared to teachers in the highest quartile. (p. 3)

Clotfelter et al. (2009) found that novice teachers had a lower usage of sick leave (4.8 days per year) as compared to more experienced teachers with 5-10 years of experience (over 8 days per year). The researchers did note that their regression results do not necessarily imply higher absences at low-income schools, as the regression results also imply lower absence use by novice teachers that are hired at these same low-income schools. The researchers found that in schools in North Carolina, low-income students face a greater likelihood than students in affluent schools to face persistently high rates of teacher absences. Similarly, Miller et al. (2007) found that 10 additional days of teacher absence correlated with a reduction in student achievement in

fourth grade mathematics by 3.3% of a standard deviation, which the researchers felt was large enough to be of policy relevance. In correlation with these findings, Clofelter et al. noted that:

> Needless to say, districts with consistently high rates of absence, as well as problematic schools within districts, constitute a legitimate source of concern if teacher absence disrupts the educational process. Variations such as these across schools and districts point to the need for more research on institutional and organizational factors that may be associated with persistent differences. It may be especially important to understand better the role of principals in controlling teacher absences. (p. 11)

In addition to potential impacts on student achievement results and on disparate impact on low-income schools, research has found other factors upon which teacher absenteeism can also have a significant effect. Miller et al. (2007) indicated that teacher absences can impact student achievement in less direct ways:

> For example, teacher absences may inhibit attempts by school faculties to implement consistent instructional practices across classrooms and grades. Common planning time, during which teachers may collaborate on improving instruction, is often so scarce that even low rates of teacher absence could almost completely undermine its purpose. Note that this mechanism implies that a teacher's absence not only impacts negatively on the students he or she directly works with, but also on the students taught by the teacher's colleagues. (p. 6)

Also, Bruno (2002) mapped the association between LAUSD schools' geographic environmental space and the propensity for teacher absence. He wrote that:

> The principal finding of this study is that the effect of teacher absenteeism is felt not equally across all school sites, but is felt unfavorably in the urban schools or schools that are located in poor, low median family income geographical space. (p. 16)

In their research, Miller et al. (2007) found that 10 additional days of teacher absence correlated with reduced student achievement in fourth grade math students by 3.3% of a standard deviation. The researchers also focused on the fact that even small differences in performance of a few students on the state math examination can result in a school not meeting AYP mandated under NCLB.

In a study of LAUSD student and teacher data spanning from 1999 to 2002, Cantrell (2003) found that teachers in the lowest absence group (an absence rate of less than 2%) outperformed the comparison group in every category each year, by ¾ to 1 ¾ Normal Curve Equivalents (NCEs) on the SAT/9 exams in reading, math, and language. The data indicate that students taught by teachers with the lowest absence rates outperformed their peers in classes taught by teachers with the highest absence rates by 1.5 to 2 NCEs. The impact of reducing absences of teachers identified in the LEAD Tool may invariably have potential beneficial results based on these LAUSD-specific findings.

A study in rural India found that a school that introduced a financial incentive and monitoring program resulted in an immediate decline in teacher absences, which positively affected child achievement results equivalent to 1.7 standard deviations higher than at comparison schools. Introduction of strategies that positively impact teacher attendance may have a beneficial effect on student achievement (Duflo & Hanna, 2005).

In a study that examined teacher evaluation, Pitkoff (1993) found that teachers who received low performance ratings tend to miss a larger number of days than teachers who did

not. The results indicated that teachers with low marks do not feel a connection to the workplace and believe they are ineffective. Similarly, Jacob and Walsh (2009) found that a teacher's absences are negatively associated with principal evaluations of the teacher. The LEAD Tool helps principals and Instructional Directors identify teachers with low performance ratings as well as those with correlating absenteeism issues. Hubbell (2008) recommended that in order to improve teacher absenteeism, teachers should be required to call principals directly when they are going to be absent, and train principals on their responses. In expanding on the benefits of this strategy, Hubbell wrote that:

> Since they tend to be quite busy as it is, many principals may resist the added responsibility of fielding calls from sick teachers. However, if the proposal accomplishes its goal of reducing teacher absences, it could end up saving time. Principals must devote extra time tending to behavior problems and/or pedagogical concerns in substitute teachers' classrooms, and they also must evaluate the performance of substitutes. An increase in regular teacher attendance would reduce the time that they spend on those activities. Also, it should be noted that the obligation to speak to ill teachers does not necessarily include the necessity of finding a substitute, as the principal could inform the current substitute coordinator that a certain teacher will be absent. (p. 5)

In a study exploring whether teacher absences matter, Miller (2008) asserted that teacher absences also hinder student learning because substitute teachers across the nation are less qualified on average than regular teachers. Miller found that 37 states do not require substitute teachers to hold a bachelor's degree and that only North Dakota mandates substitute teachers to hold the same credentials as regular teachers. In this examination of a data set containing 5,189 unique teachers represented in one urban district during the 2001-2001 through 2004-2005

academic years, Miller found that a teacher's past behavior is the best indicator of future absence behavior. The research focused on two particular types of absence: personal days and short-term illnesses that are most common and most avoidable; and non-discretionary absences, which are usually more long-term and less preventable. The researcher found that having clear policies and strategies that focus on controllable teacher absences that lead to teacher absenteeism improvement is critical to addressing teacher absenteeism. Jacob (2011) found considerable evidence that teacher absences are at least partly discretionary and that teacher absences are more frequent on Mondays and Fridays. Miller (2012) found that two patterns existed in the timing of teacher absences: first that teachers are most frequently absent on Mondays and Fridays and that a high proportion of absences due to illness occur in blocks of time short enough that no medical certification is required. In related research, Hubbell (2008) found that in order for an attendance-improvement program to be effective, the school board needs to make it clear that principals are accountable for implementation.

Miller (2012) found that teachers are absent from traditional public schools more than 10 times per year, at a rate more than 15% higher than in charter schools. The findings also demonstrated that 33.3% of secondary high school teachers were absent more than 10 days per year, whereas 36.7% and 37.8% of teachers were absent more than 10 days per year in elementary and middle schools respectively.

The LEAD Tool represents one of LAUSD's efforts to gather data from disparate data systems into a common dashboard that principals and Instructional Directors can access easily to analyze potential teacher quality and performance data points. Teacher absenteeism, along with other teacher quality and performance factors captured in the LEAD Tool, can together have a synergistic negative effect and impact on student learning at a specific school site.

Teacher Turnover

The LEAD Tool contains data variables that capture a school's 1-year teacher turnover percent and the 3-year teacher turnover percent. The 1-year teacher turnover rate is intended to help principals and school leaders check to see the latest data, as well as understand a school's 3-year trend in teacher turnover. Together these two data points help check a school's general direction over time, while also understanding the immediate turnover intensity.

Barnes, Crowe and Schaefer (2007) found that low performing schools rarely close the achievement gap because they cannot close the teacher quality gap, as they constantly need to rebuild their staff. They wrote that schools spend an inordinate amount of staff time due to the constant process of hiring and replacing beginning teachers who leave before they have mastered teaching and are able to create a successful learning environment for students. Pallas and Buckley (2012) found that one-half of teachers in their first 5 years of teaching experience considered leaving their current school or teaching altogether, whereas experienced teachers with more than 15 years of experience were least likely to leave. Futernick (2007) indicated that 10% of teachers working in high poverty schools transfer away to other schools. To make matters worse, these teachers' replacements are generally ones with minimal training and classroom experience. The research is in general consensus that high poverty schools experience more teacher turnover than low poverty schools.

In a study to measure the effects of teacher turnover in New York City schools, Ronfeldt, Loeb, and Wyckoff (2013) found that in grade levels with higher teacher turnover, students scored lower in both ELA and mathematics. Moreover, they found that the effects were particularly strong in schools with low-performing and Black students. The authors also wrote that most existing research on the relationship between teacher turnover and student achievement

is correlational, revealing negative correlations. Ronfeldt et al. noted that the evidence about teacher turnover is not necessarily indicative of a causal relationship, and that a third factor (e.g., poverty, working conditions, or poor school leadership) may simultaneously cause both low achievement and higher teacher turnover. In studying the effects of teacher turnover on student achievement when comparing students within the same grade, Ronfeldt, Lankford, Loeb, and Wyckoff (2011) found that students of teachers in the same grade level team in the same school do worse in years where teacher turnover rates are higher, as compared to years with less teacher turnover.

Some studies indicate that not all attrition is necessarily negative, and that low achieving schools may benefit from some teacher attrition. Hanushek and Rivkin (2010b) found in studying the relative effectiveness of teachers that remain versus those that leave, they were more effective and tended to stay more in schools with low achieving and Black students. The research indicates that less effective teachers are more likely to leave than more effective teachers. Darling-Hammond and Sykes (2003) found that when teachers leave, low-income schools face a difficult process in finding new teachers and hire replacements that are less experienced and prepared.

Ronfeldt et al. (2013) also wrote that turnover may have a broader organizational influence that reaches beyond just teacher turnover. Turnover is considered to have a disruptive organizational influence on all members of a school community. Marinell and Coca (2013) found that teachers were more likely to remain at schools where they had trust in the principal, and that the principal was: supportive of staff, a knowledgeable instructional leader, and adept at forming partnerships with external organizations. Simon and Johnson (2015) wrote that building and sustaining strong work environments should be central to every school district's improvement

strategy. Similarly, Fuller, Waite, Miller, and Irribarra (2013) found that among the most influential factors shaping a teacher's desire to stay or leave a school were their trust in colleagues and working together to lift achievement; trust and collective responsibility were highly correlated with respect for the leadership team and general job satisfaction.

Variance in Equitable Distribution of Quality Teachers

The LEAD Tool provides principals and Directors with data that can rank each school by the percentage of teachers at a specific school site with LEAD Indicators. A school with 50% of all teachers having LEAD Indicators may be viewed differently as compared to another school with only 10% of all teachers having LEAD Indicators. However, what might this variance in teachers with LEAD Indicators mean to a school that is working to improve student learning and what does this distribution entail for school leaders? Does this inequitable distribution of teachers portend any difference in school academic results?

The LEAD Tool Indicators include teacher quality and performance variables that highlight whether a teacher has received formal evaluations with an overall *Below Standard* evaluation rating, if he/she received and overall *Meets Standard* evaluation with two or more sub areas on the evaluation marked as needing to improve, or if he/she has not had an official evaluation during the last 5 years. These three LEAD Indicator areas represent specific work at a school site that requires strategic observations and appropriate documentation. An Instructional Director who is highly skilled in these areas may serve as a significant and important influence on a principal's success when confronted with a high percentage of teachers on their campus with LEAD Indicators.

The variance of teacher quality in schools may be due to the difficulty and challenge of helping teachers to improve, or schools' inability to exit individual teachers that cannot improve

or refuse to do so. The variance in teacher quality and the degree of the variance within schools can be compared across schools in the LAUSD. Staiger and Rockoff (2011) indicated that school leaders have little ability to select effective teachers during the initial hiring process. The lack of reliable selection instruments that correlate with strong student learning impacts is described as follows:

> Reliable screening at the hiring stage would be an efficient tool for raising student achievement because it avoids the cost of placing ineffective teachers in front of students. Unfortunately, there is scant evidence that school districts or principals can effectively separate effective and ineffective teachers when making hiring decisions. Indeed, this notion is supported by the fact that most of the variation in teacher effects occurs among teachers hired into the same school. (p. 8)

In addition, Staiger and Rockoff made other observations that may shift the emphasis from recruitment to increased scrutiny of teacher quality after hiring:

> The implications of our analysis are strikingly different form current practice. Schools and school districts attempt to screen at the point of hiring and require significant investment in education-specific coursework but then grant tenure status to teachers as a matter of course after two or three years on the job. Performance evaluation is typically a perfunctory exercise and, at least officially, very few teachers are considered ineffective (Weisberg, Sexton, Mulhern, and Keeling, 2009). Rather than screening at the time of hire, the evidence on heterogeneity of teacher performance suggests a better strategy would be identifying large differences between teachers by observing the first few years of teaching performance and retaining only the highest-performing teachers. (p. 3)

This attention to teachers' performance within the first few years in the classroom requires a focused set of observations with the specific goal of assuring that teachers hired, school site by school site, demonstrate teaching abilities that are effective and contribute to student learning and achievement. However, after this short non-tenured time frame decision is over (within 2 school years in California before a teacher becomes tenured), school leaders must observe and follow though with actions based on tenured teacher rules and protections. The LEAD Tool provides each principal and Instructional Director with the data to focus on tenured teachers with LEAD Indicators in an effort to assure that every school has a comparable percentage of effective teachers in order to achieve an equitable distribution of teachers ready to impact student achievement positively. In addition, in the future the LEAD Tool will also include data that provide a focus on non-tenured teachers in the LEAD Indicators so that early decisions can further positively impact a school's percentage of teachers that are considered effective.

The California State Department of Education (2007) issued a report evaluating the progress of school districts in achieving an equitable distribution of effective teachers throughout California. One of the key goals of this report was to provide local educational agencies (LEAs) with ideas to ensure that poor and minority students had access to highly qualified and effective teachers. The California Department of Education report stated:

> An important first step in closing the achievement gap for all children is determining on the basis of effectiveness in the classroom rather than simply on the basis of qualifications for entry into the teaching profession. And if we mean what we say--"all children"--we must take the additional step of ensuring that vey child has the same opportunity to be taught by highly qualified and effective teachers regardless of which school in a district a child attends. (p. 3)

The Tennessee Department of Education's (2009) reexamination of their Teacher Equity Plan found that students in their high priority schools had less access to the state's most effective teachers and conversely more access to the state's least effective teachers based on their value-added state test data. Their report called for more analysis of these data and for further efforts to correct this disparity in Tennessee schools.

The disparity in teacher quality seems to be one of the key factors accounting for the difference in quality between high and low-poverty schools. The availability of effective teachers to improve student achievement varies tremendously across teachers; the variance is just as large when comparing the quality of teachers within a specific school as it does throughout a school district (Aaronson, Barrow, & Sander, 2007; Rivkin et al., 2005; Rockoff, 2004). In their review of student level data from 2000-2001 to 2004-05 from Florida and North Carolina, Sass, Hannaway, Xu, Figlio, and Feng's (2010) findings showed that:

> Teachers in high-poverty schools are generally less effective than teachers in lower-poverty schools, though the differences are small and not consistent across states and subject areas. We do find consistent evidence, however, that the variation in effectiveness among teachers in high-poverty schools is greater than the variation among teachers in lower-poverty schools. Differences in the distribution of teacher quality appear to be driven by the relatively poor performance of the least effective teachers in high-poverty schools, the best teachers in high-poverty schools are on par with the best teachers in lower-poverty schools but the least effective teachers in high poverty schools are much less effective than their counterparts in lower-poverty schools. (p. 22)

Hanushek and Rivkin (2012) found that having a math teacher at the 25th percentile of effectiveness, as compared to a teacher at the 75th percentile of the quality distribution, would

mean a gain of .2 standard deviations of learning in a single year. This difference moves a student from the middle of the achievement distribution to the 58th percentile mark. School district efforts to reduce the percentage of underperforming teachers at schools of poverty could have an overall beneficial effect on overall student learning.

The California State Department of Education's (2007) efforts to require that school districts assure an equitable distribution of effective teachers at schools, especially as these distributions might affect minority students, are grounded in federal requirements:

> As required by the NCLB Act (Title I, Part A, Section 1111[b][8][C], states must ensure that poor and minority children are not taught at higher rates than other children by inexperienced, underqualified, and out-of-field teachers. California's State Plan is a multifaceted plan; it addresses the equitable distribution of high-quality, experienced, and effective teachers, specifically in schools with high-poverty, high-minority populations whose students continue to under-perform academically. (p. 5)

The California Department of Education determined that having an effective teacher in every classroom is paramount and retention of good teachers was one of the key tools in the State's plan. The belief that skilled teachers produce better student results drove many of the recommendations, and the California Department of Education established that school districts needed to assure that schools have an equitable distribution of effective teachers in every school. The California Department of Education established a threshold level at which schools did not achieve an equitable distribution of effective teachers, examining various research findings to determine a threshold equitable distribution proportion:

> This research also suggests that scattering a handful of good teachers around the district will not produce desired outcomes. One study has identified teacher quality, the "tipping-

> point" as being when the proportion of underqualified teachers is about 20 percent of the total school faculty. Beyond that point, schools no longer have the ability to improve student achievement (Shields et al. 1999). (p. 21)

The research also points out that access to data and information regarding the degree of effectiveness at specific schools and across school districts school sites varies greatly. A policy brief released by the National Center for Education Evaluation and Regional Assistance (2011) described the difficulties in assessing equitable distribution of effective teachers. The report noted that due to few school districts systematically collecting teacher effectiveness data, it would be difficult to gauge whether the most effective teachers are in the most advantaged or least advantaged schools. However, in cases where data existed in this study, the highest performing teachers were found to be underrepresented in the most disadvantaged schools. Chait (2010) analyzed strategies from six states that ensure the presence of effective teachers in high-poverty, high-minority schools. Chait asserted that:

> States should analyze and report on the distribution of teachers between schools using value-added estimates and other measures, which may include a proportion of novice teachers and measures of in-field teaching. States should provide individual and school level value-added estimates to every school and district annually and report the value-added estimates and other data publically by school poverty and minority quartiles. (p. 6)

More specifically, Chait called for a number of data sources that would better describe the distribution of effective teachers so that inequities are better identified and in order to target schools and districts for assistance. These data sources would go beyond just value-added estimates, as these estimates are not available for all teachers, and although they are an important

component of the teacher effectiveness spectrum, they do not provide a complete picture of overall teacher effectiveness.

In the Education Trust-West study, *Learning Denied: The Case For Equitable Access to Effective Teaching*, Hahnel and Jackson (2012) found that a student's consistent exposure to effective teaching resulted in accelerated academic proficiency, and that students with consecutive low value-added teachers remained below grade level. This study, utilizing value-added estimates only, examined whether traditionally underserved students in LAUSD have equitable access to the most effective teachers. The researchers found that:

> A succession of strong teachers can make a tremendous difference for students in Los Angeles. For example, among second-graders at the "Below Basic" or "Far Below Basic" levels in math in 2007, those fortunate enough to have three high value-added teachers accelerated quickly to proficiency while students with three consecutive, low value-added teachers remained below the "Basic" achievement level. This pattern holds across other grades and performance levels. (p. 7)

Hahnel and Jackson also found that a low-income student is also twice as likely to have a low value-added ELA teacher, whereas a student with a more affluent background is 62% more likely to have a high value-added ELA teacher. Although the researchers focused solely on value-added estimates, they also acknowledged that other data from observations and evaluations should also be included as variables to look at the overall equitable distribution of effective teachers in schools.

In exploring equitable distribution of effective teachers and their policy implications, based on his analysis of value-added data, Hanushek (2009) asserted that removing the lowest

performing 6-10% of teachers could have a dramatic impact on student achievement, even if these 6-10% of teachers were replaced by just average teachers. Hanushek further wrote:

> These estimates of the importance of teacher quality permit some calculations of what would be required to yield the reforms discussed earlier. To begin with, consider what magnitude of teacher deselection might yield an improvement in student performance to the level of Canada (0.5 s.d. of student achievement). Figure 8.4 shows that eliminating the least effective 6-10 percent of teachers would bring student achievement up by 0.5 s.d. The estimates given here need to be put into policy context. Consider a school with 30 typical teachers. These estimates suggest that eliminating the bottom two or three could boost student achievement up to the level of Canada's students. (p. 173)

Hanushek also noted that the gains noted previously could only be realized if the deselection of this group of ineffective teachers was permanent. Additionally, this permanence would require a continuous deselection process and effort to upgrade the overall effectiveness of all teachers.

The research clearly indicates an overall need for data that could provide further indicators regarding the distribution of effective teachers both across schools and within specific schools. Having these data defined and available to school leaders may be a key to focusing on strategies that increase the percentage of effective teachers in schools. Measuring the degree of effective teachers within a school and progress toward reducing the percent of non-effective teachers at schools to a level below a specific district-defined threshold level could have large effects on student learning. Hanushek and Rivkin (2007) found that the variation in teacher skill and effort raises the most difficult set of issues for policymakers because regulations, including certification requirements, do not address this quality in performance issue. Hanushek and Rivkin stated:

> Rather, the evidence strongly suggests to us that principals and superintendents should make decisions about teacher hiring, retention, promotion and pay based on their evaluation of teacher's potential and actual effectiveness in raising student achievement and other outcomes, and not on a set of teacher characteristics such as education and experience. Principals do in fact know who the better teachers are. Their demonstrated ability to identify teachers at the top and bottom of the quality distribution could almost certainly be extended toward the middle ranges, particularly if good tests of student achievement are administered regularly. (p. 82)

The New Teacher Project's researchers Weisberg, Sexton, Mulhern, and Keeling (2009) produced a study titled "The Widget Effect," which indicated that in districts with binary evaluation ratings (*satisfactory* or *unsatisfactory*) more than 99% of teachers receive a *satisfactory* rating. The report findings also indicated that in other school districts with broader ratings, about 94% of teachers still receive one of the two top ratings and that generally less than 1% are rated as *unsatisfactory*. This study also found that:

> Despite uniformly positive evaluation ratings, teachers and administrators both recognize ineffective teaching in their schools. In fact, 81 percent of administrators and 58 percent of teachers say there is a tenured teacher in their school who is performing poorly, and 43 percent of teachers say there is a tenured teacher who should be dismissed for poor performance. Troubling, the percentages are higher in high-poverty schools. But district records confirm the scarcity of formal dismissals; at least half of the districts studied have not dismissed a single non-probationary teacher for poor performance in the past five years. (p. 6)

The report found that the percentage of poorly performing teachers as observed by teachers in their school was 8% in Chicago Public Schools and 5% in Akron Public schools overall, and that official evaluation ratings only identified <1% of Chicago Public School teachers and 0% percent of Akron Public School teachers as *unsatisfactory*. The researchers also stated:

> It goes without saying that teacher dismissal has become a polarizing issue in the education community; however, we found that teachers and administrators broadly agree about the existence and scope of the problem and about steps that need to be taken to address poor performance in schools. In fact, an overwhelming majority of both teachers (68 percent) and administrators (91 percent) agree that dismissing poor performers is important to maintaining high-quality instructional teams. This may seem self-evident, but it suggests a consensus that teacher performance management should entail accountability, not just development. (p. 16)

Glazerman et al. (2010) examined the role of value-added estimates in teacher evaluation systems and addressed some of the uncertainties around the use of these sensitive data:

> However, uncertainties surrounding how best to design human resource policies that take advantage of meaningful teacher evaluation do not bear directly on the question of whether value-added information should be included as a component of teacher evaluation. There is considerable confusion between issues surrounding the inclusion of value-added scores in teacher evaluation systems and questions about how such information is used for human resources decisions. This is probably because the uses of teacher evaluation that have gained the most public attention or notoriety have been based exclusively on value-added. (p. 3)

The LEAD Tool represents LAUSD's efforts to combine this systemic data collection methodology so that, based on research findings regarding teacher performance variables that may influence student performance school leaders can begin to implement intervention steps and strategies to influence these effective teacher threshold levels. This data work is critical to bringing about increased teacher and student performance at poverty schools and with lower achieving students. Hanushek and Rivkin (2003) wrote that:

> One of the obvious implications is that principals and superintendents must be held accountable for the impact of their hiring, retention, and other management decisions on student achievement. Of course such structures are not common in education, so we have little to build upon in the actual structuring of such a notion. Moreover, making such active decisions is often difficult and uncomfortable, and the path of least resistance is to grant tenure to virtually all teachers and to refrain from intervening except in extreme cases. (p. 18)

The LEAD Tool provides specific data the LAUSD has developed to identify teachers that may be underperforming based on LEAD Indicator data. The motivation, readiness, and skills of principals and Instructional Directors to act on the data remains the key to achieving a higher percentage of effective teachers at all schools, and especially at high poverty schools. Utilizing the LEAD Tool data to analyze the quality of a given school's teacher workforce requires understanding the LEAD Tool data and implementing thoughtful and professional interventions as the strategic outcome of the analysis. A clear and well-structured set of intervention strategies and sound guidance from Instructional Directors to their respective principals is key to influencing the desired improvement sought from teachers at the school site. For example, the utilization of value-added estimates of teacher effectiveness has been met with

both praise and skepticism in the educational community. The understanding and sensitive use of these data with teachers requires a skillful level of guidance and interaction among the Director and his/her principals.

Principal Readiness to Assure Effective Teachers at Every School

School principals serve a key role in addressing the improvement needs of teachers identified by LEAD Indicators. The readiness, willingness, and effectiveness of these key leaders to significantly change the difficult work of positively affecting the composition of the quality of teachers within a school is a subject only beginning to be addressed in the literature. The online tools that school leaders should have available are significant to enhance their ability to efficiently manage a set of 10-20 schools under their supervision. A data set that contains specific teacher performance data for each school a principal supervises can help to quickly and efficiently focus on specific quality and performance issues that he/she may have to address. Recently, California Superior Court Judge Rolf M. Treu issued a tentative decision in the *Vergara v. State of California* (2014) case, in which he opined:

> There is also no dispute that there are a significant number of grossly ineffective teachers currently active in California classrooms. Dr. Berliner, an expert called by State Defendants, testified that 1-3% of teachers in California are grossly ineffective. Given that the evidence showed roughly 275,000 active teachers in this state, the extrapolated number of grossly ineffective teacher ranges from 2,750 to 8,250. Considering the effect of grossly ineffective teachers on student, as indicated above, it therefore cannot be gainsaid that the number of grossly ineffective teachers has a direct, real, appreciable, and negative impact on a significant number of California students, now and well into the future for as along as said teachers hold their positions. (p. 8)

Milgrom-Elcott (2011) wrote that the lack of well-prepared, high-performing teachers in high-poverty areas is recognized as a root cause of performance and recalcitrant achievement gaps, and reversing these declines is dependent on managing teachers and principals so that every classroom has a high performing teacher. The utilization of data (e.g., the LEAD Tool) to quantify teachers at schools that need specific improvement, delivering intervention strategies, and then measuring the change in teaching faculty quality composition depends highly on the training, skills, readiness, and perceived ability of principals and Instructional Directors. Jackson and Bruegmann (2009) found that the principal is best positioned to attract, improve, and retain the strongest staff. As difficult as the improvement of staff may be, it may be even more challenging and vexing to use data to establish strategies, documentation, and support to exit low performing teachers that will not improve. Milgrom-Elcott found that:

> School systems are notoriously bad at differentiating talent, to the point where, nationwide, less than one percent of teachers are dismissed for incompetence. But no system can improve without some means of exit at the bottom, both to move out low-performers and to make room for new talent. It's a necessary if difficult part of the total picture. (p. 6)

Axelrod, Handfield-Jones, and Michaels (2002) found in their research regarding building great managerial talent in the private sector that most companies fail to deal with low performers (known as C-Performers), as only about 19% of senior managers believe their companies remove low performers quickly and effectively. Donaldson (2009) found that 84% of teachers indicate that making it easier to terminate unmotivated or incompetent teachers would be an effective way to improve teacher quality.

This study examined whether there exists a correlation of LEAD Indicator data with school achievement data/rankings, teacher and principal turnover/retention, and annual change in the LEAD Indicator data set. Studies show that effective principals are more likely to act on ineffective teachers (Portin, 2003) and lose fewer effective teachers (Branch, Hanushek, & Rivkin, 2013) than do ineffective principals. In a recent report by Chait (2010), principals reported that the greatest barriers to the dismissal of poorly performing or incompetent teachers were as follows: the length of time required for the dismissal process (59.5%), effort required for the documentation (64.6%), tenure (71.8%), and teacher unions (61.2%). Chait also reported that:

> A culture of fear pervades schools and prevents principals from taking action against ineffective teachers, according to McGath, who has more than 30 years experience specializing in employee performance issues and legal mandates in the school and workplace. Principals are afraid of having tough conversations with teachers, don't know how to deliver feedback to adults, and are afraid that if they elect to dismiss someone, they will put themselves through public scrutiny. They may worry about a teacher's feelings, or how he or she would find another job. Some principals may worry that other teachers would feel threatened by their decision to dismiss a teacher and that it would harm teacher morale. (p. 13)

Additionally, ineffective principals tend to lose effective teachers (Branch et al., 2013) and high-poverty schools experience a greater impact of losing effective teachers when an ineffective principal leads the school (Beteille, Kalogrides, & Loeb, 2011). The readiness, skills, and abilities of principals and Instructional Directors to lead and achieve this difficult work may also vary among schools throughout the district. This variance in school administrator readiness

or skills to affect the percent of effective teachers, based on a specific data set of teacher effectiveness factors, is only beginning to be examined in the research.

Effective principals are able to improve teachers' effectiveness by improving their instructional abilities (Robinson, Lloyd, & Rowe, 2008). For example, Portin et al. (2009) found that effective leaders nurtured and supported their staff, while also aggressively weeding out individuals who did not show the capacity to grow. Furthermore, Branch et al. (2013) wrote:

> A primary channel through which principals can be expected to improve the quality of education is by raising the quality of teachers, either by improving the instruction provided by existing teachers or through teacher transitions that improve the caliber of the school's workforce. We expect highly rated principals to be more successful both at retaining effective teachers and at moving out less-effective ones. Less highly rated principals may be less successful in raising the quality of their teaching staffs, either because they are less skilled in evaluating teacher quality, place less emphasis on teacher effectiveness in personnel decisions, or are less successful in creating an environment that attracts and retains better teachers. (p. 66)

Under effective principals, teachers tend to be absent less and absences actually decline more as the principal's effectiveness increases (Miller, 2008). These increased days of teacher presence on a school campus correlate positively with improved student achievement, according to Miller et al. (2007).

The principal's ability to discern teachers who may have a significant impact on student achievement from those that may not can be implemented at various junctures, such as during the initial hiring decision, through the process of helping teachers to improve, or when doing the difficult work of exiting those teachers that cannot improve or refuse to do so. However, in order

to significantly impact retention of only the most effective new hires, principals would need to enhance their perceptions and expectations in deciding which teachers are or can be effective. Staiger and Rockoff (2011) provided some insights into this practice and the complexity of this principal and school administrator decision point:

> At a broad level, the principal should set the cut-off score where the productivity of the marginal teacher is expected to be equal to the productivity of the average teacher. In other words, this decision rule tells principals to keep only the rookies who are expected to be better than the average teacher. Imagine if this were not true – that is, suppose the marginal teacher were less productive than the average teacher. Then the school district could raise average performance by raising its standard for new hires by a small amount. Likewise if the marginal teacher accepted under the standard were more productive than the average teacher, then the district could raise average performance by lowering the cut-off score for new hires and adding one more above-average teacher. (p. 11)

The complexity required in assuring that principals retain only those new teachers that would perform as well as the average experienced teacher demands a skill set that would need to be encouraged and developed. Given the variance in teacher quality that exists within schools, the assumption might be made that these principal skills and expectations may not be as present as needed to assure that the highest level of student learning is achieved. The Philadelphia Education Fund study (Useem, 2001) noted that schools that had a low turnover of teachers had principals that implemented strong teacher induction programs to support new teachers, oversaw a safe and orderly school environment, maintained a welcoming and respectful approach toward all, and assured materials and supplies were consistently available in a timely manner.

The quality and persistence of principals may serve as a critical linkage point that determines variance in effectiveness to set expectations, manage the data to provide direction to interventions, and change the percentage of effective teachers on a given school site. Franklin and Pagan (2006) recognized that policies and expectations have an effect on front-line supervisors:

> Of course the supervisor may utilize formal discipline practices because higher management has signaled, through the allocation of resources and time, that it supports formal actions and will sanction those who do not conform. Therefore, we expect written documents to influence supervisor's approaches to employee discipline, especially when upper-level management reinforces these actions (p. 60)

As part of their accountabilities, principals are required to guide and support teachers to become stronger in their performance and more effective in their instructional skills. In various studies, Ban (1995) indicated that due to the lack of adequate training received, many supervisors have to learn to manage informally on the job and that they never develop a firm grasp of the complexities of personnel management systems. Robisch (1996) contended that inadequately trained supervisors have considerable more difficulty and problems in dealing with poor performers than well-trained supervisors. A school's direction regarding the expectations surrounding managing ineffective teachers who are not demonstrating behaviors that are correlated with improved student achievement, whether formal or informal, is a key factor in the development of LEAD Tool data that can serve to inform the degree of improvement in teacher quality levels at schools. Franklin and Pagan (2006) wrote that a tangible aspect of organizational culture that may influence disciplinary practices is the organization's commitment to training supervisors on formal discipline practices and policies. Belief that the organization

supports the work of supervisors that are managing teachers with LEAD Indicators can be an outgrowth of utilizing the LEAD Tool in general to guide strategy and collaborative work of administrators at various levels of LAUSD school leadership. A product of this collaborative work utilizing the LEAD Tool may generate positive changes in teacher quality at schools. Franklin and Pagan also indicated that:

> From this, we can conclude that when considering the relationship between the supervisor and organization management, if there is a sense of support, it is more likely that supervisors will pursue formal disciplinary actions. If supervisors fear their decisions will not be supported and will perhaps be overruled, the use of informal strategies is more likely. (p. 62)

Axelrod et al. (2002) wrote that even the most explicit action plans will fail if managers are not compelled to carry them out, and that senior leaders should hold their managers accountable to carry out actions to improve or remove low performers. As part of their support to principals, LAUSD school leaders may need to encourage them to pursue this work vigorously and to provide honest feedback to teachers so they can improve. Moreover, their feedback should result in accurate and strategic documentation that can be utilized in cases where a teacher refuses to grow and improve. Principals must be able to communicate in confidence with teachers regarding their low performance or demonstrated behaviors that have a negative impact on student achievement. Painter (2001) indicated that principals are afraid of having difficult conversations with teachers and have trouble providing feedback to adults. Because teachers are entitled to feedback on their performance and need to receive opportunities to improve under collective bargaining agreements and under dismissal procedures governed by the California

Education Code, the persistence of a principal's efforts to ensure these dialogues are occurring within the improvement process is critical. Chait (2010) wrote:

> Tenured teachers also have a legal right to this notification and sometimes remediation as well. It is possible that there are teachers who are chronically ineffective because they weren't given effective training or models of effective instructional practices early in their career. (p. 17)

Although most research reviewed tends to utilize value-added estimates of effectiveness as a proxy for measuring effectiveness, the LEAD Tool utilizes additional factors to identify teachers that need confirmation, support, and improvement, or potential exiting if they do not improve to the desired level. These factors rely on principal ability to distinguish between levels of teacher performance quality to identify the teacher population that is in need of improvement. Jacob and Lefgren (2007) established that principals are good at identifying teachers that produce the largest and smallest standardized achievement gains in their schools, but struggle to distinguish among teachers in the middle of this distribution (60-80% of teachers). Their studies established that principals are able to gauge the performance of some teachers more effectively than others and conversely that some principals may be more effective than others in evaluating teacher effectiveness. Jacob and Lefgren also found that principal ratings were also a significant predictor of future student achievement, but they were not as accurate as empirical measures of teacher effectiveness. A study conducted by the National Council on Teacher Quality (NCTQ, 2012) in 2011 focusing on LAUSD schools found that 34% of principals did not try to dismiss a poor performing teacher because the process was unlikely to result in a dismissal, and 68% of teachers indicated that there were tenured teachers at their school who should be dismissed for poor performance.

Through the LEAD Tool data, measurement of the degree of success becomes more clear and apparent, and where the percentage of effective teachers does not climb higher, questions may be asked about the relative skills and abilities of the administrators in charge of assuring change. The district will benefit from a better understanding of the correlation of LEAD Tool data with academic performance in order to continually require school leaders and principals to engage in this difficult but necessary work on behalf of LAUSD students.

Summary

The literature review focused on various teacher, principal, and school quality variables that are contained within the LEAD Tool data. The literature also provided a degree of insight into whether these variables are associated with effecting changes that are pinpointed by the LEAD Tool data and can determine school growth and achievement. The role of principals is critical in carrying out this work, and their staying-power at a school site may have a significant effect on the continuity of holding teachers with LEAD Indicators accountable to improve. As Warren Bennis (1993) noted, leaders should stay nimble and prepared for what has not yet been imagined; this insight is highly appropriate to the work of utilizing data to inform efforts to influence school academic growth and achievement. The LEAD Tool can help guide and lead a school district to improve teacher, principal, and school performance, and this work requires both imagination and tremendous effort. This study attempted to identify if a correlation exists between school API growth percent and the LEAD Tool data variables.

Chapter Three: Methodology

Research Design

This chapter describes the research methodology utilized in this study. The researcher conducted a quantitative statistical analysis to determine if a correlation existed between school growth as measured by the percent of API growth points (dependent variable), and the LEAD Tool LEAD Tool data variables (independent variables), which reflect teacher, principal, and school quality and performance variables. The researcher conducted a series of Pearson product-moment correlations (PPMCs) to examine the relationships under investigation in this study (Popham & Sirotnik, 1992). The analysis also checked for any statistically significant relationships between variables by utilizing a two-tailed test for significance. This methodology sought to identify and understand the data's ability to estimate or predict the potential corresponding value of LEAD Tool data variables with school growth variables. A quantitative correlation design was deemed an effective method for this research study as it maintains a more clinical approach and perspective when exploring LEAD Tool data, which may result in the identification of significant relationships within what may be considered highly-charged variables in the field of education (Creswell, 2009). Utilizing this secondary LEAD Tool data is advantageous as it represents secondary, after the fact, but real data from a large urban educational school setting. By utilizing using actual school data, the analysis can provide insights and describe how teacher, principal, and school quality and performance variables may influence or effect student learning gains. Thus, examining the results of the analysis from this experimental design LEAD Tool secondary data set, which does not exist in this form in other school districts, may provide insights into school district staffing practices. To some extent, the findings may potentially shed some light on how the distribution of resources in an unequal

manner amongst schools may influence school academic growth and achievement gains. The study thus sought to test the correlations of various dependent and independent variables contained in the LEAD Tool data from one school year to the next as a means to determine if results remain consistent between school years.

Chapter Three consists of a restatement of the problem and the purpose of the study. This chapter also contains a description of the data sources and data collection and procedures. The chapter includes a description of the dependent and independent data sets that were analyzed in this study, as well as human subject considerations.

Restatement of the Research Questions

Assuring every student is taught by an effective teacher is a daunting task for any school district. LAUSD has developed an experimental design tool called the LEAD Tool, which measures the percentage of teachers at schools who cannot be considered effective teachers based on the data contained in the LEAD Tool. The LEAD Tool data set was designed to bring together teacher, principal, and school quality and performance data variables available from LAUSD data systems. These variables represent data where the research indicates a potential negative correlation with school and student academic growth. The LEAD Tool contains variables, referred to as LEAD Indicators, to categorize related teacher, principal, and school quality and performance variables for each school site as follows:

- Teachers who have received and overall *Below Standard* rating on their final performance evaluation; and if not, then,
- Teachers who have received an overall *Meets Standard* rating on their final performance evaluation and have two or more sub areas marked as *Needs Improvement*; and if not then,

- Teachers who have received an overall rating of *Far Below Standard* or *Below Standard* on their AGT data results (LAUSD's version of Value-Add Teacher effects estimates); and if not, then,
- Teachers who have had 13 or more absences (not protected under the Family and Medical Leave Act [FMLA]) in the previous school year; and if not, then,
- Teachers who do not have an official evaluation on file with the district (within the last 5 school years).

Teachers whose information is contained in the LEAD Tool data may have one or several of the LEAD Indicators listed above in their records/data. A teacher may have an overall final evaluation of *Below Standard* and also have 13 or more absences, as well as AGT data that reflect *Far Below* rating on student learning effects. A teacher may also be reflected in the LEAD Tool data based on having 13 or more absences in the previous school year. However, if a teacher has one or has more than one LEAD Indicators, he/she is represented only once in the overall percentage of teachers identified by the tool at their specific school. The research in Chapter Two established how each of these LEAD Indicators may correlate with student achievement and learning gains. The LEAD Tool then provides each school with a percent of teachers at their school who have the above LEAD Indicators. The percent of teachers at each school, or the concentration of teachers with LEAD Indicators at each school is represented by a percentage. The CTLI indicates the percentage of all teachers at the school that have LEAD Indicators. The LEAD Tool data set utilized for this research study contains data variables that catalogue school and employee quality and performance characteristics and data for each school site as follows:

- API Decile Rank

- 1-year API growth percent
- 3-year API growth percent
- Most recent 1-year API growth points gained by the school.
- Most recent 3-year API growth points gained by the school.
- The average years of principal duration at the school (as measured within the last eight years).
- The current principal's years of principal experience in LAUSD.
- 1-year teacher turnover percent
- 3-year teacher turnover percent
- Percentage of teachers evaluated at the school in the previous school year
- Concentration of teachers with LEAD indicators (CTLI)

The district wants to use the LEAD Tool to understand which schools have a high or low CTLI. The district can utilize the LEAD Tool to monitor the year-to-year overall change at each school to determine if sufficient progress is being made so every school is staffed with nearly 100% effective teachers.

The LEAD Indicators create a lens to gauge the degree of effective teachers at each school across the LAUSD. Understanding the effect that a varying degree of CTLI on schools may have can encourage school leaders to embark upon a more collaborative effort to measure, understand, and diagnose if the school's CTLI is changing toward the positive and the potential relative benefit that may occur. The goal of this study was to perform a thorough and carefully constructed analysis to demonstrate if a potential benefit may occur following a change in CTLI levels at schools.

This study examined the correlation of school growth (dependent) variables (1-year and 3-year API growth percent) with various teacher, principal, and school quality and performance data (independent variables). The study provided insight into whether a school's 1-year or 3-year API growth percent correlates with a school's teacher turnover/retention, principal turnover/retention, principal's experience level, or CTLI. The study also explored if a school's growth variables correlate with a school's overall API ranking, or with the degree of teacher evaluations completed at each school in a given year. The analysis helped to understand if current efforts to increase the percent of effective teachers at each school ultimately contribute toward having an effective teacher in every classroom.

The purpose of this study was to analyze whether the LEAD Tool contains data variables that may influence a school's overall degree of academic growth and student achievement. The results of the study may be useful to help guide the work of school leaders to quantitatively measure data and progress toward having schools staffed with only effective teachers.

This improvement work is critical for LAUSD to achieve having an effective teacher in every classroom. The researcher in this work also serves as the Chief Human Resources Officer for LAUSD, a position that is perceived to be influential in district-wide personnel matters. The researcher utilized a secondary data source that is available to school leaders as part of their regular work responsibilities. The LEAD Tool data are available online through the district's Human Capital Data Warehouse, known as MyTeam. The researcher conducted a statistical analysis of the data to gain insights into the following research questions:

1. Does a school's 1-year or 3-year API growth percent correlate with its API ranking?
2. Does a school's 1-year or 3-year API growth percent correlate with teacher turnover data?

3. Does a school's 1-year or 3-year API growth percent correlate with principal turnover data?
4. Does a school's 1-year or 3-year API growth percent correlate with its principal's years of experience?
5. Does a school's 1-year or 3-year API growth percent correlate with its annual teacher evaluation completion rates?
6. Does a school's 1-year or 3-year API growth percent correlate with its Concentration of Teachers with LEAD Indicators (CTLI)?

Restatement of Purpose

As the district seeks to meet the specific goal outlined in the LAUSD Superintendent's *All Youth Achieving Strategic Plan* and achieve the goal of having an effective teacher in every classroom, measuring the progress toward this goal becomes the critical primary function of the LEAD Tool. The LEAD Tool is a data set of teacher quality and performance variables, collectively identified as *A Leader's Evaluation and Analysis Development* (LEAD) Tool, to measure progress toward staffing every classroom with an effective teacher. Understanding how the LEAD Tool variables can serve as a focal point to set achievable goals and drive collaborative work across the LAUSD depends on the correlation with school achievement data. A key goal of this study was to validate whether LEAD Tool data variables correlate with school growth variables and may predict a school's relative opportunity to succeed.

Data Sources

For this study, the researcher utilized a secondary data set available to Human Resources professionals and LAUSD and school leaders. The Human Resources (HR) Division utilizes the LEAD Tool data during the year as a regular part of their work and the data can exist on various

HR employee computers as well being available to Local District Superintendents, Directors, and school principals. The LEAD Tool data currently serves to inform principals and Local District leaders to identify classroom teachers who are required to be in the evaluation cycle during that specific school year as identified in the LEAD Tool.

The LEAD Tool data contain actual employee names as well as school names. In order to preserve employee and school anonymity and in consideration of human subjects, the researcher utilized a de-identified LEAD Tool data set that did not allow the resulting analysis and results to be associated to a specific employee nor to a specific school. The researcher therefore requested a de-identified set of data from existing secondary LEAD Tool sets.

Data Analysis

This study utilized a quantitative statistical analysis to gain insights into the variance and relationship among school growth and LEAD Tool data variables to determine the empirical relationship among them. Understanding how these variables may influence each other within the LEAD Tool construct is of viable interest to the future use of the LEAD Tool. This analysis may help us to better understand if having a higher concentration of teachers at a school site with performance evaluations that denote a need for significant improvement can help predict a school's overall growth in its API growth percent. Examining the descriptive analysis and relationship that may exist among the various LEAD Tool independent and dependent variables may add value to the school district decision-making process and goal of having all classrooms staffed with effective teachers. The researcher utilized the GNU PSPP, a statistical program to conduct the analysis, and as an alternative to the Statistical Package for Social Sciences (SPSS) quantitative analysis software tool.

The LEAD Tool contains data for approximately 900 schools (elementary, middle, senior high, options schools, etc.), and this study utilized a data subset consisting of elementary schools only. This elementary school subset data consists of approximately 450 elementary schools and will contribute to a more stable analysis of the variable dynamics. For example, at the elementary school level, controlling between schools where students must change classrooms every period, six periods per day, may have an impact on the various independent variable outcomes. Comparing these independent variables among elementary schools only eliminates the potential influence of these conditions at middle and senior high schools. At the elementary school level, teachers are a constant in the classrooms for students all year long, whereas at the middle and high school level students see multiple teachers in a given day, and therefore student and teacher retention patterns may vary to some extent based on school level and other independent variable differences. Table 4 displays the LEAD Indicator Independent variables and dependent variables.

Table 4

LEAD Tool: LEAD Indicators, Independent and Dependent Variables

Independent Variables	Dependent Variables
1. CTLI Percentage	1. ESC Geographic Location
2. BSE	2. 1-year API growth points gained
3. Meets and NI	3. 3-year API growth points gained
4. Student Growth Over Time (AGT)	4. Average years of principal duration
5. Final Evaluation in Last 5 years	5. Current principal years' of principal experience
6. 13+ Days Absent	6. 3-year average teacher turnover at the school
	7. Percentage of teachers evaluated

Creswell (1994) wrote that the intent of quantitative methodology is to develop generalizations that that may enable better prediction, explanation, and understanding of some phenomenon. Understanding the kinds of relationships that may exist among the LEAD Tool data variables is key to determining if the tool should remain a focus of LAUSD goals in the future. As part of the examination of the variables, several correlation charts were constructed to

display and begin to explore the kinds of relationships that may exist among the predictor (independent) variable represented by CTLI, which is the percentage of teachers at a given school, and the several dependent variables reflected in Table 4. Once these correlation charts were constructed, the variable statistical strength of correlation were measured utilizing PPMC.

Institutional Review Board and Human Subjects Consideration

This research did not involve interactions with human subjects and met the federal requirements for research considered to be exempt. The LEAD Tool secondary data set that was utilized for the PPMC statistical analysis was de-identified and will not be able to be identifiable for any specific school or with any specific employee(s).

The de-identified LEAD Tool data set for the 2012-13 and the 2013-14 school years only included data sets for approximately 457 LAUSD elementary schools. Although schools were categorized by their LAUSD school district geographical locations (North, East, South, West, and Intensive Support Service Center), the samples were large enough to not allow identification at the individual school level. The research design plan called for a multivariate correlation of independent variables and independent variables contained within the LEAD Tool data for the 2012-13 and the 2013-14 school years. The dependent variables and independent variables that were analyzed will not be readily identifiable to any human subjects.

The data analysis was conducted in December 2015 through February 2016 under the direction of the researcher's doctoral chair, Dr. Jack McManus, as he is an expert in statistical analysis. The correlation analysis provided evidence as to the relative strength of the relationship among school API growth percent and LEAD Tool data variables. This research proposal was submitted and approved as exempt status by the Pepperdine University Institutional Review Board (IRB; See Appendix A).

Summary

Chapter Three described the research design and methodology utilized in this study. The purpose of this quantitative correlation study was to explore the relationship that may exist among variables represented in an experimental design tool, a data set of school characteristics and teacher quality and performance variables, collectively identified as *A Leader's Evaluation and Analysis Development* (LEAD) Tool.

The study utilized LEAD Tool secondary data for the 2012-13 and the 2013-14 school years. The analysis of the data measured the relationship between variables contained within this de-identified secondary data set. The research study included only elementary schools and excluded other school levels such as middle schools and senior high schools in order to control for factors that may influence school or employee performance.

Chapter Four: Results

LAUSD has developed a data set of school, teacher, and principal performance variables, collectively identified as *A Leader's Evaluation and Analysis Development* (LEAD) Tool. The LEAD Tool helps to measure progress toward staffing every classroom with an effective teacher. The LEAD Tool, created by the LAUSD's HR Division, attempts to identify teachers who cannot be deemed *effective* and are in need of development and improvement.

This chapter provides the analysis and discussion of the findings from the quantitative data study conducted to determine if a school's 1-year or 3-year API growth percentage correlates with school, teacher, or principal quality and performance variables as measured by the LEAD Tool. The study examined how these variables may influence a school's success, as measured by the percent of growth on API results. The research questions, a description of the data process, and data sets are reviewed prior to the presentation of the findings.

Restatement of the Research Questions

The key guiding question for this study was: Does a school's API growth correlate with school, teacher, or principal quality and performance data? The study specifically attempted to answer the following research sub questions:

1. Does a school's 1-year or 3-year API growth percent correlate with its API ranking?
2. Does a school's 1-year or 3-year API growth percent correlate with teacher turnover?
3. Does a school's 1-year or 3-year API growth percent correlate with principal turnover?
4. Does a school's 1-year or 3-year API growth percent correlate with its principal's years of experience?

5. Does a school's 1-year or 3-year API growth percent correlate with its annual teacher evaluation completion rates?
6. Does a school's 1-year or 3-year API growth percent correlate with its Concentration of Teachers with LEAD Indicators (CTLI)?

Description of the Data Analysis Process

The researcher reviewed the 2012-13 and 2013-14 LEAD Tool de-identified data sets for accuracy, frequency, and to generate descriptive statistics for the data variables. The subsequent analysis utilized the PPMC analysis to determine relationships among the data. This quantitative design provided a statistical perspective by which to examine and determine whether the LEAD Tool data relationships exist among school growth and various school, teacher, or principal quality and performance data variables. Utilization of this de-identified LEAD Tool set, a secondary data source from a large urban educational school system, may provide descriptive insights as to whether school, teacher, and principal performance variables influence or impact school growth.

To preserve employee and school anonymity and in consideration of human subjects protection guidelines, the researcher utilized a de-identified LEAD Tool data set that captured data for elementary schools for the 2012-13 (as of September of 2012) and the 2013-14 (as of September 2013). This data set allowed the data analysis results to be conducted without any subsequent data attribution to a specific employee or specific school. Table 5 displays the LEAD Indicator dependent variable and independent variables set utilized for this study. The research in Chapter Two established how each of the LEAD Indicators correlated, negatively or positively, with student achievement and school growth in learning.

Table 5

LEAD Tool: LEAD Indicators, Dependent and Independent Variables Utilized in the Study

Dependent Variables	Independent Variables
1. 1-Year API Growth Percent	1. API Index Ranking
2. 3-Year API Growth Percent	2. Average years of principal duration (last 8 years)
	3. Current principal's years of principal experience
	4. 1-year teacher turnover percentage
	5. 3-year average teacher turnover percentage
	6. Percent of teachers evaluations completed
	7. CTLI Percentage composed of:
	a. BSE
	b. Meets and NI
	c. Student Growth Over Time (AGT)
	d. 13+ Days Absent
	e. No Final Evaluation in Last 5 years

The CTLI, identified as item 7 in Table 5, merits additional clarification and further description, as the other variables are more readily discernible. The CTLI is composed of an unduplicated count of teachers at each school who received a Below Standard Evaluation (BSE); and then, any teacher who received a *Meets Standard* final rating on their evaluation, but had two or more evaluation subareas marked as needing to improve; and then, any teacher identified in the lowest two quintiles of effect on AGT (SGOT or AGT are utilized interchangeably), which is the district's value-added test data analysis that was utilized for this purpose in prior years; and then, any teachers who were absent 13 or more days non-protected (protected absences would include FMLA, Workers compensation, etc.) absences in the previous school year; and then, any teachers who were not evaluated in the last 5 years The LEAD Tool CTLI reflects the unduplicated count of teachers captured under this process and displays this on the LEAD Tool under the *Teachers with LI* column. The CTLI is derived by the percent of teachers at the school identified as not being effective.

There were 11,929 elementary teachers reflected in the 2012-13 school year, with 2,914 (24.4%) categorized as TLIs. The 2013-14 LEAD Tool data set reflects a total of 11,711 elementary teachers, with 2,822 (24.1%) categorized as TLIs. Although there are fluctuations in all LEAD Indicator values from year-to-year, the overall number of elementary school teachers identified in these two data sets indicates an overall decrease of 218 teachers from the 2012-13 to 2013-14 school year and a slight decrease in the number of TLIs. The CTLI percentage between the 2012-13 and the 2013-14 school years shows a slight decrease from 24.4% to 24.1%, respectively. Table 6 provides a comparison of CTLI data for the 2012-13 and 2013-14 school years for ease of comparison.

Table 6

LEAD Tool: CTLI, CTLI Data Composition for 2012-13 and 2013-14 School Years

School Year	Current Teachers (1)	BSE (2)	NI (3)	SGOT AGT (4)	No Evaluation (5)	13+ Absences (6)	Teachers with LI (7)	CTLI (8)
2012-13	11,711	111	281	1,515	331	584	2,822	24.4%
2013-14	11,929	100	233	1,395	460	726	2,914	24.1%

Data Accuracy and Consistency

The analysis of the LEAD Tool first required a review of data consistency for both the 2012-13 and the 2013-14 LEAD Tool de-identified data sets. The larger sample size utilized in this study, 437 schools in the 2012-13 LEAD Tool data set and the same 437 schools in the 2013-14 data, may help provide a stronger basis to examine the results of the PPMCs and whether there was a statistically significant correlation between any of the LEAD Tool variables. Whether increases or decreases in one variable can relate to increases or decreases in another variable can be of assistance to administrators utilizing the LEAD Tool data as they decide on where to focus their improvement efforts.

The review aimed to identify those schools in the 2012-13 and the 2013-14 LEAD Tool sets with complete data variables to be included in the analysis. As an example, various schools were newly established, so the data set for these schools did not yet contain growth or performance variables that would reflect data represented over time for longer established schools, such as 3-year API growth scores, 3-year teacher turnover, API decile rank, or principal duration data. Removing schools from the analysis that were missing these data elements provided a data set of schools with a longer track record of existence that would allow for a more representative and consistent analysis.

The schools removed from each of the two respective de-identified LEAD Tool data sets are listed in Table 7 (identified by Location Number) and are listed in more detail in Appendices B and C, respectively. The 2012-13 LEAD Tool data set contained 473 de-identified elementary schools in the overall data set. As a result of the data consistency review, 36 schools were removed (See Appendix B) for purposes of this study analysis, leaving 437 schools to be included in the analysis. The 2013-14 LEAD Tool data set contained 475 de-identified elementary schools in the overall data set. As a result of the data consistency review, a total of 38 schools were removed (See Appendix C) for this study analysis, leaving 437 schools to be included in the analysis (See Table 7).

Table 7

LEAD Tool: Schools Excluded from Study Analysis

2012-13 LEAD Tool Schools Removed from Data Set (Appendix B)	2013-14 LEAD Tool Schools Removed from Data Set (Appendix C)
	8
17	17
36	36
58	58
92	92
	93

(continued)

2012-13 LEAD Tool Schools Removed from Data Set (Appendix B)	2013-14 LEAD Tool Schools Removed from Data Set (Appendix C)
103	103
125	125
212	212
231	231
241	241
319	319
320	320
323	323
330	330
346	346
347	347
369	369
372	372
398	398
425	425
430	430
492	492
503	503
567	567
613	613
614	614
641	641
642	642
650	650
709	709
712	712
739	739
796	796
807	807
808	808
809	809
828	828
Total: 36	Total: 38

Data Frequency and Descriptive Statistics

The descriptive statistics for the 2012-13 LEAD Tool variables are provided in Table 8, and the 2013-14 LEAD Tool variables are presented in Table 9. The variable ranges were reviewed to check for any outlying data and within reasonable expectations for the data sets. The means, ranges, minimum, and maximums were all within assumptions for each LEAD Tool data variable potential highs and lows. The minimum and maximums for some of the variables highlight some of the potential points of interest to the research. Some schools reflect having

principals with few to no years of principal experience and some with up to 33 years of experience. The minimum and maximum percent of growth on API growth for schools ranged from -10% growth in 3 years to a maximum of 23% of growth in 3 years overall. The analysis of a school's data may inform which variables may correlate with negative or positive changes.

Table 8

LEAD Tool: 2012-13, Descriptive Statistics

Variable	N	Mean	S.E. Mean	Std. Dev.	Variance	Range	Minimum	Maximum	Sum
1-Year API Growth %	437	2.16	.15	3.16	9.98	27.20	-7.70	19.50	945.80
3-Year API Growth %	437	4.98	.21	4.42	19.53	26.30	-5.60	20.70	2175.90
API Rank	437	4.80	.13	2.67	7.11	9.00	1.00	10.00	2099.00
Principal Duration	437	3.67	.09	1.90	3.60	8.00	.00	8.00	1602.19
Principal Years of Experience	437	9.47	.26	5.48	29.99	30.50	.00	33.70	4139.40
1-Year Teacher Turnover	437	15.02	.43	8.92	79.56	61.00	.00	61.00	6565.00
3-Year Teacher Turnover	437	30.32	.52	10.90	118.74	68.00	5.00	73.00	13249.00
% Evals Prior Year	437	40.41	.95	19.90	395.93	100.00	.00	100.00	17661.00
CTLI	437	23.98	.55	11.54	133.11	74.00	.00	74.00	10478.00

Note. Valid cases = 1,724, cases with missing value(s) = 1,287.

Table 9

LEAD Tool: 2013-14 LEAD Indicators, Descriptive Statistics

Variable	N	Mean	S.E. Mean	Std. Dev.	Variance	Range	Minimum	Maximum	Sum
1-Year API Growth %	437	1.26	.13	2.61	6.83	17.70	-8.30	9.40	551.70
3-Year API Growth %	437	4.74	.22	4.67	21.82	34.10	-10.90	23.20	2071.00
API Rank	437	4.95	.13	2.68	7.18	9.00	1.00	10.00	2165.00
Principal Duration	437	3.59	.09	1.91	3.65	7.00	1.00	8.00	1567.29
Principal Years of Experience	437	6.65	.25	5.19	26.94	31.90	.00	31.90	2906.80
1-Year Teacher Turnover	437	9.32	.43	8.97	80.49	94.00	.00	94.00	4074.00
3-Year Teacher Turnover	437	27.55	.59	12.27	150.57	94.00	.00	94.00	12039.00
% Evals Prior Year	437	38.78	.90	18.90	357.39	100.00	.00	100.00	16945.00
CTLI	437	24.16	.56	11.71	137.13	70.00	.00	70.00	10558.00

Note. Valid cases = 1724, cases with missing value(s) = 1287.

Table 10 summarizes the mean difference between the variables in the analysis data sets. Overall, comparing the 2012-13 with the 2013-14 means, the overall mean for the percent of API growth has decreased. The principal experience level declined by almost 3 years' difference from 2013-13 to 2013-14, although the time a principal stays at a school site remained relatively consistent. Of note, the percent of teacher turnover reflected a reduced rate in the 2013-14 school

year over the previous 2012-13 school year. The LAUSD conducted a reduction in force in the Spring of 2012, which may have affected the 2012-13 data.

Table 10

LEAD Tool: 2012-13 and 2013-14 Summary Difference in Mean for 437 Cases

Variables	2012-13 Mean	2013-14 Mean	Difference
API Rank Decile	4.80	4.95	.15
1-Year API Growth %	2.16	1.26	-.9
3-Year API Growth %	4.98	4.74	-.24
Principal Duration	3.67	3.59	-.08
Principal Years Experience	9.47	6.65	-2.82
Percent 1-Year Teacher Turnover	15.02	9.32	-5.7
Percent 3-Year Teacher Turnover	30.32	27.55	-2.77
Percent Evaluations Completed Prior Year	40.41	38.78	-1.63
CTLI	23.98	24.16	.18

The elementary schools in the LEAD Tool data showed a positive change in API rank deciles, from a mean ranking of 4.80 in 2012-13 as compared to 4.95 reflected in the 2013-14 data. More schools were advancing overall in their API rank than decreasing in rank. The CTLI mean increased from 23.98 in 2012-13 to 24.16 in 2013-14 data. Overall, the percentage of CTLIs at schools increased .18% from 2012-13 to 2013-14. 1-year and 3-year API growth both showed declines of -6.53 and -1.38, respectively, whereas both the 1-year and 3-year teacher turnover data improved from 2012-13 to the 2013-14 LEAD Tool data by 5.7% and 2.77% respectively. The mean principal duration decreased by .08 and the mean principal years of experience decreased from 2012-13 to 2013-14 data by -2.82 years (See Table 10).

Data Summary and Analysis

This quantitative data study conducted with the Pearson product-moment analysis, utilizing the 2012-13 and 2013-14 LEAD Tool data sets, attempted to identify if any meaningful relationships exist that could help answer each research sub questions. As a result of the analysis findings, the discussion will be presented in a narrative format. The findings for each question

will highlight correlations that the findings may have identified in regards to each research sub question.

Answers to the Research Questions

The LEAD Tool provides an opportunity to view and compare school, teacher, and principal quality and performance data. Understanding whether these school, teacher, or principal quality and performance are related is of significance to this study. The central question that guided this research was, Does a school's growth, as measured by API growth percent, correlate with school, teacher, or principal quality and performance variables?

This study sought to provide insight on whether some of these data points correlate significantly with the 1-year API growth percent or the 3-year API growth percent. The findings and results of the correlation analysis are explored through the research questions, Pearson's r, and the subsequent review of any statistically significant correlations between the LEAD Tool variables. The PPMC statistical analyses are displayed subsequently in Table 11 and Table 12 for the 2012-13 and 2013-14 data sets, respectively. The findings from the data analysis for each research sub question are provided in the following sections.

Table 11

LEAD Tool: 2012-13, Pearson Correlation with Sig. (Two-tailed)

		1 Yr. API Growth %	3 Yr. API Growth %	API Rank	Principal Duration	Principal Experience	TT1	TT3	% Evals. Prior Yr.	CTLI
1 Yr. API	Pearson Corr	1.00	.61	.02	.02	-.02	.06	.13	.03	-.06
Growth %	Sig. (2-tailed)		.00	.73	.67	.61	.21	.00	.54	.25
	N	437	437	437	437	437	437	437	437	437
3 Y API	Pearson Corr	.61	1.00	-.04	-.01	-.08	.06	.06	.00	-.13
Growth %	Sig. (2-tailed)	.00		.40	.91	.10	.19	.18	.97	.01
	N	437	437	437	437	437	437	437	437	437
API Rank	Pearson Corr	.02	-.04	1.00	.10	-.12	-.29	-.25	-.06	-.23
Decile	Sig. (2-tailed)	.73	.40		.04	.01	.00	.00	.23	.00
	N	437	437	437	437	437	437	437	437	437
Principal	Pearson Corr	.02	-.01	.10	1.00	.34	-.04	.06	-.09	.00
Duration	Sig. (2-tailed)	.67	.91	.04		.00	.36	.21	.05	.00
	N	437	437	437	437	437	437	437	437	437

(continued)

		1 Yr. API Growth %	3 Yr. API Growth %	API Rank	Principal Duration	Principal Experience	TT1	TT3	% Evals. Prior Yr.	CTLI
Principal	Pearson Corr	-.02	-.08	-.12	.34	1.00	.05	.00	-.01	.05
Experience	Sig. (2-tailed)	.61	.10	.01	.00		.26	.92	.79	.30
	N	437	437	437	437	437	437	437	437	437
1-Year	Pearson Corr	.06	.06	-.29	-.04	.05	1.00	.26	-.07	.11
Teacher	Sig. (2-tailed)	.21	.19	.00	.36	.26		.00	.16	.02
Turnover %	N	437	437	437	437	437	437	437	437	437
3-Year	Pearson Corr	.13	.06	-.25	.06	.00	.26	1.00	.03	.22
Teacher	Sig. (2-tailed)	.00	.18	.00	.21	.92	.00		.47	.00
Turnover %	N	437	437	437	437	437	437	437	437	437
% Evals	Pearson Corr	.03	.00	-.06	-.09	-.01	-.07	.03	1.00	-.15
Prior Year	Sig. (2-tailed)	.54	.97	.23	.05	.79	.16	.47		.00
	N	437	437	437	437	437	437	437	437	437
CTLI %	Pearson Corr	-.06	-.13	-.23	.00	.05	.11	.22	-.15	1.00
	Sig. (2-tailed)	.25	.01	.00	.99	.30	.02	.00	.00	
	N	437	437	437	437	437	437	437	437	437

Note. Valid cases = 1,724, cases with missing value(s) = 1,287.

Table 12

LEAD Tool: 2013-14, Pearson Correlation with Sig. (Two-tailed)

		1 Yr. API Growth %	3 Yr. API Growth %	API Rank	Principal Duration	Principal Experience	TT1	TT3	% Evals. Prior Yr.	CTLI
1 Yr. API	Pearson Corr	1.00	.47	.12	-.11	-.09	.02	.01	.03	.02
Growth %	Sig. (2-tailed)		.00	.02	.02	.07	.75	.80	.51	.63
	N	437	437	437	437	437	437	437	437	437
3 Y API	Pearson Corr	.47	1.00	.00	-.05	-.03	.04	.03	.04	.03
Growth %	Sig. (2-tailed)	.00		.93	.31	.51	.36	.50	.43	.53
	N	437	437	437	437	437	437	437	437	437
API Rank	Pearson Corr	.12	.00	1.00	.07	-.10	-.19	-.29	.07	-.13
Decile	Sig. (2-tailed)	.02	.93		.12	.03	.00	.00	.13	.01
	N	437	437	437	437	437	437	437	437	437
Principal	Pearson Corr	-.11	-.05	.07	1.00	.43	-.04	-.05	.07	.05
Duration	Sig. (2-tailed)	.02	.31	.12		.00	.38	.32	.15	.33
	N	437	437	437	437	437	437	437	437	437
Principal	Pearson Corr	-.09	-.03	-.10	.43	1.00	-.11	-.06	-.01	.17
Experience	Sig. (2-tailed)	.07	.51	.03	.00		.02	.22	.78	.00
	N	437	437	437	437	437	437	437	437	437
1-Year	Pearson Corr	.02	-.04	-.19	-.04	-.11	1.00	.66	.01	-.04
Teacher	Sig. (2-tailed)	.75	.36	.00	.38	.02		.00	.79	.35
Turnover %	N	437	437	437	437	437	437	437	437	437
3-Year	Pearson Corr	.01	.03	-.29	-.05	-.06	.66	1.00	.05	.02
Teacher	Sig. (2-tailed)	.80	.50	.00	.32	.22	.00		.32	.70
Turnover %	N	437	437	437	437	437	437	437	437	437
% Evals	Pearson Corr	.03	.04	.07	.07	-.01	.01	.05	1.00	-.25
Prior Year	Sig. (2-tailed)	.51	.43	.13	.15	.78	.79	.32		.00
	N	437	437	437	437	437	437	437	437	437
CTLI %	Pearson Corr	.02	.03	-.13	.05	.17	-.04	.02	-.25	1.00
	Sig. (2-tailed)	.63	.53	.01	.33	.00	.35	.70	.00	
	N	437	437	437	437	437	437	437	437	437

Note. Valid cases = 1,724, cases with missing value(s) = 1,287.

Research sub question 1. Does a school's 1-year or 3-year API growth percent correlate with their API rank?

API rank and 2012-13 LEAD Tool data. This section summarizes the data analysis results for 2012-13 LEAD Tool data set. The PPMC analysis gauged the strength of the relationship between a school's 1-year and 3-year API growth percent and a school's overall API decile rank among the 437 schools included in each set of data.

In the 2012-13 data set, the statistical analysis identified a very weak positive correlation (Evans, 1996) between 1-year API growth percent and API decile rank (r = .02), and very weak negative correlation between the 3-year API growth percent and API decile rank (r = -.04).

API rank and 2013-14 LEAD Tool data. The 2013-14 data set of 437 schools' analysis showed a very weak positive relationship between the 1-year API growth percent and the API decile rank (r = .12) of schools. The analysis of 3-year API growth percent and the API decile rank demonstrated no correlation (r = .00) between these variables.

The Sig. (two-tailed) values found a statistically significant relationship between the 1-year API growth and a school's API Ranking at the .02 level. The direction of the relationship is positive, indicating that 1-year API growth percent and the school's API ranking are positively correlated. The results of this statistical analysis indicate that these two variables tend to increase together.

The API rank looks at variables beyond a school's test score results to determine the overall rank among other schools. Variables such as socio-economic factors and other school related data student characteristics influence the school's ultimate API decile rank (API 1-10). The growth of each school within each decile rank would likely show similar patterns of growth

or decline, but nonetheless, these variables would seemingly increase or decrease together, as the analysis confirmed.

Research sub question 2. Does a school's 1-year or 3-year API growth percent correlate significantly with teacher turnover?

Teacher turnover and 2012-13 LEAD Tool data. The PPMC gauged the strength of relationship between 1-year and 3-year API growth percent and a school's 1-year and 3-year teacher turnover percent among the 437 schools included in this analysis. In the 2012-13 data set, the statistical analysis identified a very weak positive correlation between 1-year API growth percent and both the 1-year teacher turnover (r = .06) and the 3-year teacher turnover percent (r = .06). The 3-year API growth percent demonstrated a very weak positive relationship with 1-year teacher turnover (r = .13) and 3-year teacher turnover (r = .06).

Teacher turnover and 2013-14 LEAD Tool data. Consistently, the 2013-14 data set showed weak relationships between 1-year API growth percent and 1-year teacher turnover (r = .02) and a very weak positive correlation with 3-year teacher turnover (r = .01). The 3-year API growth percent showed a very weak negative correlation with 1-year teacher turnover (r = -.04) and a very weak positive correlation with 3-year teacher turnover (r = .03).

As the research in Chapter Two indicated, overall teacher turnover may cause instability at a school site. However, overall, not all teacher turnover was considered negative, as some turnover actually demonstrated a positive correlation with school performance. Teacher turnover may have both positive and negative correlations, and the results may provide some indications that both 1-year and 3-year teacher turnover tends to correlate negatively with school growth.

Research sub question 3. Does a school's 1-year or 3-year API growth percent correlate significantly with principal turnover?

Principal turnover and 2012-13 LEAD Tool data. The PPMC gauged the strength in relationship between the 1-year and 3-year API growth percent with the principal duration (turnover) at a school. The 2012-13 data set analysis demonstrated a very weak positive relationship between 1-year API growth percent and principal duration (r = .02) and a very weak negative correlation between 3-year API growth percent and principal duration (r = -.01).

Principal turnover and 2013-14 LEAD Tool data. The 2013-14 data set showed a very weak negative relationship between 1-year API growth percent and principal duration (r = -.11) and between 3-year API growth percent and principal duration (r = -.05). The statistical analysis found that the 1-year API growth percent and the principal duration at school variables have a statistically significant relationship (p = .02). The direction of the relationship is negative, with greater API growth percent associated with higher principal turnover at a given school. This negative correlation (r = -.11), and statistical significance level (p = .02) provide insights indicating that indicate that the longer a principal stays at a school, the school's growth tends to correlate negatively, as measured by the school's 1-year API growth percent. This result seems to support research findings that principal turnover may not necessarily be equated to the principal performance levels or impact.

Research sub question 4. Does a school's 1-year or 3-year API growth percent correlate significantly with their principal's years of experience?

Principal experience and 2012-13 LEAD Tool data. The PPMC analysis demonstrated a weak negative correlation between the 1-year API growth percent and principal years of experience (r = -.02) and between the 3-year API growth and principal years of experience (r = -.08).

Principal experience and 2013-14 LEAD Tool data. The 2013-14 data set showed similar negative correlation coefficient values between 1-year API growth percent and principal years of experience (r = -.09) and for 3-year API growth percent with principal years of experience (r = -.03). The research did not yield findings that principals with more years of experience necessarily outperformed principals with fewer years of experience. However, high-performing principals had a positive relationship with school success and growth. The results of this analysis indicate that principals with more years of experience seem to have a negative correlation with a school's growth, as measured by API 1-year and 3-year growth percent.

Research sub question 5. Does a school's 1-year or 3-year API growth percent correlate significantly with the percent of annual teacher evaluations completed?

Evaluations completed and 2012-13 LEAD Tool data. Schools and principals are required to conduct evaluations of teachers on an annual basis. Although there is flexibility on which teachers are to be evaluated from year-to-year, the 2012-13 data descriptive analysis shows that the mean percent for teachers being evaluated at each school was 40.41%. The 2013-14 descriptive analysis data shows a slight decrease in teacher evaluations completed with a mean of 38.78%. The descriptive analysis also indicates a wide range in the number of evaluations completed at schools, with data for some schools reflecting ranges from 0% at some schools up to 100% of teachers evaluated at other schools.

In the 2012-13 data set, the PPMC established a very weak positive relationship between 1-year API growth percent and the percent of teacher evaluations completed (r = .03) and no correlation between the 3-year API growth percent and the percent of teacher evaluations completed (r = .00).

Evaluations completed and 2013-14 LEAD Tool data. The 2013-14 data set found very weak positive relationships between the 1-year and 3-year API growth percent with the percent of teacher evaluations completed of (r = .03) and (r = .04) respectively. The completion of evaluations, legally required, may not alone drive school growth. The results of the analysis showed a positive, albeit weak, correlation exists. As more evaluations are completed, the analysis shows that a more positive relationship with school growth exists as measured by the 1-year and 3-year API growth percent.

Research sub question 6. Does a school's 1-year or 3-year API growth percent correlate significantly with their Concentration of Teachers with LEAD Indicators (CTLI)?

CTLI and 2012-13 LEAD Tool data. The CTLI summarizes the percent of classroom teachers at a given school that show a need for improvement or they have not been evaluated in the last five years. The CTLI may represent a key group of teachers where a principal should focus on for improvement efforts.

In the 2012-13 data set, the PPMC coefficients indicate a very weak negative correlation between the 1-year API growth percent and CTLI (r = -.06), as well as between the 3-year API growth percent and CTLI (r = -.13). The Sig (two-tailed) value of .01 indicates that a statistically significant relationship exists between the 3-year API growth percent and a school's CTLI. The direction of the relationship is negative so that an increase in the 3-year API growth percent would be associated with a decrease in CTLI at a school. Conversely, an increase in CTLI percent at a given school would be associated with a decrease in the 3-year API growth percent for a school. A school that focuses on improvement efforts that decrease its CTLI may correlate with an increase in the 3-year API growth percent.

CTLI and 2013-14 LEAD Tool data. In the 2013-14 data set analysis, the PPMC demonstrated a very weak positive relationship between the 1-year API growth percent and CTLI (r = .02) and between the 3-year API growth percent and CTLI (r = .03). The indications of a positive relationship are inconsistent with the 2012-13 data analysis results. The 2013-14 results indicate that an increase in CTLI may be associated with increases in API growth percent. Table 11 and Table 12 illustrate the results of the PPMCs and the related tests of significance.

Other LEAD Tool Variable Correlations

The LEAD Tool data variables included in the PPMC analysis included the two dependent variables consisting of the 1-year growth percent and the 3-year growth percent. The analysis also included seven independent variables consisting of: (a) API decile rank, (b). principal duration at school. (c) principal years of experience. (d) 1-year teacher turnover. (e) 3-year teacher turnover, (f) percent of teacher evaluations completed in the previous year, and (g) CTLI percent of a given school. The correlations between some of these variable pairings resulted in a statistically significant relationship.

2012-13 LEAD Tool analysis. Utilizing the 2012-13 LEAD Tool data statistical analysis results, five variable pairings had statistically significant relationships at the Sig. (two-tailed) p-value of .05 or less. Depending on the variable pairings, there were both positive and negative correlations.

The LEAD Tool variables API decile rank and the principal duration at a school were found to have a statistically significant relationship (p = .04). The direction of the relationship was positive, with both variables tending to increase together. An increase in API decile ranking for a school may be associated with an increase in principal duration at a school site.

API decile rank and principal experience had a statistically significant relationship (p = 01). However, in this variable pairing the direction of the relationship (r = -.12) was negative. Increases in API decile ranking are associated with lower principal experience levels.

Principal duration and the percent of teacher evaluations (r = -.09) had a statistically significant relationship (p = .05). These two variables were negatively correlated, with increases in the principal duration associated with fewer teacher evaluations completed during a school year.

One-year teacher turnover and CTLI (r = .11) had a statistically significant relationship (p = .02). Conversely, a decrease in a schools CTLI percent may be associated with a decrease in the 1-year teacher turnover data.

The 2012-13 statistical analysis found a strong positive correlation between 1-year API growth percent and 3-year API growth percent (r = .61). The 2013-14 data set statistical analysis found a moderate positive correlation between 1-year API growth percent and 3-year API growth percent (r = .47). These two data variables would tend to increase together, so growth in the 1-year data would be associated with growth in the 3-year data.

2013-14 LEAD Tool analysis. Utilizing the 2013-4 LEAD Tool data statistical analysis results, three variable pairings yielded statistically significant relationships at the Sig. (two-tailed) value of .05 or less. Depending on the variable pairings, there were both positive and negative correlations.

API decile rank and principal experience (r = -.10), as in the 2012-13 data set, had a statistically significant relationship (p = .03). The direction of this relationship is negative, with increases in API decile rank associated with decreased level of principal years of experience.

API decile rank and CTLI (r = -.13) had a statistically significant relationship (p = .01). The direction of their relationship is negative, with increases in a school's API decile rank being associated with decreases in a school's CTLI percent level.

Principal experience and 1-year teacher turnover (r = -.11) had a statistically significant relationship (p = .02). These two variables are negatively correlated, with an increase in one variable associated with a decrease in the other variable. An greater experience level of the principal as a principal is associated with a decrease in the 1-year teacher turnover for a school.

Summary

Chapter Four provided a description of the data and an analysis of the findings in relation to each LEAD Tool data set. The data analysis and findings were structured to answer each research sub question. The findings from the statistical analysis provided results yielding some potentially useful relationships in the LEAD Tool variables. The 2012-13 variable correlations and the respective Sig. (two-tailed) values, identified 10 sets of variable pairings where a statistically significant correlation existed between the variables. The 2013-14 data analysis also demonstrated 10 sets of variable pairings indicating a statistically significant correlation between the variables. The findings and the statistically significant relationships identified in this study will be discussed in further detail and related to the literature in Chapter Five.

Chapter Five provides a summary, conclusion, and suggested implications regarding the findings as a result of the analysis in Chapter Four. Chapter Five also includes recommendations for future research based on the analysis and findings.

Chapter Five: Discussion

The purpose of this study was to examine the data that composes the LAUSD *Leaders Evaluation Analysis Development (LEAD)* Tool for correlations that may exist between school growth and school, teacher, and principal quality and performance data. The goal of this research was to analyze how LAUSD elementary schools' API growth percent (1-year and 3-year growth percent) correlates with various LEAD Tool school, teacher, or principal quality and performance. School administrators working to improve our schools may benefit from utilizing LEAD Tool data variables to correlate with potential improvements efforts that may lead to school performance growth.

The purpose of this chapter is to provide a summary of the data analysis and the process utilized in this study. The researcher will also provide conclusions and implications from the analysis results. The final section of this chapter will include recommendations for further research and analysis.

Purpose of the Research and Research Questions

The purpose of this study was to analyze the relationships of school growth data with various school, teacher, and principal quality and performance data that are reflected in the LEAD Tool. Chapter Five will compare the research question findings with the literature, draw conclusions and potential implications, and make recommendations for further research based on the study results. The research questions guided the analysis of the LEAD Tool data variables included during the analysis. The following research questions were examined through the course of this study:

1. Does a school's 1-year or 3-year API growth percent correlate with its API rank?
2. Does a school's 1-year or 3-year API growth percent correlate with teacher turnover?

3. Does a school's 1-year or 3-year API growth percent correlate with principal turnover?
4. Does a school's 1-year or 3-year API growth percent correlate with its principal's years of experience?
5. Does a school's 1-year or 3-year API growth percent correlate with its annual teacher evaluation completion rates?
6. Does a school's 1-year or 3-year API growth percent correlate with its Concentration of Teachers with LEAD Indicators (CTLI)?

Review of the Literature

Chapter Two provided a literature review focused on the quality of teachers, correlation of teachers on student learning, teacher attendance impacts on student learning, variances in teacher quality distribution among schools, and principal turnover and performance effects on school and student performance. The review demonstrated the effects various teacher and principal quality and performance variables could have on school performance and student academic success. The principal quality variables were not as clearly extrapolated from the research to draw specific conclusions, as the performance data variables were not as readily demonstrable.

The research provided a foundation for the analysis conducted in this study to determine if any relationships exist between the variables found in the LEAD Tool based on what the research indicates about these data variables. As an example, the research had mixed results on the topic of teacher turnover, as some attrition was deemed to have positive correlation with student learning, while other studies indicated that attrition had a negative correlation. Testing

this underlying teacher turnover data variables found in the LEAD Tool against school growth variables is one of the key research questions of this study.

Research Design and Methodology

This study was completed as quantitative analysis that involved conducting PPMCs with a two-tailed test for significance. The study analysis results were reported in a narrative format to describe the findings in relation to the six research questions guiding this study.

The elementary school data for each data set were checked for accuracy and consistency. The resulting data sets established 437 elementary schools to be included in the analysis and those schools excluded from the analysis (Table 7).

The researcher also conducted a check for data frequency and a descriptive analysis for both the 2012-13 and the 2013-14 LEAD Tool data sets. The resulting descriptive statistics are displayed in Table 8 and Table 9, respectively. A review of the data variable means between the 2012-13 and 2013-14 data sets is represented in Table 10.

As the last step in the process, the researcher utilized the GNU PSPP program to conduct the analysis involving two sets of LEAD Tool data from the 2012-13 and the 2013-14 school years. The resulting output of the PPMCs measured whether a relationship exists between a school's growth and the various LEAD Tool variables.

Data Source

The sample data set for this study was composed of data from the 2012-13 and the 2013-14 LEAD Tool data sets. No attributions could be established between the results and a specific school or employee due to the use of this de-identified data set. Ensuring anonymity and complying with human subjects considerations was utmost in the researcher's goals.

Brief Restatement of the Findings

Chapter Four provided the details of the findings as a result of the statistical analysis guided by the research questions to explore the LEAD Tool data variables. The key findings from Chapter Four provide insights into the correlation and significance of some of the LEAD Tool data variables with various aspects of school performance data. The key findings provided insights into relationships among LEAD Tool data variable pairings. The following sections restate the various themes of examination in this study that were reflected in the LEAD Tool data.

School academic growth variables. This study utilized a school's API growth percent to measure academic growth during a 1-year and a 3-year period for the purposes of this analysis. Although no longer being utilized in California to measure school academic growth, the API growth scores (points) and the correlating API Index (ranked schools on a scale of 1-10) that served as the school growth variable were applicable during the timeframes for this study and the related data.

The 1-year API growth percent allowed this study to compare the API growth percent from one year to the next for each school. The 3-year API growth percent measured the percent of change at a given school during the 3 previous school years of API growth data. The percent of API growth for each school provided an academic growth variable to measure against other independent variables to detect any potential correlations or significant relationships.

The API ranking for a school, expressed as API 1-10, provides a school's ranking based on the API score results and in comparison with other socioeconomically similar schools in California. The amount of growth within each API decile ranking, (i.e., schools ranked as API 1,

schools ranked as API 2, etc.) was a variable of interest in this study to measure against the percent of 1-year and 3-year API growth percent variables.

The literature suggests that the effects on school academic growth are linked to factors not necessarily captured by credentials, degrees, and other traditional measure of employee success. A differentiation in a teacher's effect on academic growth as measured by standardized test results may reflect the difference in learning levels between one teacher's classroom and being in another classroom (McCaffey et al., 2003). This study sought to understand the correlations between various measures that similarly and simultaneously correlate with changes in school academic outcomes.

Understanding the correlation between predictor variables and dependent variables was reflected in the analysis conducted. The 2012-13 statistical analysis found a strong positive correlation between 1-year API growth percent and 3-year API growth percent ($r = .61$). The 2013-14 data set statistical analysis found a moderate positive correlation between 1-year API growth percent and 3-year API growth percent ($r = .47$). These two data variables would tend to increase together, so growth in the 1-year data would be associated with growth in the 3-year data. This was a key finding, as the correlations among these two variables indicated a positive relationship.

Research question 1. Does a school's 1-year or 3-year API growth percent correlate with their API rank?

API rank and 2012-13 LEAD Tool data. The PPMC measured the strength of the relationship between a school's 1-year and 3-year API growth percent and a school's overall API decile ranking for the 437 schools. In the 2012-13 LEAD Tool data set, the statistical analysis identified a very weak positive correlation (Evans, 1996) between 1-year API growth percent and

API decile ranking (r = .02). The data suggest that the most recent (previous school year results) 1-year API growth percent had a weak but positive correlation with a school's API ranking. As the API score and other school characteristics combine to define a school's API ranking, the API growth can be seen as a factor in the ranking, but not necessarily the strongest factor. School growth points in a single school year can show positive growth, but not sufficient to influence a change in API ranking on its own. This is an important factor to understand about year-to-year API growth scores, as school API growth can fluctuate from positive to negative growth points on a yearly basis. A large single-year growth in API points can make a greater difference in determining a change in API rank as compared to a school demonstrating little or no API growth point increases in a given year.

Similarly, the 2012-13 data set found a very weak negative correlation between the 3-year API growth percent and API decile ranking (r = -.04). The negative correlation between the 3-year API growth percent and a school's API decile ranking seemed counterintuitive. The variance during the 3 years of whether a school keeps adding or subtracting API point growth relies on many factors. The results here tend to indicate that an increase in the 3-year API growth percent has a very weak correlation with a decrease in a school's API ranking. The descriptive statistical analysis for the 2012-13 data set revealed that the minimum 1-year API growth percent was -7.70% as compared to the 3-year API growth percent of -5.60%. Comparing the maximum percent of growth showed a 19.50% percent for the 1-year, whereas the 3-year showed a maximum of 20.70% growth. Potentially, the smaller 3-year overall growth percentage minimum and maximums as compared to the 1-year API growth percent may reflect a fluctuation in the strength of growth during the 3-year window of time captured in the 2013-14 timeframe.

API rank and 2013-14 LEAD Tool data. The 2013-14 data set of 437 schools resulted in a very weak positive relationship between the 1-year API growth percent and the API decile ranking ($r = .12$) of schools. The analysis of 3-year API growth percent and the API decile ranking demonstrated no correlation ($r = .00$) between these variables.

The Sig. (two-tailed) values found a statistically significant relationship between the 1-year API growth and a school's API ranking at the $p = .02$ level. The direction of the relationship is positive, indicating that 1-year API growth percent and the school's API ranking are positively correlated. The results of this statistical analysis indicate that these two variables tend to increase together. The 1-year API growth scores contribute more directly to the school's latest API ranking than does the 3-year API score growth and percent.

The data findings suggest that a school's API ranking of 1-10 has a weak correlation with API growth percent. The 2013-14 1-year data correlates positively with the 1-year API growth, and demonstrates a statistically significant relationship with the related API ranking. Whether a school has an API ranking of 1 or 10 demonstrated only a very weak correlation with school API score growth and results. The results, although indicating a very weak relationship between the variables, indicate that a school's API ranking does not necessarily create a barrier to school success. Other factors within a school, independent of the API ranking, may be more indicative of school API growth than the actual API ranking itself. Schools with lower API rankings seem to have almost the same ability to gain or decline in school growth as those schools with higher API rankings.

Teacher turnover variables. The LEAD Tool data contains a school's 1-year and 3-year teacher turnover percent. These data give principals, principal supervisors, and district administrators an ability to understand the latest single year teacher turnover rate for a school as

well as the 3-year turnover trend. These data variables could help administrators address strategies to reduce teacher turnover rates that have been linked to school performance barriers in the research.

Research question 2. Does a school's 1-year or 3-year API growth percent correlate with teacher turnover data?

2012-13 LEAD Tool data. A PPMC was run to gauge the strength of relationship between 1-year and 3-year API growth percent and a school's 1-year and 3-year teacher turnover percent among the 437 schools included in this analysis. In the 2012-13 data set, the statistical analysis identified a very weak positive correlation between 1-year API growth percent and both the 1-year teacher turnover (r = .06) and the 3-year teacher turnover percent (r = .06). The 3-year API growth percent demonstrated a very weak positive relationship with 1-year teacher turnover (r = .13) and 3-year teacher turnover (r = .06).

2013-14 LEAD Tool data. Consistently, the 2013-14 data set also demonstrated similar weak relationships between 1-year API growth percent with: 1-year teacher turnover (r = .02); and a very weak positive correlation with 3-year teacher turnover (r = .01). The 3-year API growth percent showed a very weak negative correlation with 1-year teacher turnover (r = -.04) and a very weak negative correlation with 3-year teacher turnover (r = .03).

Principal experience and turnover variables. The LEAD Tool contained two LEAD Tool data variables to examine the relationship of principal years of experience and school principal's duration (turnover) at a school. The LEAD Tool provides information about how many years of principal experience the current principal possesses. The data analysis provides insight to understand if higher levels of principal experience correlate with higher or lower levels of API growth percent.

Another LEAD Tool data variable provides the principal turnover for each school during the previous 8 school years. The stability of the principal position for each school is defined as *principal duration* in the LEAD Tool. The statistical analysis measured the correlation between a school's principal turnover (replaced every year or has had the same principal for 8 years) with a school's academic growth, as measured by their 1-year and 3-year API growth percent.

Jackson and Bruegmann (2009) found that principals are best positioned to attract, improve, and retain the best staff. Axelrod et al. (2002) found that most companies fail to deal with low performers and that only few managers felt that their companies actually removed low performers. The research found that effective principals can drive school success, so examining principal years of experience and the turnover rate of principals in this study was of research interest.

Research question 3. Does a school's 1-year or 3-year API growth percent correlate with principal turnover data?

***2012-13 LEAD Tool data*.** The PPMC was utilized to gauge the strength in relationship between the 1-year and 3-year API growth percent with the principal duration at a school. The 2012-13 data set analysis demonstrated a very weak positive relationship between 1-year API growth percent and principal duration (r = .02) and a very weak negative correlation between 3-year API growth percent and principal duration (r = -.01).

The relationship between a school's turnover of principals with their API growth percent was shown to have only a weak correlation. That the school's principal role is not highly correlated with the API growth percent may indicate that other areas of principal effect might still be determined that result in a school's success. Hahnel and Jackson (2012) indicated that a

succession of strong teachers can make a tremendous impact. A school's success may not necessarily depend on the consistency of the principal role.

2013-14 LEAD Tool data. The 2013-14 data set showed a very weak negative relationship between 1-year API growth percent and principal duration (r = -.11) and between 3-year API growth percent and principal duration (r = -.05). The statistical analysis found that the 1-year API growth percent and the principal duration at school variables had a statistically significant relationship (p = .02). The direction of the relationship was negative, with greater API growth percent associated with higher principal turnover at a given school. This negative correlation and statistical significance level cause some deeper thinking, as a principal's longer stay at a school tends to correlate negatively with a school's 1-year API growth percent. This may indicate that principals might trend toward staying longer at schools that may not be experiencing as much percent growth as compared to other schools with greater growth. This may also mean that the effect of principals that do not stay long at schools may not correlate with positive API growth percent at schools where they serve. Importantly, the descriptive analysis, utilizing both the 2012-13 and the 2013-14 LEAD Tool data sets, revealed a high turnover in the principal role, with a mean of 3.67 for 2012-13 and a mean of 3.59 for the 2013-14 data set. The analysis indicates that 5 principals cycled through a given school during the preceding 8 school year. This shows a tremendous amount of turnover, which may have lessened the strength of overall correlation between the principal and API growth percent.

Research question 4. Does a school's 1-year or 3-year API growth percent correlate with their principal's years of experience?

2012-13 LEAD Tool data. Principal years of experience had a mean of 9.47 years in the 2012-13 data set and mean of 6.65 years in the 2013-14 data set. A difference of nearly 3 years

between the two means can have correlations with school success. The PPMC analysis demonstrated a weak negative correlation between the 1-year API growth percent and principal years of experience (r = -.02) and between the 3-year API growth and principal years of experience (r = -.08)

2013-14 LEAD Tool data. The 2013-14 data set showed similar negative correlation coefficient values between 1-year API growth percent and principal years of experience (r = -.09) and for 3-year API growth percent with Principal years of experience (r = -.03). The analysis tends to show that the more years of experience that a principal may possess, the less API growth percent that a school can expect to achieve. Although principal quality correlations with school growth are not as readily available in the research, the analysis may indicate a negative correlation with API growth percent, but yet correlate with other results in this study that may be more aligned with the research on areas of principal effectiveness and influence. Those areas of statistical significance related to principal experience and duration will be addressed in the section expanding upon the significance of the findings.

Teacher evaluations completed variable. The LEAD Tool contains a data variable that captures the percent of teachers evaluated in the previous school year. The state of California mandates that teacher evaluations be completed for all non-permanent teachers and that all permanent teachers be evaluated every other year, unless exempted by the principal. Although mandated as a yearly activity, the LEAD Tool data indicate that at the elementary schools reflected in this study, in the 2012-13 school year data set 35% of staff were evaluated in the previous school year and in the 2013-14 data set 32% were evaluated in the previous school year. Within each LEAD Tool's data set, the range of evaluations completed at a given school was from 0% evaluations completed to 100%. Weisberg et al. (2009) observed that performance

evaluations are typically a perfunctory exercise and few teachers are considered ineffective. This study explored if the percent of teacher performance evaluations completed correlated with school academic growth.

Research question 5. Does a school's 1-year or 3-year API growth percent correlate with their annual teacher evaluation completion rates?

***2012-13 LEAD Tool data*.** Schools and principals are required to conduct teacher evaluations on an annual basis. Although principals have flexibility regarding which teachers are to be evaluated from year to year, the 2012-13 data descriptive analysis shows that the mean percent of teachers being evaluated at each school was 40.41%. The 2013-14 descriptive analysis data show a slight decrease in the percent of teacher evaluations completed, with a mean of 38.78%. The descriptive analysis also indicates a wide range in the number of evaluations completed at schools, with data for schools reflecting ranges from 0% completed at some schools and up to 100% of teachers evaluated at other schools. In the 2012-13 data set, the PPMC established a very weak positive relationship between 1-year API growth percent and the percent of teacher evaluations completed ($r = .03$) and no correlation between the 3-year API growth percent and the percent of teacher evaluations completed ($r = .00$).

***2013-14 LEAD Tool data*.** The 2013-14 data set found very weak positive relationships between the 1-year ($r = .03$) and 3-year ($r = .04$) API growth percent with the percent of teacher evaluations completed. Weisberg et al. (2009) indicated that in school districts, more than 99% of teachers receive a *satisfactory* rating on their evaluation. If the majority of evaluations conducted do not distinguish any significant level between teachers' performance, then the very weak correlations found in the analysis confirm the strength of relationship between the percent of evaluations completed with API growth percent.

CTLI variable. The LEAD Tool's core data variable is reflected as the percent of teachers at a school that cannot be deemed effective. The total CTLI is reflected in the LEAD Tool data for purposes of this study. Thus the CTLI is the percent of a school's classroom teachers that cannot be deemed as effective teachers. The CTLI is composed of teachers at a school who have received a *Below Standard* final evaluation (BSE), received a *Meets Standard* on their final evaluation but had two or more sub-areas on the evaluation marked as needs improvement, received a rating in the lower to quintiles of effect on student learning based on the district's VAMs, were absent 13 or more days in the previous school year; or have not received a final evaluation in the last 5 years.

The LEAD Tool serves as monitoring tool to review the distribution of quality teachers throughout LAUSD schools. Conducting an analysis to test if the data variables contained within the LEAD Tool correlate with improved school academic outcomes can be of significance to school district school, teacher, and principal quality improvement efforts. Hahnel and Jackson (2012) found that the teacher quality levels, as measured by VAMs, were distributed unevenly among LAUSD schools. Gandara and Maxwell-Jolly (2000) reported that teachers in high poverty schools are less prepared to successfully address student and parental barriers to learning. Hanushek (2010) found that the importance of teachers comes from the fact that average gains in learning across classrooms within the same school are very different and some teachers at the same schools produce bigger gains whereas others produce few gains for students.

Research question 6. Does a school's 1-year or 3-year API growth percent correlate with their Concentration of Teachers with LEAD Indicators (CTLI)?

2012-13 LEAD Tool data. The CTLI summarizes the percent of the classroom teachers at a school where the data indicate a need for improvement or to determine whether they are in

need of improvement (i.e., if they have not been evaluated in 5 years). The CTLI may represent a key group of teachers where a principal may focus x-number of hours in improvement efforts.

In the 2012-13 data set, the PPMC coefficients showed a very weak negative correlation between the 1-year API growth percent and CTLI (r = -.06) and the 3-year API growth percent and CTLI (r = -.13). As schools increased their API growth percent, a correlation in the relationship would reflect in the form of a decrease in CTLI at the school.

The analysis demonstrated a Sig (two-tailed) p-value of .01 that indicated a significant relationship exists between the 3-year API growth percent and the CTLI of a school. The direction of the relationship is negative so that a school's increase in the 3-year API growth percent would be associated with a decrease in CTLI at a school. Conversely, an increase in CTLI percent at a given school is associated with a decrease in the 3-year API growth percent for a school. A school that has a focus on improvement efforts that decrease the percent of teachers with CTLI may experience an associated increase in the 3-year API growth percent.

The research indicates that teachers that are not effective, are frequently absent, or whose effects on student learning as measured by VAMs generally have a negative impact on student learning results. Hanushek (1992) found that the difference in teacher quality can make a one grade level difference in student achievement on test performance. Hanushek et al. (2005) indicated that one standard deviation increase in teacher quality raise standardized gain by 0.22 standard deviations. A student who has a teacher at the 85th percentile can expect annual achievement gains of at least 0.22 standard deviations above a student who has the median teacher. Hahnel and Jackson (2012) found that LAUSD teachers designated as HQTs under NCLB did not necessarily correlate with student learning advancement as measured by standardized test scores.

In a study of school data in North Carolina, Clotfelter et al. (2009) found that every 10 days of teacher absence was associated with a decline of 1.7% of a standard deviation in math achievement and 0.9% standard deviation in reading. This same study showed that elementary students fared worse on standardized tests when assigned to teachers who take more absences. Moreover, Miller et al. (2007) found that teacher absences can impact student achievement in less direct ways such as by inhibiting attempts by school faculty to implement consistent instructional practices across classroom and grades. This indicates that a teacher's absence not only negatively affects students he/she teachers, but also the students taught by other teachers.

2013-14 LEAD Tool data. In the 2013-14 data set analysis, the PPMC demonstrated a very weak positive relationship between the 1-year API growth percent and CTLI (r = .02) and between the 3-year API growth percent (r = .03). Although the strength of the correlations do not provide the same level of significance as found in the 2012-13 3-year API growth percent, this finding may indicate that teacher effects between strong and less effective teachers are more equitably distributed among schools than previously projected. The descriptive analysis conducted on both the 2012-13 and the 2013-14 LEAD Tool data sets reveal the mean CTLI at schools were 23.98% and 24.16%, respectively, during those school years. The range was 74% maximum in 2012-13 and 70% in 2013-14: a 3% overall drop across the school district.

Significance of the Findings

The LEAD Tool serves as a tool to monitor the change in school, teacher, and principal data quality for schools. Analyzing the LEAD Tool variables to understand which could be more useful to monitor and implement strategies to possibly attain a more significant result toward increasing positive school and student achievement. This study could help target focal points for school administrator efforts and also to help reshape the LEAD Tool regarding data variables

that have more potential impact on achievement. The 2012-13 LEAD Tool data statistical analysis results yielded five data variable pairings that demonstrated statistically significant relationships at the Sig. (two-tailed) value of .05 or less. The variable pairings reflected both positive and negative correlations as discussed in the subsequent sections.

LEAD Tool variables: API decile rank and principal duration. API decile rank and the principal duration (turnover) at a school, were found to have a statistically significant relationship ($p = .04$). The direction of the relationship is positive, with both variables tending to increase together. An increase in API decile ranking for a school may be associated with an increase in principal duration at a school site. Staiger and Rockoff (2011) observed that rather than screening at time of hire, the evidence on heterogeneity of teacher performance suggests a better strategy would be identifying large differences between teachers by observing the first few years of teaching performance and retaining only the highest-performing teachers. An effective teacher and the availability of effective teachers to improve student achievement vary tremendously across teachers, and that the variance is just as large when comparing the quality of teachers within a specific school as it does throughout a school district (Aaronson et al., 2007; Rivkin et al., 2005; Rockoff, 2004). The positive relationship of a principal's duration at a school with an increase in API ranking may be a result of the work a principal can effectuate to increase teacher quality at a school based on the literature review of those areas where changes result in increased student achievement.

LEAD Tool variables: API decile rank and principal experience. The API decile rank and experience as a principal had a statistically significant relationship ($p = .01$). Although in this variable pairing the direction of the relationship ($r = -.12$) was negative. Increases in API decile ranking are associated with lower principal experience levels. The analysis reveals that principal

years of experience may not necessarily lead to increases in a school's API decile ranking. Based on the analysis, years of principal experience may not necessarily be a proxy for quality or effectiveness as a principal.

The 2013-14 data analysis of the API decile rank and principal experience (r = -.10), similar to the 2012-13 data set results, yielded a statistically significant relationship (p = .03). The direction of this relationship is negative, with increases in API decile rank associated with decreased level of principal years of experience. The consistency between both data sets may help establish that principal years of experience may not be the driving force for schools to increase their API decile rank.

LEAD Tool variables: Principal duration and the percent of teacher evaluations completed. Principal duration and the percent of teacher evaluations completed (r = -.09) had a statistically significant relationship (p = .05). These two variables are negatively correlated, with increases in principal duration associated with fewer teacher evaluations completed during a school year. The data suggest that the longer a principal remains at a school results in a decrease in the number of teacher evaluations completed. The findings suggest that a principal's longer tenure at a school site might bring more familiarity with the quality of teachers at the site and lessen the need to evaluate a larger percentage of the staff.

LEAD Tool variables: One-year teacher turnover and CTLI. The 1-year teacher turnover and CTLI (r = .11) had a statistically significant relationship (p = .02). These two variables are positively correlated: an increase in 1-year teacher turnover data is associated with an increase in a school's CTLI percent. Conversely, a decrease in a schools CTLI percent may be associated with a decrease in the 1-year teacher turnover data. This data analysis may encourage principals to work on increasing the percent of effective teachers at a school, which in turn can

reduce the 1-year teacher turnover rate of the school. The removal of ineffective teachers at a school may encourage other teachers to stay longer as the school working environment improves with stronger teachers remaining. Hanushek (2009) indicated that based on his analysis of value-added data that removing the lowest performing 6-10% of teachers could have a dramatic impact on student achievement, even if these 6-10% of teachers were replaced by just average teachers. The New Teacher Project's Widget Effect (2009) reported that an overwhelming majority of both teachers (68%) and administrators (91%) agree that dismissing poor performers is important to maintaining high-quality instructional teams. Studies show that effective principals are more likely to act on ineffective teachers (Portin et al., 2003) and lose fewer effective teachers (Branch et al., 2013).

The research underscores that reducing the percent of teachers considered ineffective can yield an influencing factor and help schools retain more effective teachers. The analysis underscores the statistically significant relationship of a school's 1-year turnover with the CTLI at the same school. Decreasing the LEAD Tool CTLI for a school has a statistically significant relationship with maintaining a more effective teacher workforce at the school.

LEAD Tool variables: One-year API growth percent and 3-year API growth percent. The 2012-13 statistical analysis found a strong positive correlation between 1-year API growth percent and 3-year API growth percent ($r = .61$). The 2013-14 data set statistical analysis found a moderate positive correlation between 1-year API growth percent and 3-year API growth percent ($r = .47$). These two data variables would tend to increase together, so growth in the 1-year data would be associated with growth in the 3-year data. These two items within the LEAD Tool can be utilized to identify schools that are trending negatively on API growth. If the 3-year trend is showing negative or a few points' gain but the 1-year API growth percent is trending

positively, then understanding that there will be a correlating increase in the following year may help school administrators or principal supervisors focus on schools more strategically for improvement efforts. Utilizing the LEAD Tool data to inform conversations between principals and their supervisors may lead to development of skills that would not be so evident without the data. In a study conducted by Corcoran et al. (2012), school survey responses indicated that principal supervisors may not have spent a significant number of years developing skills that may be essential in order to provide support to new or beginning principals.

The 2013-4 LEAD Tool data statistical analysis results yielded two data variable pairings that demonstrated statistically significant relationships at the Sig. (two-tailed) *p*-value of .05 or less that were not described in the preceding analysis. Depending on the variable pairings, there were both positive and negative correlations.

LEAD Tool variables: API decile rank and CTLI. A school's API decile rank and CTLI (r = -.13) had a statistically significant relationship (p = .01). The direction of their relationship was negative, with increases in a school's API decile rank being associated with decreases in the school's CTLI percent level. A decreasing number of teachers at a school that are ineffective have a significant relationship to the school's increase in API decile rank. Portin et al. (2009) found that effective leaders nurtured and supported their staff while also aggressively weeding out individuals who did not show the capacity to grow. Miller (2008) indicated that under effective principals, teachers tended to be absent less and actually declined more as the principal's effectiveness increased. Miller et al. (2007) indicated that these increased days of teacher presence on a school campus correlate positively with improved student achievement. Decreasing the percent of the various underlying CTLI data variables can result in a correlating improvement in API decile rank for a school.

LEAD Tool variables: Principal experience and 1-year teacher turnover. Principal experience and 1-year teacher turnover (r = -.11) had a statistically significant relationship (p = .02). These two variables are negatively correlated with an increase in one variable associated with a decrease in the other variable. A greater principal experience level is associated with a decrease in the 1-year teacher turnover for a school.

Branch et al. (2013) indicated that ineffective principals tend to lose effective teachers. Beteille et al. (2011) indicated that high poverty schools experience a greater impact of losing effective teachers when an ineffective principal leads the school. Although principal experience is not necessarily deemed an effective principal quality indicator, the analysis does indicate that the more experience a principal has may have a positive effect, with a correlating decrease in the 1-year teacher turnover percent.

Conclusions

The findings from the study and the literature review suggest that some LEAD Tool data variables may have more significance than other variables. The various correlations identified through the statistical analysis may provide some direction for potential strategies that should receive more focus or implementation efforts to improve overall school improvement. The test for statistical significance of specific variable pairings also provides a more specific recommendation for focusing on specific LEAD Tool data variables that can contribute to the work both in further research and in the field, with the various school administrators engaged in the efforts to improve school performance. The key findings that can be implemented more readily suggest that focusing on the following data variables to lead improvement efforts may prove more effective than other variables:

1. A school's CTLI percent has a statistically significant negative relationship associated with a school's the 3-year API growth percent.
2. A school's CTLI percent has a statistically significant negative relationship associated with a school's API decile rank.
3. A school's CTLI has a statistically significant positive relationship associated with a school's 1-year teacher turnover percent.
4. Principal duration has a statistically significant positive relationship associated with a school's API decile rank.
5. Principal duration has a statistically significant negative relationship associated with the percent of teachers evaluated at the school.
6. Principal experience has a statistically significant negative relationship associated with a school's API decile rank.
7. Principal experience has a statistically significant negative relationship associated with a school's 1-year teacher turnover percent.

These key areas can serve to inform changes on the LEAD Tool to better inform the work of school administrators. As an example, and although the data showed some degree of correlations among the LEAD Tool data variables, the number of teacher evaluations completed in the previous school year may not have significant correlations to inform potential school improvement efforts. Should a principal focus on completing more evaluations as opposed to efforts that decrease the percent of CTLI at a school? Efforts that focus around the aforementioned seven key findings may yield better results than efforts that relate to other LEAD Tool data variables.

Recommendations for Further Research

This study was designed to examine the LEAD Tool data in light of the research A school's CTLI percent was negatively associated with a school's 3-year API growth percent and a school's API decile rank: both important measures of school growth. In addition, the analysis showed a positive relationship between CTLI and a school's 1-year teacher turnover. As CTLI increases, teacher turnover increases.

The CTLI at a school should be monitored and reduced, and efforts should focus on strategies that can decrease the percent. The data suggest that measuring CTLI data and then implementing efforts to reduce it may correlate with higher teacher retention, as teachers may be more apt to stay if their fellow colleagues' level of quality and performance is high.

CTLI decreases were correlated with increases in a school's API growth percent and with API decile rank. These correlations suggest that decreases in CTLI may correlate with overall school growth.

Principal duration had a statistically significant positive relationship with a school's API decile rank. A school fared better in its relative benchmark against similar schools when the principal duration was longer, which means less principal turnover occurred. Interestingly though, the data analysis also indicated that the longer the duration of a principal at a school, the fewer teacher evaluations were completed. The percent of teachers evaluated under a longer term principal at the school was smaller when the school had more turnover in the principal position. Potentially, more time spent with or greater familiar faculty has an effect on the number of teachers that are to be evaluated.

Importantly, the data on principal experience were mixed. The analysis showed that principal experience had a statistically significant negative relationship with a school's API

decile rank. Greater principal experience tended to negatively impact a school's rank. This variable relationship is worthy of deeper analysis, as in general, principal experience is a valued commodity in education, but it may not necessarily be impactful on a school's API rank.

Principal experience did show a statistically significant negative relationship associated with 1-year teacher turnover. More experienced principals had less teacher turnover. It is possible that more experienced principals have strengths in areas that teachers appreciate and that cause them to stay, while at the same time school growth, as indicated by their API decile rank, may not advance as steadily.

Suggestions for Future Research

One of the research strategies that was not implemented due to the researcher's current position as the Chief HR Officer was to conduct interviews or surveys of principals and principal supervisors. The researcher's professional role within the hierarchy of LAUSD management could have unduly influenced the survey results or risked human subject considerations and protocols.

Future research may wish to analyze or interview principals and principal supervisors to determine whether the LEAD Tool data is useful in guiding school improvement efforts. Another stream of research may gauge the level of principal readiness or preparedness to actualize school improvement goals based on what the LEAD Tool data suggests can be areas of focus for school improvement efforts. In addition, future research may want to examine other variable relations such as:

1. Utilizing the LEAD Tool data to measure data relationships within schools with the same API decile rank with 1-year and 3-year API growth percent.

2. Measuring schools within same API decile rank, grouped by similar principal durations and similar principal experience levels.
3. Determine whether experienced principals at lower performing schools impact teacher turnover and other data variables differently than experienced principals at higher performing schools.
4. Separating and measuring high performing schools against low performing schools to see if the LEAD Tool data variables demonstrate different relationships.
5. Researching if secondary schools show similar types of correlations among the LEAD Tool data variables.
6. Establishing principal quality variables that are similar to a school's CTLI percent. Researchers would need to identify data points that could be correlated with principal quality indicators. As seen in this study, neither the principal level of experience nor the principal duration at a school necessarily correlated with improvements in API growth percent.

Final Summary

The statistical analysis presented in Chapter Four and discussed in Chapter Five provides guidance that can influence data-based decision making regarding school, teacher, principal, and school staffing policies. This study analyzed the correlation of a school's API growth percent (dependent variables) with various LEAD Tool data variables that represented various school, teacher, and principal quality and performance characteristics (independent variables). The study may provide insight into whether a school's API growth percent has a measurable correlation with a school's teacher turnover/retention, principal turnover/retention, or principal's experience level. The study also explored whether a school's API growth percent also correlates with a

school's overall API decile rank, the number of teacher evaluations completed at each school in a given year, or the school's percent of CTLIs. This analysis help to determine if current efforts to increase the percentage of effective teachers at each school will ultimately contribute to having an effective teacher in every classroom.

The results of the study may help guide the work of school leaders to quantitatively measure data and progress toward having schools staffed with only effective teachers. The LEAD Indicators create a lens to gauge the degree of effective teachers at each school across the LAUSD. Understanding the effect of the various LEAD Tool data variables may encourage school leaders to embark upon a more collaborative effort to measure, understand, and diagnose if their CTLI is decreasing and the potential relative benefit that may occur as a result.

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APPENDIX A

IRB Approval

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

April 13, 2015

Justo A Avila

Protocol #: E0115D06
Project Title: A Leader's Evaluation and Analysis Development (LEAD) Tool: A Statistical Analysis of the Variables that Measure Progress Toward Staffing Every Classroom with an Effective Teacher in the Los Angeles Unified School District

Dear Mr. Avila:

Thank you for submitting your application, *A Leader's Evaluation and Analysis Development (LEAD) Tool: A Statistical Analysis of the Variables that Measure Progress Toward Staffing Every Classroom with an Effective Teacher in the Los Angeles Unified School District,* for exempt review to Pepperdine University's Graduate and Professional Schools Institutional Review Board (GPS IRB). The IRB appreciates the work you and your faculty advisor, Dr. McManus, have done on the proposal. The IRB has reviewed your submitted IRB application and all ancillary materials. Upon review, the IRB has determined that the above entitled project meets the requirements for exemption under the federal regulations (45 CFR 46 - http://www.hhs.gov/ohrp/humansubjects/guidance/45cfr46.html) that govern the protections of human subjects. Specifically, section 45 CFR 46.101(b)(4) states:

> (b) Unless otherwise required by Department or Agency heads, research activities in which the only involvement of human subjects will be in one or more of the following categories are exempt from this policy:
>
> **Category (4) of 45 CFR 46.101**, Research involving the collection or study of existing data, documents, records, pathological specimens, or diagnostic specimens, if these sources are publicly available or if the information is recorded by the investigator in such a manner that subjects cannot be identified, directly or through identifiers linked to the subjects.

Your research must be conducted according to the proposal that was submitted to the IRB. If changes to the approved protocol occur, a revised protocol must be reviewed and approved by the IRB before implementation. For any proposed changes in your research protocol, please submit a **Request for Modification Form** to the GPS IRB. Because your study falls under exemption, there is no requirement for continuing IRB review of your project. Please be aware that changes to your protocol may prevent the research from qualifying for exemption from 45 CFR 46.101 and require submission of a new IRB application or other materials to the GPS IRB.

A goal of the IRB is to prevent negative occurrences during any research study. However, despite our best intent, unforeseen circumstances or events may arise during the research. If an unexpected situation or adverse event happens during your investigation, please notify the GPS IRB as soon as possible. We will ask for a complete explanation of the event and your response. Other actions also may be required depending on the nature of the event. Details regarding the timeframe in which adverse events must be reported to the GPS IRB and the appropriate form to be used to report this information can be found in the *Pepperdine University Protection of Human Participants in Research: Policies and Procedures Manual* (see link to "policy material" at http://www.pepperdine.edu/irb/graduate/).

Please refer to the protocol number denoted above in all further communication or correspondence related to this approval. Should you have additional questions, please contact Kevin Collins, Manager of the

Institutional Review Board (IRB) at gpsirb@peppderdine.edu. On behalf of the GPS IRB, I wish you success in this scholarly pursuit.

Sincerely,

Thema Bryant-Davis, Ph.D.
Chair, Graduate and Professional Schools IRB

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives
Mr. Brett Leach, Compliance Attorney
Dr. Jack McManus, Faculty Advisor

APPENDIX B

LEAD Data: 2012-13 De-Identified Elementary School Data

Los Angeles Unified School District
Human Resources Division
September 2012
QA

A leader's Evaluation and Analysis Development (LEAD) Tool
School Profile and LEAD Indicators for Schools
Elementary Schools

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
1	1	2	2	739	712	27	3.8	58	8.5	4.00	22	29	47	21	45	26.1	40	18	2	1	6	0	0	9	23
2	2	2	3	752	751	1	0.1	42	5.9	8.00	9	26	37	15	41	9.2	34	10	1	2	5	1	0	9	26
3	3	2	3	771	745	26	3.5	55	7.7	4.00	9	18	33	16	48	6.2	30	15	0	0	5	0	2	7	23
4	4	2	1	714	675	39	5.8	52	7.9	2.67	8	53	38	18	47	10.1	36	17	0	0	6	0	2	8	22
5	5	2	3	756	727	29	4.0	46	6.5	4.00	17	31	23	9	39	16.0	20	10	1	0	3	0	0	4	20
6	6	2	1	689	664	25	3.8	33	5.1	4.00	11	35	44	20	45	13.1	40	20	1	3	6	0	3	13	33
7	7	2	5	791	804	-13	-1.6	31	4.1	2.67	10	22	50	19	38	3.2	49	18	0	0	6	1	2	9	18
8	10	2	4	787	771	16	2.1	22	2.9	1.14	11	24	18	2	11	16.1	16	2	0	0	4	2	0	6	38
9	11	2	4	784	767	17	2.2	31	4.1	2.00	21	21	33	11	33	31.5	28	11	0	0	6	0	3	9	32
10	12	2	2	738	712	26	3.7	40	5.7	2.00	21	39	39	18	46	14.2	35	18	0	4	8	0	3	15	43
11	13	2	6	823	811	12	1.5	32	4.0	8.00	14	34	22	11	50	33.7	21	8	0	0	0	0	0	0	0
12	15	2	3	774	757	17	2.2	27	3.6	1.60	13	25	8	4	50	6.2	8	4	0	0	3	0	0	3	38
13	16	2	4	786	808	-22	-2.7	-1	-0.1	2.67	18	39	17	6	35	7.9	15	2	1	0	3	2	0	6	40
14	19	2	3	759	732	27	3.7	67	9.7	2.67	15	22	49	9	18	3.7	41	6	0	0	3	2	3	8	20
15	20	2	4	775	769	6	0.8	42	5.7	2.67	17	29	18	13	72	4.3	18	12	0	1	0	1	0	2	11
16	21	2	5	797	759	38	5.0	55	7.4	4.00	14	47	22	14	64	3.8	21	12	0	0	3	0	2	5	24
17	22	2	1	706	694	12	1.7	-18	-2.5	4.00	13	19	47	14	30	9.2	40	12	0	1	8	5	2	16	40
18	26	2	3	768	698	70	10.0	107	16.2	2.67	18	37	23	12	52	10.6	20	11	0	0	4	0	1	5	25
19	27	2	1	696	728	-32	-4.4	24	3.6	2.67	14	17	22	13	59	17.5	18	12	2	0	1	0	2	5	28
20	29	2	4	780	778	2	0.3	11	1.4	4.00	8	30	24	9	38	18.9	25	8	0	0	2	0	2	4	16
21	31	2	1	694	718	-24	-3.3	-13	-1.8	4.00	13	37	23	6	26	3.2	21	7	0	0	3	0	2	5	24
22	32	2	8	867	835	32	3.8	32	3.8	4.00	8	25	39	10	26	10.7	37	10	0	0	1	8	3	12	32
23	34	2	8	862	828	34	4.1	43	5.3	8.00	11	24	28	0	0	18.6	25	0	0	0	4	2	1	7	28
24	37	2	3	765	762	3	0.4	26	3.5	2.67	0	33	16	10	63	13.1	16	9	0	0	2	0	0	2	13
25	38	2	9	891	867	24	2.8	50	5.9	2.00	14	29	28	14	50	6.9	23	12	0	0	4	0	1	5	22
26	39	2	4	782	768	14	1.8	90	13.0	1.60	24	31	21	7	33	4.3	17	6	0	1	3	0	0	4	24
27	40	2	1	707	687	20	2.9	8	1.1	2.00	9	38	24	12	50	11.2	22	11	0	2	8	0	2	12	55
28	41	2	5	795	788	7	0.9	38	5.0	4.00	22	26	23	14	61	8.2	20	11	1	2	3	1	0	7	35
29	42	2	6	818	845	-27	-3.2	-25	-3.0	2.67	13	42	8	6	75	10.2	7	5	0	0	1	0	1	2	29
30	43	2	8	860	842	18	2.1	36	4.4	4.00	13	32	40	15	38	15.0	33	12	0	1	1	1	1	4	12
31	44	2	7	849	845	4	0.5	16	1.9	2.67	0	17	17	9	53	7.9	17	9	0	0	3	0	0	3	18
32	45	2	5	800	785	15	1.9	43	5.7	2.00	28	33	30	12	40	6.1	25	7	0	0	4	1	0	5	20
33	46	2	9	896	882	14	1.6	14	1.6	4.00	18	30	22	2	9	28.7	23	2	0	0	1	2	0	3	13
34	47	2	7	853	852	1	0.1	42	5.2	4.00	7	35	14	10	71	8.2	15	7	0	0	2	0	1	3	20
35	51	2	7	852	843	9	1.1	26	3.1	2.00	15	22	48	45	94	9.7	41	40	0	0	8	0	3	11	27
36	53	2	1	702	693	9	1.3	29	4.3	4.00	9	29	55	21	38	3.2	51	20	0	0	8	0	3	11	22
37	54	2	4	785	752	33	4.4	16	2.1	2.67	15	33	21	3	14	7.1	19	3	0	0	4	0	1	5	26
38	56	2	5	808	803	5	0.6	-23	-2.8	4.00	18	44	11	4	36	4.3	9	3	0	0	4	0	0	4	44
39	57	2	1	681	676	5	0.7	23	3.5	8.00	21	32	41	21	51	14.4	33	14	0	1	4	1	1	7	21
40	59	2	2	738	733	5	0.7	52	7.6	4.00	21	21	52	24	46	8.2	42	20	0	6	7	4	1	18	43
41	60	2	1	710	704	6	0.9	20	2.9	4.00	12	11	52	21	40	10.6	45	17	1	0	7	0	3	11	24
42	61	2	1	711	728	-17	-2.3	19	2.7	8.00	15	29	34	13	38	18.0	31	13	0	1	4	1	2	8	26
43	62	2	2	741	717	24	3.3	60	8.8	2.67	13	41	25	8	32	7.2	21	9	0	0	3	0	1	4	19
44	63	2	3	760	766	-6	-0.8	19	2.6	2.67	10	22	63	22	35	6.2	57	22	0	4	10	0	1	15	26

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
45	64	2	6	823	743	80	10.8	78	10.5	8.00	10	54	40	16	40	17.3	37	16	1	1	3	0	0	5	14
46	65	2	9	899	894	5	0.6	46	5.4	2.67	0	38	20	10	50	9.2	21	10	0	0	1	0	2	3	14
47	67	2	4	778	767	11	1.4	44	6.0	2.67	9	24	35	7	20	10.2	33	9	2	1	3	1	3	10	30
48	68	2	2	737	742	-5	-0.7	-24	-3.2	1.33	13	24	32	14	44	8.7	28	14	1	0	6	0	3	10	36
49	70	2	6	815	780	35	4.5	22	2.8	4.00	18	22	22	8	36	12.5	19	8	0	0	3	0	1	4	21
50	71	2	2	737	736	1	0.1	-2	-0.3	2.67	13	14	32	9	28	5.2	29	10	0	0	5	0	1	6	21
51	73	2	3	767	738	29	3.9	51	7.1	1.33	5	26	23	12	52	4.3	22	11	0	1	1	0	0	2	9
52	74	2	2	721	709	12	1.7	6	0.8	2.67	5	36	37	19	51	4.3	36	19	0	0	10	0	2	12	33
53	75	2	2	722	691	31	4.5	45	6.6	2.67	11	18	28	5	18	10.6	26	6	0	0	6	0	0	6	23
54	76	2	3	762	756	6	0.8	48	6.7	2.00	23	40	22	8	36	27.1	18	8	0	2	2	0	1	5	28
55	77	2	5	808	779	29	3.7	45	5.9	2.00	5	37	39	13	33	5.0	37	13	0	0	4	0	2	6	16
56	79	2	1	688	662	26	3.9	65	10.4	2.67	17	30	57	34	60	11.5	45	24	0	1	8	0	3	12	27
57	80	2	4	789	718	71	9.9	89	12.7	4.00	20	51	43	14	33	6.2	39	15	1	4	0	1	1	7	18
58	81	2	3	762	740	22	3.0	21	2.8	2.67	23	26	42	11	26	5.2	36	13	0	0	8	0	3	11	31
59	82	2	2	726	725	1	0.1	49	7.2	2.67	4	29	29	1	3	10.6	28	2	0	0	2	0	0	2	7
60	84	2	10	927	938	-11	-1.2	18	2.0	4.00	0	29	18	4	22	10.9	16	3	0	1	3	0	1	5	31
61	86	2	1	717	719	-2	-0.3	-21	-2.8	4.00	13	37	23	2	9	7.0	19	2	0	1	2	0	1	4	21
62	90	2	4	773	799	-26	-3.3	-8	-1.0	1.60	5	10	20	12	60	14.2	20	11	0	1	2	0	2	5	25
63	96	2	4	791	767	24	3.1	36	4.8	4.00	21	33	29	15	52	3.2	24	16	0	0	4	0	1	5	21
64	98	2	1	692	698	-6	-0.9	15	2.2	2.67	16	15	39	18	46	10.9	35	19	0	2	3	0	1	6	17
65	99	2	4	775	758	17	2.2	37	5.0	4.00	20	44	21	14	67	12.3	18	12	1	0	2	0	1	4	22
66	101	2	5	800	776	24	3.1	88	12.4	4.00	18	24	41	23	56	15.2	36	20	0	0	4	0	2	6	17
67	102	2	5	796	772	24	3.1	23	3.0	4.00	38	57	16	10	63	10.2	14	7	0	1	1	0	1	3	21
68	104	2	1	697	716	-19	-2.7	21	3.1	4.00	13	33	64	30	47	6.3	58	30	0	2	9	0	0	11	19
69	105	2	3	763	722	41	5.7	93	13.9	4.00	23	54	44	28	64	3.2	39	22	3	0	4	0	5	12	31
70	106	2	3	754	736	18	2.4	63	9.1	4.00	11	25	47	22	47	8.2	41	22	0	3	3	0	1	7	17
71	108	2	4	780	780	0	0.0	25	3.3	2.67	5	8	22	9	41	7.2	21	9	0	0	2	0	3	5	24
72	111	2	5	796	791	5	0.6	40	5.3	4.00	26	17	19	12	63	14.3	18	10	0	0	2	0	0	2	11
73	112	2	1	712	693	19	2.7	-18	-2.5	2.67	6	42	17	9	53	8.2	17	9	0	0	3	0	0	3	18
74	113	2	2	739	757	-18	-2.4	-3	-0.4	2.00	14	18	28	14	50	6.2	25	13	0	0	9	0	0	9	36
75	114	2	9	908	896	12	1.3	15	1.7	1.60	0	35	14	7	50	4.8	15	5	0	0	1	0	0	1	7
76	115	2	6	825	815	10	1.2	30	3.8	8.00	8	29	25	11	44	3.8	24	9	1	2	1	1	0	5	21
77	116	2	2	723	730	-7	-1.0	46	6.8	2.00	8	26	28	15	54	11.7	24	14	0	1	2	0	0	3	13
78	117	2	1	717	700	17	2.4	61	9.3	2.67	8	12	38	19	50	12.1	33	16	0	0	6	8	3	17	52
79	119	2	2	746	727	19	2.6	53	7.6	2.67	13	27	39	13	33	10.7	36	13	0	0	1	0	3	4	11
80	123	2	3	756	774	-18	-2.3	7	0.9	4.00	10	22	40	12	30	10.7	37	11	0	0	6	0	1	7	19
81	124	2	3	766	750	16	2.1	89	13.1	2.67	3	21	39	18	46	7.3	34	17	0	1	4	0	1	6	18
82	126	2	3	754	738	16	2.2	82	12.2	4.00	22	29	38	15	39	15.2	30	12	0	1	1	0	0	2	7
83	128	2	7	841	813	28	3.4	14	1.7	8.00	8	19	14	5	36	13.6	12	5	0	0	3	0	0	3	25
84	129	2	4	784	756	28	3.7	48	6.5	8.00	7	47	27	15	56	21.2	26	15	0	0	9	0	0	9	35
85	130	2	4	787	756	31	4.1	76	10.7	2.67	2	24	46	30	65	5.2	44	28	0	1	8	0	0	9	20
86	132	2	3	754	753	1	0.1	-15	-2.0	2.67	8	24	13	6	46	4.1	12	7	0	1	2	0	0	3	25
87	133	2	5	798	761	37	4.9	57	7.7	2.00	6	26	35	10	29	4.2	34	10	0	1	2	6	1	10	29
88	134	2	2	747	726	21	2.9	41	5.8	2.67	7	24	54	25	46	9.2	49	23	0	0	5	4	1	10	20
89	135	2	2	731	753	-22	-2.9	-31	-4.1	4.00	11	24	29	13	45	14.5	26	12	0	1	7	0	1	9	35
90	136	2	6	818	789	29	3.7	35	4.5	2.67	8	20	14	3	21	9.5	10	3	1	0	2	0	0	3	30
91	137	2	10	922	893	29	3.2	19	2.1	4.00	27	17	11	3	27	5.2	10	2	0	0	0	0	1	1	10
92	138	2	2	740	756	-16	-2.1	49	7.1	4.00	11	48	18	11	61	4.3	16	10	0	0	3	0	1	4	25
93	139	2	4	787	764	23	3.0	32	4.2	2.67	5	25	20	17	85	8.2	18	15	0	0	1	1	1	3	17
94	140	2	3	769	729	40	5.5	92	13.6	2.67	19	48	28	17	61	5.2	23	14	1	1	8	0	0	10	43
95	141	2	3	757	739	18	2.4	37	5.1	4.00	6	19	52	28	54	10.3	48	27	0	3	3	0	2	8	17
96	143	2	5	791	778	13	1.7	85	12.0	2.67	10	28	41	9	22	6.2	40	8	0	1	4	2	3	10	25
97	145	2	1	703	668	35	5.2	51	7.8	2.00	31	40	41	20	49	10.7	38	15	0	1	4	0	1	6	16

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
98	146	2	2	740	711	29	4.1	127	20.7	2.67	30	21	56	29	52	14.2	43	23	0	2	6	0	3	11	26
99	149	2	2	724	741	-17	-2.3	-13	0.0	4.00	9	30	43	21	49	14.1	40	20	0	2	8	0	1	11	28
100	151	2	5	798	775	23	3.0	68	9.3	4.00	22	24	23	18	78	11.7	18	15	0	0	2	0	0	2	11
101	204	5	1	686	628	58	9.2	66	10.6	8.00	25	39	52	18	35	12.3	49	15	3	0	5	13	6	27	55
102	205	5	2	726	722	4	0.6	12	1.7	2.00	32	31	30	1	3	7.0	21	1	2	0	2	1	5	10	48
103	206	5	1	660	659	1	0.2	-21	-3.1	4.00	26	59	32	13	41	8.9	29	13	0	0	3	3	0	6	21
104	207	5	1	659	638	21	3.3	-20	-2.9	4.00	31	58	18	13	72	5.2	13	9	0	3	3	0	0	6	46
105	208	5	3	763	773	-10	-1.3	96	14.4	1.60	19	41	27	0	0	4.1	23	1	0	0	0	2	0	2	9
106	218	1	10	979	978	1	0.1	8	0.8	4.00	4	22	27	11	41	4.1	27	11	1	0	4	0	1	6	22
107	229	5	1	658	669	-11	-1.6	-39	-5.6	1.60	40	25	15	10	67	14.1	16	7	0	1	2	1	1	5	31
108	240	5	2	728	708	20	2.8	28	4.0	4.00	5	46	21	12	57	4.3	20	12	0	6	1	1	1	9	45
109	242	5	1	706	688	18	2.6	-15	-2.1	2.67	19	47	33	25	76	4.2	33	22	0	0	7	0	4	11	33
110	247	2	6	829	843	-14	-1.7	16	2.0	2.67	24	41	25	13	52	3.2	19	11	0	2	1	0	2	5	26
111	249	5	1	710	653	57	8.7	66	10.2	2.67	17	47	30	0	0	4.2	27	1	0	0	5	6	0	11	41
112	253	5	1	634	624	10	1.6	25	4.1	1.60	32	46	49	5	10	9.7	36	4	0	0	6	2	0	8	22
113	260	5	1	710	716	-6	-0.8	-6	-0.8	4.00	13	44	27	16	59	10.0	25	13	0	1	1	0	1	3	12
114	262	5	1	623	622	1	0.2	-10	-1.6	1.14	20	49	26	10	38	5.2	21	8	2	1	2	0	1	6	29
115	285	5	1	721	676	45	6.7	55	8.3	2.67	21	50	20	11	55	4.3	19	11	0	1	2	0	1	4	21
116	308	5	2	739	716	23	3.2	47	6.8	8.00	12	21	27	14	52	9.6	23	12	2	0	3	0	1	6	26
117	315	5	1	687	716	-29	-4.1	8	1.2	2.67	17	62	24	14	58	5.9	19	10	0	2	6	1	1	10	53
118	317	5	1	600	611	-11	-1.8	24	4.2	2.67	22	40	54	20	37	4.2	39	18	2	2	6	0	3	13	33
119	318	5	1	660	611	49	8.0	57	9.5	2.67	14	49	39	35	90	4.2	35	33	0	1	9	0	6	16	46
120	321	1	5	803	764	39	5.1	55	7.4	2.67	13	28	24	14	58	7.2	22	14	0	2	2	0	3	7	32
121	322	1	8	868	862	6	0.7	20	2.4	8.00	13	29	23	8	35	12.2	21	7	0	0	4	0	0	4	19
122	324	1	8	869	851	18	2.1	46	5.6	1.14	5	33	20	19	95	10.2	19	19	0	0	2	0	0	2	11
123	326	1	4	784	792	-8	-1.0	65	9.0	2.67	14	31	29	11	38	8.2	26	10	1	0	1	0	1	3	12
124	327	1	3	766	738	28	3.8	47	6.5	2.67	12	29	43	24	56	14.2	38	18	3	2	5	0	1	11	29
125	328	1	2	735	734	1	0.1	18	2.5	1.60	14	27	31	20	65	8.1	29	19	1	0	4	0	1	6	21
126	329	1	9	912	896	16	1.8	27	3.1	2.00	0	17	25	5	20	5.1	25	4	0	1	3	0	0	4	16
127	331	1	6	817	797	20	2.5	43	5.6	2.67	9	25	24	8	33	12.6	21	9	0	0	3	0	1	4	19
128	332	1	3	770	735	35	4.8	62	8.8	4.00	22	26	23	2	9	14.0	22	4	0	2	2	0	1	5	23
129	333	1	4	780	754	26	3.4	35	4.7	2.00	25	29	16	7	44	6.2	13	5	0	0	1	0	2	3	23
130	334	1	4	773	685	88	12.8	82	11.9	4.00	16	15	38	27	71	8.2	35	26	0	3	2	0	1	6	17
131	335	1	8	880	855	25	2.9	60	7.3	4.00	5	36	20	9	45	6.2	18	8	0	0	3	0	1	4	22
132	336	1	7	835	802	33	4.1	98	13.3	8.00	23	23	32	11	34	3.2	30	9	0	0	3	0	1	4	13
133	338	1	8	879	873	6	0.7	44	5.3	4.00	15	32	20	11	55	7.1	19	10	0	0	1	0	1	2	11
134	339	1	7	841	826	15	1.8	6	0.7	8.00	19	29	28	4	14	13.2	25	3	0	0	3	2	1	6	24
135	340	1	4	786	757	29	3.8	19	2.5	1.33	22	17	23	8	35	4.2	18	7	0	0	1	0	1	2	11
136	341	1	2	732	709	23	3.2	48	7.0	8.00	15	26	44	15	34	15.0	32	12	0	0	4	0	3	7	22
137	342	1	3	752	750	2	0.3	34	4.7	4.00	7	18	44	16	36	9.2	39	16	0	0	6	0	0	6	15
138	344	1	6	812	813	-1	-0.1	-2	-0.2	2.67	12	15	34	19	56	8.2	29	16	0	3	1	0	1	5	17
139	345	1	6	812	778	34	4.4	45	5.9	2.67	7	20	55	29	53	10.2	51	28	0	1	8	0	3	12	24
140	348	1	10	930	912	18	2.0	28	3.1	2.67	8	25	39	8	21	4.3	39	9	0	0	4	0	5	9	23
141	349	1	10	940	928	12	1.3	23	2.5	4.00	22	18	33	6	18	4.1	28	7	0	0	1	0	0	1	4
142	350	1	8	863	843	20	2.4	38	4.6	2.67	4	29	27	12	44	6.7	24	11	0	1	3	0	1	5	21
143	351	1	4	775	717	58	8.1	67	9.5	1.60	27	19	39	19	49	13.6	28	15	0	3	4	0	0	7	25
144	352	1	8	855	802	53	6.6	40	4.9	2.67	25	16	16	6	38	5.2	15	7	0	0	3	0	3	6	40
145	355	1	3	762	724	38	5.2	8	1.1	2.67	10	34	31	18	58	7.8	29	16	1	0	5	1	0	7	24
146	356	1	7	835	753	82	10.9	125	17.6	2.00	18	30	41	15	37	8.4	34	12	0	0	4	1	2	7	21
147	357	1	9	910	893	17	1.9	28	3.2	4.00	10	19	29	13	45	4.3	28	11	0	0	2	0	1	3	11
148	358	1	4	784	771	13	1.7	66	9.2	4.00	4	45	28	16	57	3.7	25	13	0	0	3	0	2	5	20
149	361	1	7	836	837	-1	-0.1	-24	-2.8	4.00	4	8	25	14	56	5.2	22	11	0	0	1	0	1	2	9
150	362	1	9	900	871	29	3.3	41	4.8	8.00	9	20	22	11	50	14.9	20	9	1	0	1	0	1	3	15

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
151	363	1	7	832	845	-13	-1.5	-3	-0.4	4.00	13	19	24	11	46	10.0	22	11	0	1	2	0	2	5	23
152	364	1	9	893	881	12	1.4	34	4.0	2.67	22	30	33	12	36	6.1	29	14	0	1	5	0	1	7	24
153	365	1	7	835	768	67	8.7	116	16.1	2.00	6	29	37	24	65	12.2	34	23	0	0	2	0	4	6	18
154	366	1	3	759	734	25	3.4	22	3.0	2.67	13	21	31	13	42	7.0	26	12	0	2	4	0	3	9	35
155	367	1	9	889	873	16	1.8	28	3.3	1.60	22	15	23	12	52	6.1	21	10	1	0	3	0	0	4	19
156	368	1	7	846	836	10	1.2	8	1.0	4.00	5	29	20	11	55	6.2	18	11	1	0	2	0	1	4	22
157	370	1	10	936	916	20	2.2	42	4.7	4.00	8	28	24	13	54	5.1	24	13	0	0	1	0	1	2	8
158	371	1	6	813	805	8	1.0	61	8.1	2.67	23	35	40	24	60	4.3	39	17	0	0	4	1	4	9	23
159	373	1	4	775	708	67	9.5	71	10.1	8.00	12	25	44	20	45	16.7	39	21	0	0	2	0	3	5	13
160	375	1	6	824	803	21	2.6	26	3.3	2.67	9	47	23	0	0	7.2	22	0	0	0	1	0	1	2	9
161	376	1	5	794	767	27	3.5	43	5.7	4.00	14	23	22	3	14	12.2	20	2	0	1	2	0	0	3	15
162	377	1	5	798	801	-3	-0.4	54	7.3	4.00	19	25	21	4	19	10.5	20	3	0	0	4	0	2	6	30
163	378	1	7	850	837	13	1.6	8	1.0	2.67	30	31	27	7	26	7.5	22	5	0	0	2	0	2	4	18
164	379	1	6	821	802	19	2.4	-3	-0.4	4.00	14	35	30	16	53	7.2	26	14	2	0	5	0	0	7	27
165	380	1	2	742	725	17	2.3	39	5.5	2.67	12	26	26	18	69	7.2	24	16	0	0	1	1	1	3	13
166	381	1	5	799	792	7	0.9	21	2.7	1.60	12	21	25	14	56	7.5	24	14	1	1	3	0	0	5	21
167	383	1	4	776	741	35	4.7	37	5.0	8.00	3	31	35	10	29	28.3	35	10	0	0	5	11	1	17	49
168	384	1	3	751	744	7	0.9	60	8.7	2.00	15	30	42	8	19	7.2	40	6	1	0	3	0	1	5	13
169	386	1	9	890	889	1	0.1	7	0.8	4.00	15	32	21	17	81	16.2	21	14	0	1	2	0	1	4	19
170	387	1	7	843	819	24	2.9	61	7.8	2.00	13	29	30	14	47	4.3	26	14	0	0	3	0	1	4	15
171	388	1	3	764	814	-50	-6.1	0	0.0	4.00	22	39	39	22	56	5.2	35	18	0	2	3	0	1	6	17
172	389	1	7	833	835	-2	-0.2	37	4.6	2.00	7	13	27	11	41	7.2	27	11	0	1	4	0	0	5	19
173	390	1	9	910	899	11	1.2	36	4.1	8.00	5	14	21	8	38	12.0	21	8	0	0	1	0	0	1	5
174	391	1	3	771	695	76	10.9	87	12.7	2.00	17	39	36	17	47	3.7	31	15	0	4	3	0	3	10	32
175	393	1	6	815	784	31	4.0	81	11.0	1.33	21	16	33	20	61	6.2	28	16	0	0	3	0	0	3	11
176	396	1	5	792	758	34	4.5	62	8.5	4.00	33	24	48	26	54	3.2	37	19	0	0	6	0	1	7	19
177	399	1	8	871	862	9	1.0	33	3.9	8.00	6	33	18	7	39	3.2	18	7	0	0	3	2	0	5	28
178	401	1	9	885	878	7	0.8	2	0.2	2.67	12	41	43	21	49	3.2	40	21	1	0	3	0	1	5	13
179	402	1	6	809	766	43	5.6	68	9.2	4.00	23	29	39	21	54	14.9	37	18	0	0	0	1	0	1	3
180	403	1	8	867	856	11	1.3	35	4.2	8.00	5	41	19	7	37	14.8	18	6	1	1	1	0	0	3	17
181	404	1	10	944	940	4	0.4	0	0.0	2.67	13	32	24	6	25	4.0	25	5	0	0	3	1	4	8	32
182	405	1	2	736	660	76	11.5	95	14.8	4.00	20	54	38	15	39	8.2	32	13	0	1	2	2	3	8	25
183	406	1	4	784	752	32	4.3	77	10.9	1.33	11	25	28	10	36	4.2	24	10	0	0	2	1	2	5	21
184	407	1	3	771	752	19	2.5	10	1.3	8.00	17	49	30	3	10	11.0	26	3	0	0	6	3	0	9	35
185	410	1	8	863	837	26	3.1	18	2.1	1.33	20	25	20	7	35	4.2	19	9	0	0	2	0	1	3	16
186	411	1	4	784	766	18	2.3	43	5.8	2.67	10	37	39	11	28	7.5	34	11	1	1	5	1	2	10	29
187	412	1	2	743	749	-6	-0.8	12	1.6	4.00	20	36	41	19	46	11.7	37	17	0	1	5	0	3	9	24
188	413	1	7	849	837	12	1.4	26	3.2	4.00	26	36	19	0	0	3.7	16	0	0	0	3	2	1	6	38
189	415	1	7	839	828	11	1.3	22	2.7	4.00	14	26	28	13	46	9.1	25	10	0	0	2	0	3	5	20
190	419	1	5	797	769	28	3.6	57	7.7	4.00	16	22	32	18	56	9.7	27	16	1	0	3	0	0	4	15
191	420	1	7	848	819	29	3.5	52	6.5	2.00	8	20	25	15	60	5.2	23	14	0	0	2	0	1	3	13
192	421	1	5	805	775	30	3.9	27	3.5	4.00	8	32	25	1	4	14.9	24	1	0	0	3	0	1	4	17
193	423	1	6	829	809	20	2.5	36	4.5	4.00	6	31	37	23	62	7.2	34	22	0	0	6	0	0	6	18
194	424	1	4	789	766	23	3.0	83	11.7	2.67	31	30	36	9	25	9.9	29	8	0	0	2	0	2	4	14
195	426	1	8	868	840	28	3.3	-7	-0.8	2.00	17	35	18	9	50	3.9	19	7	0	0	6	0	0	6	32
196	429	1	5	798	668	130	19.5	97	13.8	2.00	14	38	30	16	53	10.9	24	16	0	3	0	0	1	4	17
197	431	1	5	797	746	51	6.8	37	4.9	4.00	4	41	26	11	42	8.1	25	9	0	0	3	0	0	3	12
198	432	1	8	857	839	18	2.1	38	4.6	4.00	0	16	20	8	40	11.5	19	6	0	0	1	0	0	1	5
199	434	1	5	797	754	43	5.7	62	8.4	2.67	26	29	56	25	45	7.9	38	15	1	0	3	0	2	6	16
200	438	1	4	782	767	15	2.0	33	4.4	2.67	13	19	31	13	42	6.8	26	10	0	0	5	1	0	6	23
201	440	1	3	760	775	-15	-1.9	16	2.2	4.00	11	30	20	12	60	8.2	18	11	0	1	2	0	1	4	22
202	441	1	4	773	746	27	3.6	49	6.8	2.67	12	31	25	8	32	3.2	24	7	0	0	3	0	0	3	13
203	443	1	1	714	685	29	4.2	28	4.1	2.00	26	41	34	13	38	12.2	23	6	1	1	1	0	6	9	39

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
204	444	1	4	785	778	7	0.9	27	3.6	4.00	13	15	32	19	59	9.2	31	14	0	0	6	0	0	6	19
205	445	1	4	784	762	22	2.9	72	10.1	2.67	6	24	17	3	18	7.6	16	2	0	0	3	0	0	3	19
206	446	1	4	780	762	18	2.4	-5	-0.6	2.67	13	20	16	7	44	4.3	16	7	0	1	0	0	0	1	6
207	447	1	8	862	811	51	6.3	84	10.8	8.00	10	30	42	10	24	7.6	37	8	1	2	3	1	1	8	22
208	448	1	9	893	892	1	0.1	15	1.7	4.00	14	19	28	8	29	11.9	26	9	0	0	4	0	0	4	15
209	453	1	5	806	795	11	1.4	60	8.0	2.67	11	23	27	10	37	11.7	23	8	0	1	3	0	0	4	17
210	455	1	7	832	819	13	1.6	29	3.6	8.00	5	30	21	10	48	17.2	19	8	0	2	1	0	0	3	16
211	457	1	8	866	857	9	1.1	53	6.5	2.67	9	20	23	8	35	6.2	21	7	0	1	4	0	0	5	24
212	458	1	7	852	830	22	2.7	18	2.2	2.67	8	26	27	14	52	7.1	25	13	0	0	5	0	3	8	32
213	459	1	2	727	676	51	7.5	56	8.3	4.00	18	48	33	1	3	13.2	29	0	0	0	5	1	0	6	21
214	460	1	5	807	749	58	7.7	120	17.4	8.00	9	28	36	15	42	3.6	31	11	0	0	3	0	0	3	10
215	462	1	4	777	752	25	3.3	61	8.5	4.00	12	33	32	13	41	14.9	30	12	0	1	5	0	2	8	27
216	464	1	5	804	790	14	1.8	10	1.3	4.00	9	43	34	0	0	8.7	31	0	0	0	4	0	1	5	16
217	465	1	3	753	732	21	2.9	-31	-4.0	8.00	32	24	32	10	31	20.3	28	14	0	0	0	1	1	2	7
218	466	1	6	815	782	33	4.2	64	8.5	2.67	7	24	28	14	50	4.2	27	15	0	0	5	0	3	8	30
219	468	1	8	860	876	-16	-1.8	-14	-1.6	2.00	7	31	29	14	48	3.2	26	12	0	0	5	0	0	5	19
220	469	1	2	724	733	-9	-1.2	10	1.4	2.67	11	27	40	18	45	14.2	38	17	0	1	9	0	1	11	29
221	471	1	8	856	854	2	0.2	0	0.0	4.00	5	29	40	14	35	8.1	35	10	2	2	4	0	3	11	31
222	472	1	7	832	825	7	0.8	33	4.1	2.67	13	35	32	8	25	3.2	30	9	2	4	2	1	1	10	33
223	473	1	7	851	833	18	2.2	6	0.7	2.67	13	8	24	7	29	8.6	22	7	0	0	2	0	0	2	9
224	474	1	6	821	806	15	1.9	14	1.7	2.67	12	25	19	7	37	6.8	15	7	0	1	1	0	1	3	20
225	475	1	5	792	734	58	7.9	111	16.3	2.67	18	38	36	19	53	8.2	32	17	0	0	3	0	3	6	19
226	476	1	7	843	833	10	1.2	27	3.3	1.60	0	10	26	14	54	7.1	25	13	0	0	1	0	1	2	8
227	477	1	5	803	773	30	3.9	68	9.3	4.00	11	20	39	10	26	9.2	33	10	0	0	1	0	3	4	12
228	478	1	9	912	896	16	1.8	38	4.3	4.00	4	11	27	11	41	10.1	26	9	0	0	4	0	2	6	23
229	480	1	4	779	713	66	9.3	75	10.7	1.60	39	39	38	20	53	13.2	28	11	1	0	3	0	0	4	14
230	482	1	1	705	706	-1	-0.1	11	1.6	8.00	10	16	45	16	36	16.5	39	15	0	0	7	0	6	13	33
231	484	1	6	815	812	3	0.4	-8	-1.0	8.00	5	27	22	8	36	13.1	21	7	0	0	4	0	2	6	29
232	485	1	1	721	722	-1	-0.1	7	1.0	4.00	15	23	48	27	56	9.6	41	24	0	0	7	0	2	9	22
233	486	1	7	846	807	39	4.8	81	10.6	4.00	10	38	21	10	48	9.2	20	9	0	0	5	0	0	5	25
234	487	1	9	895	866	29	3.3	40	4.7	1.60	17	26	29	2	7	6.1	24	2	2	0	4	1	0	7	29
235	488	1	8	859	875	-16	-1.8	-9	-1.0	4.00	8	24	24	11	46	5.2	22	9	0	1	1	0	0	2	9
236	489	1	3	765	723	42	5.8	36	4.9	2.67	16	28	53	23	43	15.2	44	20	1	0	7	0	5	13	30
237	493	1	10	926	911	15	1.6	47	5.3	2.00	5	13	22	11	50	7.9	20	10	0	0	1	0	0	1	5
238	494	1	2	750	710	40	5.6	21	2.9	2.00	23	41	31	15	48	6.3	25	14	0	1	3	0	1	5	20
239	497	1	5	794	783	11	1.4	-17	-2.1	4.00	20	36	20	11	55	9.4	17	10	0	0	3	1	1	5	29
240	498	1	8	858	796	62	7.8	68	8.6	4.00	18	33	28	0	0	9.2	26	2	0	0	2	0	0	2	8
241	500	1	5	798	743	55	7.4	79	11.0	2.67	24	31	37	4	11	9.2	29	3	0	0	4	0	1	5	17
242	501	1	2	746	723	23	3.2	26	3.6	4.00	27	47	16	6	38	18.9	15	6	0	0	0	0	0	0	0
243	502	1	9	914	892	22	2.5	47	5.4	4.00	3	22	31	8	26	10.1	32	8	0	1	2	0	3	6	19
244	504	1	10	954	924	30	3.2	35	3.8	2.67	6	20	31	26	84	6.1	32	26	0	0	5	1	1	7	22
245	505	1	9	917	884	33	3.7	32	3.6	4.00	10	21	30	1	3	5.1	28	1	0	0	5	0	1	6	21
246	506	1	4	782	752	30	4.0	35	4.7	2.00	0	39	23	4	17	16.5	23	3	0	0	3	0	3	6	26
247	507	1	8	859	864	-5	-0.6	13	1.5	4.00	15	31	26	13	50	3.2	23	11	1	0	3	1	2	7	30
248	509	1	10	955	963	-8	-0.8	1	0.1	2.00	13	10	31	11	35	4.5	28	10	0	0	2	1	2	5	18
249	565	4	1	692	715	-23	-3.2	4	0.6	2.67	17	48	23	0	0	3.2	21	0	0	0	3	0	0	3	14
250	566	4	1	658	713	-55	-7.7	-38	-5.5	4.00	37	34	32	11	34	5.9	20	7	0	0	4	0	7	11	55
251	568	4	4	777	752	25	3.3	83	12.0	4.00	10	49	32	21	66	5.7	28	18	1	1	1	0	0	3	11
252	569	4	6	828	825	3	0.4	65	8.5	2.00	13	38	32	21	66	4.2	28	19	0	0	1	0	1	2	7
253	570	4	4	776	688	88	12.8	51	7.0	8.00	10	26	42	33	79	15.3	37	30	0	2	5	4	2	13	35
254	571	4	9	907	907	0	0.0	24	2.7	4.00	16	28	19	10	53	3.9	17	9	0	0	1	0	1	2	12
255	572	4	4	786	769	17	2.2	42	5.6	4.00	10	32	29	7	24	7.2	27	6	0	1	5	0	2	8	30
256	573	4	7	852	819	33	4.0	42	5.2	8.00	11	31	37	13	35	11.1	32	12	0	0	4	0	2	6	19

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
257	574	4	8	860	850	10	1.2	30	3.6	2.67	12	34	25	7	28	5.0	22	6	0	0	3	1	2	6	27
258	575	4	3	766	747	19	2.5	38	5.2	4.00	17	36	47	0	0	15.3	38	0	0	0	8	9	3	20	53
259	576	4	2	747	730	17	2.3	42	6.0	4.00	32	26	51	24	47	4.3	35	15	0	0	8	2	0	10	29
260	577	4	2	741	719	22	3.1	90	13.8	8.00	17	50	65	19	29	16.3	55	16	5	0	7	3	4	19	35
261	578	4	7	852	849	3	0.4	19	2.3	4.00	12	19	25	7	28	5.2	23	7	0	0	4	0	0	4	17
262	579	4	4	789	774	15	1.9	8	1.0	4.00	15	32	41	22	54	9.1	29	15	1	4	2	0	1	8	28
263	580	4	2	736	745	-9	-1.2	8	1.1	4.00	14	38	51	17	33	24.1	44	15	1	1	7	0	6	15	34
264	581	4	5	796	801	-5	-0.6	56	7.6	4.00	5	29	42	26	62	7.1	38	20	0	0	2	0	2	4	11
265	582	4	4	791	795	-4	-0.5	28	3.7	2.67	4	30	24	9	38	9.1	24	9	0	0	3	5	2	10	42
266	583	4	5	801	803	-2	-0.2	37	4.8	4.00	8	16	38	11	29	7.2	36	11	1	3	3	0	0	7	19
267	584	4	2	736	696	40	5.7	18	2.5	2.67	20	32	20	4	20	10.3	20	4	0	0	4	2	2	8	40
268	585	4	2	744	765	-21	-2.7	47	6.7	8.00	27	36	12	1	8	13.9	13	2	0	0	0	0	0	0	0
269	586	4	5	800	788	12	1.5	29	3.8	8.00	15	21	20	5	25	17.2	17	6	0	1	1	0	0	2	12
270	588	4	5	800	766	34	4.4	89	12.5	4.00	18	16	41	13	32	4.2	35	15	0	1	5	0	2	8	23
271	591	4	4	786	786	0	0.0	20	2.6	1.60	11	29	28	2	7	3.9	24	1	1	0	7	0	0	8	33
272	592	4	3	757	746	11	1.5	56	8.0	8.00	20	29	41	14	34	15.2	36	11	0	1	5	1	1	8	22
273	593	4	4	781	706	75	10.6	72	10.2	4.00	21	45	15	6	40	6.2	10	4	0	0	1	0	0	1	10
274	594	4	7	842	788	54	6.9	55	7.0	1.60	5	43	38	17	45	6.2	35	16	0	2	4	0	1	7	20
275	595	4	4	785	762	23	3.0	58	8.0	4.00	15	38	22	9	41	10.9	19	8	0	3	3	0	2	8	42
276	598	4	7	848	831	17	2.0	39	4.8	4.00	6	24	32	13	41	9.2	29	12	0	0	7	0	0	7	24
277	599	4	5	807	794	13	1.6	51	6.7	2.67	21	26	34	15	44	10.2	27	13	0	0	4	1	1	6	22
278	600	4	8	863	817	46	5.6	100	13.1	2.00	5	26	20	10	50	12.9	19	8	0	0	1	1	0	2	11
279	601	4	4	787	780	7	0.9	26	3.4	8.00	8	31	52	6	12	27.1	47	4	0	0	6	0	5	11	23
280	602	4	2	725	734	-9	-1.2	15	2.1	2.67	39	70	20	0	0	16.3	15	0	0	0	3	3	3	9	60
281	603	4	3	754	735	19	2.6	27	3.7	2.67	15	26	49	17	35	21.6	43	16	0	0	8	0	3	11	26
282	604	4	5	796	818	-22	-2.7	-26	-3.2	8.00	7	15	27	0	0	18.2	27	0	0	0	6	10	4	20	74
283	608	4	6	828	786	42	5.3	32	4.0	4.00	20	32	20	14	70	10.5	16	12	0	0	1	0	2	3	19
284	609	4	7	838	794	44	5.5	61	7.9	2.67	8	19	37	14	38	4.2	37	14	1	2	5	1	1	10	27
285	611	4	7	834	796	38	4.8	64	8.3	1.60	10	29	31	12	39	6.2	29	12	0	1	7	0	0	8	28
286	612	4	3	758	752	6	0.8	9	1.2	1.33	10	30	29	6	21	8.2	27	6	0	2	3	2	1	8	30
287	618	4	6	819	817	2	0.2	14	1.7	4.00	7	16	30	11	37	5.2	29	10	0	1	2	0	3	6	21
288	619	4	4	786	773	13	1.7	33	4.4	4.00	10	39	31	11	35	7.1	29	11	0	1	4	3	1	9	31
289	621	4	2	742	760	-18	-2.4	0	0.0	2.67	21	41	43	15	35	7.2	38	17	0	2	4	0	1	7	18
290	622	4	2	735	739	-4	-0.5	69	10.3	4.00	32	28	37	13	35	8.3	29	10	0	0	1	0	2	3	10
291	624	4	4	780	716	64	8.9	47	6.4	2.00	18	40	33	4	12	9.6	29	4	2	0	3	0	3	8	28
292	625	4	3	772	754	18	2.4	28	3.8	4.00	25	26	40	0	0	14.6	33	1	0	0	3	2	6	11	33
293	626	4	3	753	735	18	2.4	84	12.6	2.67	21	23	40	22	55	7.2	32	17	0	2	4	0	1	7	22
294	627	4	2	726	728	-2	-0.3	25	3.6	2.67	14	31	30	11	37	10.0	25	9	0	0	4	1	1	6	24
295	628	4	5	805	770	35	4.5	92	12.9	2.00	30	15	56	33	59	4.3	43	25	0	0	4	0	1	5	12
296	629	4	7	842	837	5	0.6	13	1.6	2.67	7	16	30	15	50	11.1	28	14	1	0	5	0	1	7	25
297	630	4	5	790	758	32	4.2	57	7.8	2.67	14	34	29	9	31	4.0	24	9	0	1	1	1	1	4	17
298	633	4	7	841	818	23	2.8	73	9.5	8.00	28	16	47	6	13	4.0	35	5	0	1	3	2	0	6	17
299	634	4	5	800	771	29	3.8	42	5.5	4.00	10	16	39	24	62	5.1	36	22	0	0	8	0	0	8	22
300	635	4	1	710	701	9	1.3	-14	-1.9	4.00	26	36	20	10	50	3.2	13	8	0	2	1	0	0	3	23
301	636	4	4	780	779	1	0.1	28	3.7	2.67	11	26	28	16	57	10.7	27	15	0	1	3	0	0	4	15
302	637	4	2	735	747	-12	-1.6	11	1.5	1.60	16	48	40	34	85	4.7	35	29	1	3	4	0	2	10	29
303	638	4	4	783	766	17	2.2	24	3.2	4.00	4	19	25	9	36	8.2	24	9	0	3	1	0	0	4	17
304	639	4	5	793	733	60	8.2	97	13.9	4.00	6	29	37	10	27	3.2	33	7	1	0	1	0	6	8	24
305	644	4	4	773	764	9	1.2	27	3.6	2.67	25	41	16	0	0	9.2	17	0	0	0	0	7	1	8	47
306	645	4	6	813	789	24	3.0	49	6.4	1.33	10	16	30	13	43	4.2	26	10	0	1	4	0	3	8	31
307	646	4	3	762	738	24	3.3	24	3.3	8.00	26	40	36	15	42	27.9	27	12	0	0	3	0	0	3	11
308	647	4	3	770	765	5	0.7	30	4.1	4.00	16	28	32	14	44	11.6	29	13	0	0	4	0	0	4	14
309	648	4	4	774	750	24	3.2	33	4.5	4.00	16	18	45	8	18	8.2	38	6	0	2	5	0	3	10	26

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
310	649	4	9	884	864	20	2.3	57	6.9	2.00	10	18	41	14	34	4.2	38	13	2	0	2	0	6	10	26
311	651	4	4	789	803	-14	-1.7	37	4.9	4.00	11	13	29	12	41	10.1	26	11	0	0	3	0	2	5	19
312	652	4	3	770	735	35	4.8	100	14.9	4.00	15	44	50	10	20	10.3	41	8	0	2	6	4	4	16	39
313	655	4	8	878	839	39	4.6	96	12.3	4.00	5	24	22	6	27	4.2	22	6	0	1	1	1	1	4	18
314	656	4	1	715	717	-2	-0.3	4	0.6	4.00	15	38	35	16	46	7.2	32	15	0	0	8	0	4	12	38
315	657	4	3	760	735	25	3.4	13	1.7	1.60	14	21	44	8	18	17.1	35	6	1	0	6	2	2	11	31
316	658	4	4	777	771	6	0.8	46	6.3	2.67	21	31	61	36	59	4.2	51	32	0	0	7	1	2	10	20
317	661	4	4	782	772	10	1.3	60	8.3	4.00	38	24	73	3	4	16.0	51	3	2	1	6	1	1	11	22
318	662	4	2	727	708	19	2.7	14	2.0	2.00	29	23	50	21	42	31.9	39	16	0	0	4	1	2	7	18
319	663	4	1	700	702	-2	-0.3	38	5.7	4.00	41	34	77	0	0	3.2	46	19	0	3	6	1	0	10	22
320	664	4	4	776	747	29	3.9	42	5.7	2.67	9	17	44	7	16	10.7	41	7	0	0	8	1	1	10	24
321	666	4	3	764	774	-10	-1.3	48	6.7	4.00	27	27	22	11	50	8.2	18	10	0	3	1	0	1	5	28
322	667	4	6	815	829	-14	-1.7	18	2.3	1.14	10	14	50	37	74	16.1	45	35	0	1	2	3	2	8	18
323	670	4	5	801	792	9	1.1	55	7.4	4.00	16	16	45	15	33	9.1	42	15	0	2	4	1	1	8	19
324	671	4	3	772	760	12	1.6	73	10.4	2.67	6	26	34	7	21	6.2	30	5	0	0	3	0	1	4	13
325	672	4	10	952	949	3	0.3	31	3.4	2.67	10	22	31	17	55	5.2	27	14	0	0	4	0	0	4	15
326	673	4	2	738	707	31	4.4	34	4.8	2.67	12	41	45	13	29	7.7	41	9	0	2	9	0	0	11	27
327	675	4	7	832	838	-6	-0.7	21	2.6	2.67	25	43	16	7	44	10.1	12	6	0	1	2	0	1	4	33
328	676	4	4	784	785	-1	-0.1	2	0.3	4.00	4	26	27	14	52	12.2	24	11	0	3	3	0	1	7	29
329	677	4	4	777	765	12	1.6	34	4.6	2.00	17	39	29	14	48	4.7	28	12	0	2	1	7	1	11	39
330	679	4	3	753	730	23	3.2	52	7.4	2.67	10	50	44	11	25	11.3	38	7	0	1	9	9	4	23	61
331	680	4	5	794	778	16	2.1	52	7.0	2.00	24	13	39	19	49	4.6	32	17	0	0	4	0	2	6	19
332	681	4	2	745	738	7	0.9	21	2.9	2.00	23	37	35	15	43	14.9	33	12	0	1	4	1	0	6	18
333	682	4	4	777	755	22	2.9	39	5.3	8.00	4	17	51	21	41	20.7	50	20	0	2	7	0	5	14	28
334	687	4	2	747	738	9	1.2	20	2.8	4.00	16	30	45	8	18	4.3	36	5	1	0	3	4	1	9	25
335	690	4	9	895	878	17	1.9	17	1.9	8.00	10	25	21	7	33	13.9	19	6	0	0	4	3	0	7	37
336	692	4	2	747	749	-2	-0.3	8	1.1	2.67	24	24	37	15	41	7.1	30	11	0	0	9	0	0	9	30
337	695	4	2	741	716	25	3.5	37	5.3	8.00	15	44	34	8	24	7.1	28	7	0	0	4	0	0	4	14
338	696	4	8	867	876	-9	-1.0	35	4.2	4.00	7	23	29	14	48	12.0	27	14	1	1	4	0	0	6	22
339	697	4	7	837	822	15	1.8	33	4.1	8.00	12	11	17	1	6	17.6	16	0	0	0	4	0	2	6	38
340	698	4	4	785	760	25	3.3	74	10.4	2.67	3	27	31	18	58	6.2	31	17	0	0	9	1	2	12	39
341	699	4	4	773	795	-22	-2.8	-38	-4.7	2.67	13	38	23	13	57	7.2	22	13	0	2	1	0	1	4	18
342	700	4	6	813	791	22	2.8	37	4.8	1.60	15	31	13	0	0	3.2	11	0	0	0	1	0	2	3	27
343	701	4	5	792	794	-2	-0.3	37	4.9	2.67	32	20	36	16	44	4.3	29	14	1	0	2	0	2	5	17
344	702	4	3	758	761	-3	-0.4	13	1.7	4.00	18	22	44	9	20	15.6	37	7	0	2	6	0	0	8	22
345	707	4	8	863	857	6	0.7	23	2.7	4.00	11	36	19	10	53	10.2	17	7	1	3	3	0	1	8	47
346	711	4	6	816	762	54	7.1	58	7.7	2.67	19	18	48	17	35	5.2	40	15	0	0	4	0	1	5	13
347	713	4	4	785	777	8	1.0	34	4.5	2.67	10	22	42	20	48	5.1	39	19	0	2	4	0	2	8	21
348	714	3	4	780	780	0	0.0	19	2.5	2.00	16	44	52	17	33	3.2	45	14	0	1	14	5	4	24	53
349	715	3	10	939	938	1	0.1	17	1.8	4.00	19	20	36	0	0	22.0	31	0	0	0	10	10	0	20	65
350	716	3	1	669	661	8	1.2	-5	-0.7	2.67	61	31	44	14	32	4.3	33	13	1	1	8	1	2	13	39
351	717	3	4	775	780	-5	-0.6	9	1.2	1.60	17	42	18	7	39	18.2	19	7	0	1	3	2	2	8	42
352	718	3	3	756	740	16	2.2	77	11.3	8.00	5	39	21	9	43	4.1	17	9	0	0	1	0	2	3	18
353	719	3	3	757	737	20	2.7	43	6.0	4.00	11	43	30	28	93	16.2	25	24	0	1	3	0	2	6	24
354	720	3	1	678	669	9	1.3	14	2.1	2.67	28	29	38	0	0	8.2	25	1	0	0	5	4	0	9	36
355	721	3	7	833	826	7	0.8	83	11.1	8.00	20	63	26	0	0	14.2	23	0	0	0	6	3	3	12	52
356	722	3	1	718	735	-17	-2.3	70	10.8	1.33	11	26	46	11	24	12.4	40	10	0	1	7	0	4	12	30
357	723	3	4	778	777	1	0.1	8	1.0	2.67	6	41	32	14	44	15.9	27	10	0	0	4	0	2	6	22
358	724	3	1	710	712	-2	-0.3	69	10.8	2.00	42	42	24	13	54	5.1	19	10	1	2	1	0	1	5	26
359	725	3	3	758	738	20	2.7	16	2.2	4.00	16	33	32	3	9	16.4	28	2	0	1	3	0	3	7	25
360	727	3	7	829	811	18	2.2	29	3.6	4.00	13	31	23	9	39	9.2	19	8	0	1	0	0	3	4	21
361	729	3	9	888	873	15	1.7	8	0.9	2.00	11	5	18	3	17	11.1	17	3	0	0	2	0	2	4	24
362	730	3	6	816	776	40	5.2	63	8.4	2.67	17	34	32	23	72	4.2	26	19	0	0	4	0	0	4	15

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
363	731	3	7	851	800	51	6.4	70	9.0	2.67	15	28	21	12	57	4.6	18	10	0	0	4	0	0	4	22
364	732	3	8	855	838	17	2.0	19	2.3	2.67	17	43	54	10	19	4.2	44	9	1	0	14	0	1	16	36
365	733	3	8	869	855	14	1.6	122	16.3	4.00	29	29	18	7	39	7.2	13	5	0	0	0	3	0	3	23
366	734	3	3	760	739	21	2.8	39	5.4	8.00	12	25	17	7	41	14.9	15	5	0	1	0	1	1	3	20
367	735	3	2	747	698	49	7.0	88	13.4	2.67	10	36	40	27	68	7.2	38	22	0	5	3	0	1	9	24
368	737	3	9	892	901	-9	-1.0	12	1.4	2.67	0	30	21	9	43	10.2	19	8	0	0	2	0	1	3	16
369	738	3	10	954	956	-2	-0.2	19	2.0	2.67	12	24	17	7	41	6.1	15	7	0	0	1	1	0	2	13
370	740	3	4	787	773	14	1.8	27	3.6	4.00	40	35	21	11	52	10.7	15	10	0	0	2	0	4	6	40
371	741	3	9	905	875	30	3.4	43	5.0	2.00	12	26	25	10	40	5.1	21	8	0	0	2	0	0	2	10
372	742	3	2	743	709	34	4.8	99	15.4	2.67	8	30	25	8	32	8.2	22	7	1	0	2	0	1	4	18
373	743	3	4	784	740	44	5.9	18	2.3	2.67	11	44	19	9	47	7.2	17	8	1	0	1	0	0	2	12
374	744	3	6	818	821	-3	-0.4	32	4.1	2.67	21	28	14	7	50	18.9	13	5	1	1	1	0	0	3	23
375	745	3	4	777	777	0	0.0	62	8.7	2.67	21	19	39	5	13	4.2	30	4	0	0	4	1	3	8	27
376	746	3	2	736	737	-1	-0.1	20	2.8	2.67	30	27	20	11	55	17.3	18	10	0	2	1	1	0	4	22
377	747	3	10	955	941	14	1.5	23	2.5	4.00	7	26	27	10	37	10.2	25	9	1	1	1	1	0	4	16
378	748	3	9	900	870	30	3.4	18	2.0	2.67	17	26	23	2	9	6.1	21	2	0	0	2	1	0	3	14
379	749	3	10	930	922	8	0.9	18	2.0	8.00	15	23	20	9	45	3.2	17	8	0	0	1	0	0	1	6
380	750	3	7	852	837	15	1.8	29	3.5	8.00	50	48	16	0	0	12.8	10	2	0	0	0	1	1	2	20
381	751	3	4	780	802	-22	-2.7	-5	-0.6	2.67	6	38	18	7	39	5.2	18	7	0	1	3	1	2	7	39
382	753	3	3	758	766	-8	-1.0	-13	-1.7	2.67	36	55	28	22	79	31.3	21	15	0	0	3	0	1	4	19
383	755	3	10	954	959	-5	-0.5	-1	-0.1	8.00	21	29	19	1	5	13.9	17	2	0	0	2	0	0	2	12
384	758	3	8	861	850	11	1.3	24	2.9	8.00	5	22	19	19	100	22.6	18	18	0	1	4	0	0	5	28
385	759	3	3	769	759	10	1.3	91	13.4	2.67	10	28	29	7	24	6.9	27	7	0	0	4	0	1	5	19
386	760	3	3	769	755	14	1.9	35	4.8	2.00	10	19	32	14	44	7.2	27	13	1	0	4	0	0	5	19
387	762	3	9	901	907	-6	-0.7	6	0.7	4.00	15	28	39	20	51	6.1	33	16	0	0	4	0	2	6	18
388	763	3	8	856	850	6	0.7	49	6.1	4.00	19	15	26	10	38	13.8	22	8	0	0	1	0	1	2	9
389	766	3	2	733	687	46	6.7	54	8.0	8.00	17	56	18	10	56	10.7	16	10	1	2	2	0	1	6	38
390	768	3	10	953	949	4	0.4	31	3.4	4.00	17	38	24	14	58	14.3	23	14	0	5	2	2	1	10	43
391	769	3	7	847	870	-23	-2.6	35	4.3	4.00	17	39	18	6	33	9.7	18	7	0	0	3	0	2	5	28
392	770	3	4	774	792	-18	-2.3	3	0.4	8.00	32	36	25	2	8	14.9	16	0	0	0	3	2	1	6	38
393	774	3	8	872	800	72	9.0	76	9.5	8.00	18	45	23	11	48	11.4	19	8	0	0	3	0	0	3	16
394	775	3	1	650	648	2	0.3	-24	-3.6	2.00	20	55	20	16	80	4.2	17	14	3	0	0	1	1	5	29
395	776	3	10	919	900	19	2.1	16	1.8	2.67	10	24	29	11	38	4.6	27	11	0	1	6	1	0	8	30
396	780	3	10	936	920	16	1.7	61	7.0	2.67	4	27	28	0	0	4.1	26	0	0	0	1	0	1	2	8
397	781	3	5	795	806	-11	-1.4	11	1.4	2.67	13	16	39	12	31	4.2	38	9	0	0	3	3	2	8	21
398	783	3	8	873	839	34	4.1	104	13.5	2.67	22	73	19	0	0	8.2	17	1	0	0	1	1	2	4	24
399	784	3	3	761	678	83	12.2	119	18.5	4.00	33	42	40	25	63	7.3	30	16	0	1	1	0	4	6	20
400	785	3	3	772	794	-22	-2.8	-9	-1.2	2.67	15	22	15	11	73	17.9	11	10	1	3	2	0	0	6	55
401	787	3	2	741	710	31	4.4	99	15.4	4.00	16	21	51	3	6	12.2	44	4	3	0	7	9	1	20	45
402	788	3	10	919	892	27	3.0	36	4.1	8.00	0	39	18	0	0	3.2	15	0	0	0	0	10	1	11	73
403	789	3	10	956	945	11	1.2	25	2.7	8.00	5	32	22	9	41	11.4	22	9	0	0	2	0	1	3	14
404	790	3	10	937	930	7	0.8	38	4.2	2.00	13	38	24	7	29	7.5	17	5	1	0	1	0	0	2	12
405	791	3	3	769	770	-1	-0.1	24	3.2	2.67	19	37	21	0	0	7.2	19	0	0	0	3	1	5	9	47
406	793	3	8	877	857	20	2.3	43	5.2	8.00	14	25	21	14	67	13.1	21	12	0	0	6	0	1	7	33
407	795	3	7	843	858	-15	-1.7	73	9.5	1.33	15	25	13	7	54	4.3	14	6	0	0	0	0	0	0	0
408	797	3	5	806	754	52	6.9	66	8.9	2.67	28	36	18	18	100	13.3	14	12	0	0	2	1	0	3	21
409	798	3	4	779	792	-13	-1.6	1	0.1	4.00	9	34	36	16	44	8.2	34	14	3	1	4	0	1	9	26
410	799	3	1	688	703	-15	-2.1	33	5.0	4.00	16	40	27	18	67	3.2	22	14	0	0	6	0	2	8	36
411	801	3	5	806	797	9	1.1	66	8.9	4.00	25	40	17	9	53	3.2	14	8	0	2	2	0	0	4	29
412	802	3	10	958	955	3	0.3	29	3.1	8.00	14	33	21	9	43	21.7	19	8	0	0	3	0	0	3	16
413	803	3	6	817	821	-4	-0.5	-7	-0.8	4.00	13	62	16	11	69	6.2	15	8	0	0	4	0	1	5	33
414	804	3	4	789	774	15	1.9	66	9.1	4.00	4	30	24	10	42	17.2	23	9	0	0	2	2	2	6	26
415	805	3	3	760	730	30	4.1	29	4.0	2.00	21	56	14	4	29	3.2	11	3	0	1	1	0	1	3	27

No. of Schools	Loc No.	ESC	API Rank	2011 API	2010 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
416	806	3	3	758	747	11	1.5	19	2.6	4.00	16	29	32	11	34	8.2	25	8	1	2	2	1	1	7	28
417	810	3	4	783	817	-34	-4.2	-24	-3.0	4.00	5	29	19	6	32	10.6	17	6	0	0	1	1	0	2	12
418	811	3	3	765	763	2	0.3	42	5.8	2.67	21	30	21	13	62	4.3	18	13	0	0	3	0	2	5	28
419	812	3	1	708	723	-15	-2.1	3	0.4	4.00	35	43	22	17	77	30.7	16	14	0	1	2	0	2	5	31
420	813	3	10	937	918	19	2.1	38	4.2	2.00	7	41	14	4	29	5.1	11	1	0	0	2	0	0	2	18
421	815	3	7	845	820	25	3.0	81	10.6	2.67	38	31	14	8	57	4.6	9	5	0	0	2	0	1	3	33
422	816	3	8	855	819	36	4.4	54	6.7	4.00	0	31	13	7	54	18.2	12	7	0	1	0	0	0	1	8
423	818	3	2	741	758	-17	-2.2	25	3.5	2.00	11	17	27	6	22	16.3	26	8	0	1	6	0	1	8	31
424	819	3	2	732	752	-20	-2.7	-9	-1.2	2.67	20	31	20	11	55	3.2	19	9	1	0	2	0	3	6	32
425	820	3	5	808	741	67	9.0	84	11.6	2.67	15	21	20	5	25	6.2	17	5	0	2	2	1	1	6	35
426	821	3	10	963	963	0	0.0	15	1.6	4.00	23	35	31	10	32	6.1	25	12	0	3	2	0	1	6	24
427	823	3	3	767	734	33	4.5	70	10.0	4.00	20	43	41	26	63	14.0	34	23	1	0	2	0	4	7	21
428	824	3	1	705	635	70	11.0	51	7.8	2.67	51	43	38	7	18	4.2	32	2	0	0	6	2	5	13	41
429	825	3	9	905	854	51	6.0	89	10.9	1.60	24	33	18	7	39	6.2	15	6	0	0	2	1	0	3	20
430	827	3	2	739	644	95	14.8	90	13.9	2.67	22	48	39	26	67	13.2	25	16	0	3	6	0	1	10	40
431	829	3	4	786	769	17	2.2	-9	-1.1	0.00	13	15	23	10	43	9.1	21	10	0	0	1	0	0	1	5
432	831	3	10	945	928	17	1.8	43	4.8	2.67	5	28	38	0	0	6.2	32	1	0	0	0	21	0	21	66
433	832	3	3	758	758	0	0.0	33	4.6	8.00	25	47	16	7	44	14.2	13	4	0	0	1	0	0	1	8
434	833	3	6	819	802	17	2.1	38	4.9	8.00	8	38	24	23	96	9.7	23	21	0	0	0	0	2	2	9
435	834	3	5	807	806	1	0.1	7	0.9	4.00	2	23	49	22	45	16.2	45	22	0	0	7	1	3	11	24
436	835	3	5	797	783	14	1.8	18	2.3	4.00	14	41	30	16	53	11.2	25	13	0	0	4	3	2	9	36
437	836	3	10	975	973	2	0.2	17	1.8	4.00	17	30	23	10	43	7.1	17	7	0	1	3	0	0	4	24
			ELEMENTARY							**3.67**	**15**	**30**	**13,357**	**5,315**	**40**	**9.5**	**11,711**	**4,705**	**111**	**281**	**1,515**	**331**	**584**	**2,822**	**24**
			DISTRICT TOTAL							**3.92**	**17%**	**33%**	**33,634**	**11,632**	**35%**	**9.1**	**25,511**	**10,197**	**341**	**894**	**3,302**	**1,097**	**1,515**	**7,149**	**21%**

Prepared by Personnel Research & Analysis

IC:PRA_DATA/IC/LEAD DATA/De-Identify- QA 2012-13 and 2013-14 with G%:12-13

APPENDIX C

LEAD Data: 2013-14 De-Identified Elementary School Data

Los Angeles Unified School District

Human Resources Division

September 2013

QA

A leader's Evaluation and Analysis Development (LEAD) Tool

School Profile and LEAD Indicators for Schools

Elementary Schools

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
1	1	2	3	758	740	18	2.4	53	7.5	2.67	15	40	38	20	53	3.4	35	19	2	1	2	0	0	5	14
2	2	2	2	754	751	3	0.4	14	1.9	4.00	9	29	39	17	44	7.4	33	16	1	3	7	2	0	13	39
3	3	2	4	779	771	8	1.0	62	8.6	4.00	13	24	33	7	21	4.4	28	6	0	0	5	1	1	7	25
4	4	2	2	734	716	18	2.5	62	9.3	2.67	6	18	40	20	50	8.3	37	19	0	1	4	0	1	6	16
5	5	2	2	747	756	-9	-1.2	38	5.4	4.00	5	32	22	5	23	14.2	20	4	0	1	6	0	0	7	35
6	6	2	1	708	687	21	3.1	27	4.0	4.00	11	31	43	15	35	11.3	37	14	0	1	2	0	2	5	14
7	7	2	5	811	791	20	2.5	15	1.9	2.00	8	14	51	16	31	1.4	48	16	1	2	6	0	3	12	25
8	10	2	6	830	787	43	5.5	59	7.7	1.33	13	24	17	0	0	14.3	13	0	0	0	2	5	2	9	69
9	11	2	3	759	784	-25	-3.2	-9	-1.2	1.33	7	25	31	14	45	1.2	28	14	0	0	3	0	6	9	32
10	12	2	2	729	739	-10	-1.4	-10	-1.4	2.00	6	32	37	17	46	12.4	33	14	0	0	4	0	3	7	21
11	13	2	6	833	824	9	1.1	13	1.6	8.00	0	14	23	10	43	31.9	22	10	0	0	2	0	1	3	14
12	15	2	4	780	772	8	1.0	28	3.7	2.00	14	38	8	1	13	4.4	7	1	0	0	2	1	0	3	43
13	16	2	5	814	785	29	3.7	62	8.2	1.60	0	27	16	5	31	0.8	17	5	1	0	2	0	1	4	24
14	19	2	3	768	760	8	1.1	61	8.6	4.00	5	22	44	10	23	1.9	40	11	0	1	3	1	8	13	33
15	20	2	5	809	775	34	4.4	81	11.1	2.67	0	30	20	12	60	0.0	18	11	0	1	0	0	1	2	11
16	21	2	6	818	797	21	2.6	75	10.1	2.67	9	27	24	7	29	2.0	22	6	0	0	4	0	3	7	32
17	22	2	2	732	706	26	3.7	24	3.4	4.00	8	26	44	13	30	7.4	40	12	0	0	5	4	0	9	23
18	26	2	2	751	769	-18	-2.3	53	7.6	4.00	5	33	24	6	25	8.8	21	5	0	0	3	0	0	3	14
19	27	2	1	715	696	19	2.7	25	3.6	2.67	11	32	21	10	48	15.8	17	11	3	0	1	0	0	4	24
20	29	2	4	782	780	2	0.3	8	1.0	4.00	8	28	29	9	31	17.1	25	8	0	1	4	2	2	9	36
21	31	2	1	706	694	12	1.7	-21	-2.9	2.67	9	25	25	8	32	1.4	20	7	0	1	2	6	0	9	45
22	32	2	8	872	867	5	0.6	47	5.7	2.67	22	33	40	8	20	8.9	28	7	0	0	2	2	1	5	18
23	34	2	7	852	862	-10	-1.2	37	4.5	8.00	12	32	28	18	64	16.8	25	15	0	1	3	3	0	7	28
24	37	2	3	761	766	-5	-0.7	3	0.4	2.67	0	13	17	7	41	11.3	16	7	0	0	4	0	0	4	25
25	38	2	8	874	892	-18	-2.0	10	1.2	1.75	0	26	27	17	63	5.1	30	19	0	0	2	0	2	4	13
26	39	2	6	835	782	53	6.8	115	16.0	1.33	13	35	18	7	39	2.5	16	7	0	0	4	1	0	5	31
27	40	2	1	725	708	17	2.4	22	3.1	2.00	0	17	24	6	25	9.4	21	7	0	1	5	0	2	8	38
28	41	2	5	801	795	6	0.8	27	3.5	4.00	5	35	23	14	61	6.4	22	12	1	0	3	0	0	4	18
29	42	2	7	844	818	26	3.2	3	0.4	2.67	0	11	8	3	38	8.4	8	3	0	0	1	0	1	2	25
30	43	2	7	848	861	-13	-1.5	3	0.4	4.00	3	18	40	20	50	13.2	34	17	0	0	6	0	1	7	21
31	44	2	7	859	849	10	1.2	18	2.1	2.67	0	6	18	9	50	6.1	17	8	0	1	3	0	0	4	24
32	45	2	6	825	801	24	3.0	82	11.1	1.33	15	38	29	14	48	4.3	29	12	0	1	2	0	3	6	21
33	46	2	9	900	896	4	0.4	10	1.1	4.00	4	23	24	3	13	26.9	24	4	0	0	0	6	1	7	29
34	47	2	8	885	852	33	3.9	98	12.4	4.00	13	24	17	7	41	6.4	15	7	0	0	0	0	1	1	7
35	51	2	8	874	851	23	2.7	30	3.6	2.00	17	35	44	20	45	0.4	38	19	0	0	3	0	4	7	18
36	53	2	2	742	702	40	5.7	58	8.5	2.67	12	25	57	20	35	1.4	47	18	0	0	6	0	5	11	23
37	54	2	5	811	784	27	3.4	61	8.1	2.67	21	32	22	10	45	5.3	19	9	0	1	2	0	0	3	16
38	56	2	6	825	808	17	2.1	10	1.2	4.00	0	36	13	0	0	0.1	12	0	0	0	1	0	0	1	8
39	57	2	1	699	681	18	2.6	29	4.3	8.00	6	30	38	20	53	12.6	35	19	0	1	3	0	3	7	20
40	59	2	2	728	738	-10	-1.4	19	2.7	4.00	5	20	47	19	40	6.4	40	19	0	0	9	0	1	10	25
41	60	2	3	759	710	49	6.9	58	8.3	4.00	11	27	49	1	2	8.8	43	1	0	0	7	2	4	13	30
42	61	2	1	725	712	13	1.8	42	6.2	8.00	10	26	34	11	32	16.2	31	10	0	1	6	6	0	13	42

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
43	62	2	2	741	741	0	0.0	82	12.4	2.67	14	41	24	10	42	5.4	18	9	0	1	3	2	0	6	33
44	63	2	4	790	760	30	3.9	52	7.0	2.67	9	26	63	15	24	4.4	55	13	0	1	8	4	2	15	27
45	64	2	7	848	823	25	3.0	106	14.3	2.33	15	35	37	16	43	3.3	37	13	1	2	3	1	2	9	24
46	65	2	9	915	899	16	1.8	26	2.9	4.00	0	11	23	10	43	7.5	21	10	0	0	2	1	1	4	19
47	67	2	4	792	778	14	1.8	49	6.6	1.33	12	24	36	11	31	4.4	32	11	1	0	4	2	2	9	28
48	68	2	2	748	736	12	1.6	-17	-2.2	1.00	14	23	30	13	43	9.1	24	10	1	0	3	0	1	5	21
49	70	2	6	834	815	19	2.3	24	3.0	2.67	22	40	20	5	25	10.7	15	5	0	0	2	0	1	3	20
50	71	2	2	754	737	17	2.3	1	0.1	2.67	0	13	31	17	55	3.4	28	16	0	0	4	1	0	5	18
51	73	2	4	795	767	28	3.7	66	9.1	1.60	14	24	24	8	33	2.5	21	8	0	0	2	0	2	4	19
52	74	2	1	722	723	-1	-0.1	-3	-0.4	2.67	9	31	38	9	24	2.8	31	10	0	1	4	0	0	5	16
53	75	2	1	705	723	-18	-2.5	27	4.0	2.67	4	17	28	3	11	8.8	24	1	0	0	4	0	1	5	21
54	76	2	3	771	764	7	0.9	70	10.0	1.60	17	43	19	9	47	1.2	16	8	0	0	6	0	0	6	38
55	77	2	6	822	809	13	1.6	46	5.9	2.00	11	21	40	17	43	3.2	36	18	0	0	6	1	2	9	25
56	79	2	1	695	687	8	1.2	57	8.9	4.00	17	37	50	19	38	9.8	40	13	0	0	11	1	0	12	30
57	80	2	4	786	788	-2	-0.3	86	12.3	4.00	8	37	44	17	39	4.4	38	16	1	2	1	0	1	5	13
58	81	2	3	762	762	0	0.0	15	2.0	4.00	5	36	42	22	52	3.4	36	18	0	0	6	0	1	7	19
59	82	2	2	736	726	10	1.4	39	5.6	2.67	7	17	30	10	33	8.8	24	10	0	1	1	0	1	3	13
60	84	2	10	950	927	23	2.5	33	3.6	2.67	6	22	18	13	72	1.1	19	11	0	1	2	0	3	6	32
61	86	2	2	742	717	25	3.5	31	4.4	4.00	5	27	22	5	23	5.2	20	5	0	0	3	0	2	5	25
62	90	2	5	814	773	41	5.3	8	1.0	1.60	5	10	22	9	41	12.4	21	9	0	2	2	0	0	4	19
63	96	2	4	780	790	-10	-1.3	7	0.9	2.67	9	29	26	10	38	1.4	23	11	0	1	3	0	0	4	17
64	98	2	2	736	693	43	6.2	43	6.2	2.67	9	21	36	16	44	9.1	29	15	0	1	4	0	1	6	21
65	99	2	2	753	776	-23	-3.0	22	3.0	4.00	6	41	21	9	43	10.5	18	8	0	0	2	0	2	4	22
66	101	2	4	797	802	-5	-0.6	42	5.6	2.00	8	28	40	17	43	0.3	38	16	1	0	4	0	3	8	21
67	102	2	5	813	796	17	2.1	28	3.6	8.00	29	58	16	12	75	8.4	16	11	0	1	2	0	1	4	25
68	104	2	1	705	697	8	1.1	20	2.9	2.67	16	33	62	24	39	4.5	50	20	0	0	4	1	2	7	14
69	105	2	2	740	763	-23	-3.0	19	2.6	4.00	16	38	42	3	7	1.4	38	3	3	0	3	1	5	12	32
70	106	2	3	764	754	10	1.3	49	6.9	4.00	7	25	44	18	41	6.4	39	16	0	0	3	0	2	5	13
71	108	2	4	795	780	15	1.9	54	7.3	2.67	5	9	24	10	42	5.4	20	9	0	0	3	0	2	5	25
72	111	2	3	769	797	-28	-3.5	22	2.9	4.00	11	36	20	0	0	0.4	17	0	0	0	3	0	1	4	24
73	112	2	1	714	712	2	0.3	16	2.3	4.00	29	35	19	5	26	6.4	19	7	0	0	1	0	1	2	11
74	113	2	2	751	739	12	1.6	-3	-0.4	2.00	8	27	27	11	41	4.4	23	10	0	0	8	0	1	9	39
75	114	2	9	907	908	-1	-0.1	9	1.0	1.60	0	8	15	6	40	0.4	16	6	0	0	3	0	0	3	19
76	115	2	6	835	825	10	1.2	33	4.1	4.00	17	31	27	9	33	2.0	24	8	0	0	1	1	1	3	13
77	116	2	2	732	723	9	1.2	48	7.0	2.00	8	19	29	4	14	9.9	24	3	0	0	5	0	0	5	21
78	117	2	2	745	719	26	3.6	46	6.6	1.60	9	29	36	16	44	10.3	31	16	0	0	4	2	4	10	32
79	119	2	2	730	746	-16	-2.1	-9	-1.2	4.00	9	24	39	23	59	8.9	33	21	0	0	3	0	3	6	18
80	123	2	4	787	757	30	4.0	41	5.5	4.00	14	32	40	13	33	8.9	34	14	0	0	6	0	1	7	21
81	124	2	2	753	766	-13	-1.7	56	8.0	4.00	6	13	40	20	50	5.5	35	19	0	1	4	0	0	5	14
82	126	2	3	775	754	21	2.8	105	15.7	4.00	13	37	35	14	40	13.4	33	13	0	0	5	4	2	11	33
83	128	2	7	849	841	8	1.0	29	3.5	8.00	0	14	14	7	50	11.8	14	7	0	0	2	0	0	2	14
84	129	2	3	777	784	-7	-0.9	26	3.5	8.00	12	39	28	11	39	4.1	25	9	0	0	5	0	1	6	24
85	130	2	5	799	786	13	1.7	91	12.8	2.67	5	11	48	17	35	6.1	44	17	0	1	8	0	0	9	20
86	132	2	4	786	756	30	4.0	-24	-3.0	2.67	0	21	13	1	8	2.3	12	1	0	1	3	0	0	4	33
87	133	2	5	815	798	17	2.1	46	6.0	2.00	15	19	35	15	43	2.4	32	15	0	0	3	3	0	6	19
88	134	2	3	758	747	11	1.5	48	6.8	2.67	8	22	55	29	53	7.5	49	28	0	2	5	0	5	12	24
89	135	2	1	719	732	-13	-1.8	-7	-1.0	2.00	12	28	28	13	46	1.2	22	12	0	0	3	0	3	6	27
90	136	2	8	863	819	44	5.4	61	7.6	2.67	8	25	14	1	7	7.7	14	1	0	1	1	0	1	3	21
91	137	2	10	922	922	0	0.0	7	0.8	4.00	10	27	12	3	25	3.4	12	3	0	0	1	1	2	4	33
92	138	2	3	778	740	38	5.1	109	16.3	4.00	19	47	18	6	33	3.5	13	5	0	2	0	0	1	3	23
93	139	2	5	803	787	16	2.0	27	3.5	2.00	0	6	21	0	0	6.4	19	1	0	0	2	1	1	4	21

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
94	140	2	2	746	769	-23	-3.0	52	7.5	2.67	5	42	24	10	42	3.4	21	10	0	3	6	0	0	9	43
95	141	2	3	762	757	5	0.7	21	2.8	8.00	15	24	53	18	34	4.4	49	20	0	0	5	0	1	6	12
96	143	2	5	807	795	12	1.5	73	10.0	2.67	5	17	43	26	60	0.1	39	24	0	0	5	0	3	8	21
97	145	2	1	711	703	8	1.1	50	7.6	1.60	8	37	42	25	60	8.9	34	22	1	0	3	0	1	5	15
98	146	2	2	731	739	-8	-1.1	97	15.3	2.67	3	31	44	17	39	12.4	38	17	0	1	5	0	3	9	24
99	149	2	3	762	725	37	5.1	24	3.3	2.67	5	24	43	22	51	12.3	39	21	0	1	4	0	1	6	15
100	151	2	5	813	798	15	1.9	86	11.8	4.00	6	37	20	1	5	9.9	18	1	0	0	4	0	0	4	22
101	204	5	1	699	686	13	1.9	62	9.7	8.00	9	41	51	13	25	12.3	47	15	0	0	7	8	6	21	45
102	205	5	2	735	726	9	1.2	30	4.3	1.60	10	34	23	2	9	5.2	22	1	1	0	2	2	1	6	27
103	206	5	1	666	661	5	0.8	8	1.2	2.67	90	94	32	20	63	0.4	28	2	0	0	0	0	0	0	0
104	207	5	1	631	657	-26	-4.0	-32	-4.8	4.00	53	81	17	7	41	3.4	15	4	0	0	1	0	0	1	7
105	208	5	4	791	764	27	3.5	69	9.6	1.60	13	26	26	0	0	2.3	27	0	0	0	0	12	1	13	48
106	218	5	10	983	979	4	0.4	2	0.2	4.00	0	11	29	11	38	2.3	28	11	2	0	2	0	0	4	14
107	229	5	1	703	656	47	7.2	-27	-3.7	1.60	20	47	16	8	50	0.3	17	8	0	0	2	0	2	4	24
108	240	5	2	755	729	26	3.6	45	6.3	4.00	0	17	23	0	0	5.4	20	0	0	0	2	5	1	8	40
109	242	5	1	707	706	1	0.1	-14	-1.9	2.67	28	42	37	14	38	2.4	32	10	0	2	3	0	0	5	16
110	247	5	6	835	829	6	0.7	1	0.1	2.00	10	30	22	11	50	1.4	20	10	0	1	3	0	1	5	25
111	249	5	2	751	710	41	5.8	96	14.7	2.67	4	33	30	0	0	2.4	32	0	0	0	2	6	1	9	28
112	253	5	1	691	637	54	8.5	88	14.7	1.60	12	49	40	14	35	7.9	32	15	0	2	1	1	3	7	22
113	260	5	2	752	710	42	5.9	26	3.6	8.00	16	26	28	13	46	0.3	22	11	0	1	2	0	0	3	14
114	262	5	1	655	624	31	5.0	1	0.2	1.00	9	32	24	14	58	3.4	22	14	4	2	2	0	1	9	41
115	285	5	3	764	719	45	6.3	96	14.3	2.67	21	39	23	9	39	5.3	16	8	0	1	1	0	1	3	19
116	308	5	1	711	738	-27	-3.7	-21	-2.9	4.00	30	35	27	5	19	7.8	23	3	0	0	2	0	0	2	9
117	315	5	1	688	689	-1	-0.1	-31	-4.3	4.00	94	91	22	0	0	0.4	19	0	0	0	0	1	0	1	5
118	317	5	1	645	599	46	7.7	56	9.5	2.00	13	36	45	22	49	2.4	40	19	3	0	4	0	2	9	23
119	318	5	1	702	659	43	6.5	113	19.2	2.67	11	22	41	17	41	2.4	34	14	0	0	5	0	7	12	35
120	321	1	4	793	804	-11	-1.4	28	3.7	2.67	18	22	24	6	25	5.4	23	7	0	0	3	0	2	5	22
121	322	1	7	849	867	-18	-2.1	-8	-0.9	8.00	10	10	22	13	59	10.4	21	12	0	1	3	0	1	5	24
122	324	1	9	900	869	31	3.6	59	7.0	1.14	11	23	20	0	0	8.4	21	0	0	0	3	0	2	5	24
123	326	1	5	802	785	17	2.2	-2	-0.2	2.67	8	32	28	17	61	6.4	24	16	0	1	4	0	1	6	25
124	327	1	4	786	768	18	2.3	64	8.9	2.67	0	15	40	18	45	12.4	40	18	3	2	3	0	3	11	28
125	328	1	2	753	735	18	2.4	43	6.1	2.00	17	30	33	16	48	6.3	30	17	1	1	6	0	1	9	30
126	329	1	10	923	912	11	1.2	28	3.1	2.00	4	4	26	15	58	4.5	24	14	0	0	3	0	1	4	17
127	331	1	7	840	817	23	2.8	59	7.6	2.67	14	23	24	7	29	10.8	23	5	0	0	1	0	1	2	9
128	332	1	2	740	772	-32	-4.1	-4	-0.5	4.00	5	14	25	9	36	12.2	24	9	0	1	3	0	0	4	17
129	333	1	2	753	782	-29	-3.7	-2	-0.3	2.67	0	31	14	9	64	4.4	13	9	0	1	1	0	1	3	23
130	334	1	2	738	773	-35	-4.5	40	5.7	2.67	11	31	39	9	23	24.3	34	7	0	3	2	2	1	8	24
131	335	1	7	856	881	-25	-2.8	30	3.6	4.00	0	0	21	10	48	4.4	20	9	0	0	1	0	2	3	15
132	336	1	5	813	835	-22	-2.6	45	5.9	4.00	8	41	27	14	52	1.4	25	13	0	0	4	0	1	5	20
133	338	1	8	877	879	-2	-0.2	6	0.7	4.00	6	12	19	8	42	5.3	20	9	0	0	2	0	0	2	10
134	339	1	8	862	841	21	2.5	23	2.7	8.00	8	35	27	6	22	11.4	26	5	0	0	4	1	1	6	23
135	340	1	5	809	786	23	2.9	34	4.4	1.33	16	29	21	11	52	2.4	18	11	0	1	1	1	1	4	22
136	341	1	1	721	732	-11	-1.5	25	3.6	8.00	3	21	36	10	28	13.2	36	10	0	3	3	0	5	11	31
137	342	1	3	757	751	6	0.8	28	3.8	4.00	13	22	44	19	43	7.4	38	20	0	0	2	0	3	5	13
138	344	1	6	828	812	16	2.0	25	3.1	2.67	3	21	32	1	3	6.4	29	1	0	0	3	0	1	4	14
139	345	1	5	808	812	-4	-0.5	19	2.4	2.67	6	20	56	24	43	8.4	51	23	0	1	8	0	3	12	24
140	348	1	10	941	930	11	1.2	29	3.2	4.00	8	16	41	23	56	4.3	42	22	0	2	5	0	3	10	24
141	349	1	10	953	940	13	1.4	35	3.8	4.00	4	29	30	20	67	2.3	30	20	0	1	3	0	0	4	13
142	350	1	8	873	863	10	1.2	53	6.5	2.67	4	13	27	12	44	4.9	26	12	0	1	4	0	1	6	23
143	351	1	4	780	776	4	0.5	48	6.6	1.60	7	30	31	14	45	11.8	32	14	0	0	3	0	2	5	16
144	352	1	7	857	855	2	0.2	44	5.4	2.67	7	35	16	8	50	3.4	17	10	0	1	2	0	3	6	35

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
145	355	1	4	791	761	30	3.9	33	4.3	2.67	4	21	31	12	39	6.0	27	12	1	1	4	0	1	7	26
146	356	1	7	845	835	10	1.2	89	11.8	2.00	6	29	38	18	47	0.3	34	18	0	0	3	0	2	5	15
147	357	1	10	928	910	18	2.0	19	2.1	2.67	4	29	29	0	0	4.9	29	0	0	0	3	3	1	7	24
148	358	1	3	775	788	-13	-1.6	14	1.8	2.67	4	8	28	12	43	1.9	26	12	0	0	3	0	5	8	31
149	361	1	7	861	836	25	3.0	24	2.9	4.00	5	13	23	13	57	3.4	22	11	0	0	2	0	1	3	14
150	362	1	9	903	899	4	0.4	34	3.9	8.00	0	11	20	8	40	13.1	24	10	0	2	3	0	4	9	38
151	363	1	7	843	833	10	1.2	17	2.1	8.00	5	21	23	9	39	8.2	23	8	0	0	4	0	1	5	22
152	364	1	9	892	889	3	0.3	13	1.5	2.67	0	28	31	10	32	4.3	32	9	0	1	3	0	1	5	16
153	365	1	6	819	835	-16	-1.9	74	9.9	2.00	6	19	39	11	28	10.4	35	11	0	0	6	0	4	10	29
154	366	1	3	779	759	20	2.6	56	7.7	2.67	12	21	30	10	33	0.4	26	9	0	3	2	0	4	9	35
155	367	1	9	899	889	10	1.1	11	1.2	2.67	10	22	22	12	55	4.3	23	11	0	0	3	0	0	3	13
156	368	1	6	827	846	-19	-2.2	-21	-2.5	4.00	6	20	20	7	35	4.4	21	7	1	0	0	0	2	3	14
157	370	1	10	950	936	14	1.5	53	5.9	4.00	4	30	24	10	42	3.3	24	10	0	1	2	0	1	4	17
158	371	1	4	797	812	-15	-1.8	38	5.0	2.67	17	31	39	21	54	4.4	36	19	1	2	5	0	1	9	25
159	373	1	3	776	774	2	0.3	66	9.3	8.00	13	21	44	20	45	13.4	36	17	0	0	3	0	5	8	22
160	375	1	6	831	824	7	0.8	20	2.5	4.00	9	29	25	12	48	0.4	23	13	0	0	1	0	1	2	9
161	376	1	4	799	793	6	0.8	23	3.0	4.00	10	23	23	15	65	10.4	21	14	0	1	1	0	0	2	10
162	377	1	4	780	798	-18	-2.3	40	5.4	8.00	10	25	23	4	17	8.7	20	5	0	0	3	1	0	4	20
163	378	1	9	895	850	45	5.3	51	6.0	2.67	5	38	24	16	67	5.7	23	16	0	1	3	0	0	4	17
164	379	1	7	837	822	15	1.8	35	4.4	4.00	20	28	29	8	28	0.3	25	9	1	1	5	0	1	8	32
165	380	1	3	775	742	33	4.4	48	6.6	4.00	4	13	27	7	26	5.4	25	6	0	0	2	0	3	5	20
166	381	1	6	829	799	30	3.8	39	4.9	2.00	14	25	25	10	40	6.3	21	11	1	1	1	0	1	4	19
167	383	1	3	768	777	-9	-1.2	22	3.0	8.00	6	11	39	8	21	26.5	34	8	0	0	3	16	1	20	59
168	384	1	4	788	752	36	4.8	87	12.4	2.00	8	26	45	14	31	5.4	36	10	0	0	4	1	3	8	22
169	386	1	8	874	890	-16	-1.8	-12	-1.4	4.00	15	37	22	9	41	14.4	21	9	0	0	5	0	2	7	33
170	387	1	7	857	843	14	1.7	49	6.1	2.00	8	21	28	11	39	4.4	25	11	0	0	3	0	1	4	16
171	388	1	1	705	765	-60	-7.8	-86	-10.9	4.00	6	41	39	17	44	3.4	40	17	0	0	7	0	2	9	23
172	389	1	6	834	833	1	0.1	21	2.6	2.67	0	10	28	14	50	5.4	27	14	1	0	3	0	1	5	19
173	390	1	9	907	910	-3	-0.3	18	2.0	8.00	5	10	22	10	45	10.2	20	10	0	0	2	2	2	6	30
174	391	1	4	784	771	13	1.7	59	8.1	1.60	25	33	35	14	40	1.9	33	15	2	0	1	0	2	5	15
175	393	1	5	814	815	-1	-0.1	69	9.3	1.33	7	31	30	14	47	4.4	28	13	1	0	4	0	2	7	25
176	396	1	5	815	792	23	2.9	64	8.5	4.00	13	46	41	17	41	1.4	35	16	0	1	5	0	2	8	23
177	399	1	9	893	871	22	2.5	69	8.4	4.00	0	11	18	2	11	1.4	17	2	0	0	3	2	1	6	35
178	401	1	9	904	885	19	2.1	25	2.8	2.00	5	19	42	21	50	1.4	40	21	0	0	1	0	2	3	8
179	402	1	5	812	811	1	0.1	49	6.4	8.00	8	33	38	17	45	13.1	36	18	0	0	1	0	2	3	8
180	403	1	8	872	867	5	0.6	39	4.7	8.00	10	16	21	3	14	0.0	23	3	0	1	2	0	0	3	13
181	404	1	10	962	944	18	1.9	29	3.1	2.67	8	24	27	23	85	0.3	24	22	0	1	1	0	3	5	21
182	405	1	3	756	736	20	2.7	77	11.3	2.67	3	23	37	24	65	6.4	34	22	0	0	5	0	3	8	24
183	406	1	6	821	786	35	4.5	74	9.9	1.33	9	25	26	13	50	2.4	26	11	0	0	4	0	1	5	19
184	407	1	3	768	771	-3	-0.4	30	4.1	8.00	7	29	28	15	54	9.2	27	14	1	1	3	6	1	12	44
185	410	1	9	894	863	31	3.6	37	4.3	1.33	11	21	21	6	29	2.4	19	6	0	0	0	1	3	4	21
186	411	1	4	780	784	-4	-0.5	33	4.4	2.67	0	23	38	14	37	6.3	36	15	1	0	5	2	1	9	25
187	412	1	3	755	743	12	1.6	25	3.4	4.00	11	35	42	23	55	9.9	36	22	1	1	3	0	3	8	22
188	413	1	8	875	849	26	3.1	38	4.5	4.00	12	45	18	10	56	1.9	18	10	0	1	2	2	2	7	39
189	415	1	6	829	840	-11	-1.3	-8	-1.0	4.00	12	29	28	15	54	7.3	25	15	0	0	3	0	1	4	16
190	419	1	5	815	797	18	2.3	68	9.1	4.00	11	37	30	13	43	7.9	25	12	0	0	1	0	0	1	4
191	420	1	6	828	848	-20	-2.4	6	0.7	2.00	4	5	25	7	28	3.4	22	5	0	0	1	0	1	2	9
192	421	1	3	764	805	-41	-5.1	-28	-3.5	4.00	13	31	26	16	62	13.1	20	13	0	0	3	0	1	4	20
193	423	1	6	832	830	2	0.2	45	5.7	4.00	6	20	38	13	34	5.4	33	11	0	0	8	0	1	9	27
194	424	1	5	800	789	11	1.4	69	9.4	2.67	0	35	29	22	76	8.1	30	21	0	0	3	0	1	4	13
195	426	1	8	872	867	5	0.6	25	2.9	2.00	6	32	19	0	0	2.1	15	0	0	0	5	0	0	5	33

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
196	429	1	5	799	799	0	0.0	94	13.4	2.00	4	31	28	8	29	9.1	23	8	2	3	0	0	3	8	35
197	431	1	4	796	798	-2	-0.3	14	1.8	2.00	0	23	28	15	54	6.3	25	15	0	0	1	0	0	1	4
198	432	1	8	862	857	5	0.6	27	3.2	4.00	11	10	21	13	62	9.7	22	14	0	0	1	0	1	2	9
199	434	1	5	817	797	20	2.5	96	13.3	4.00	8	37	42	24	57	6.1	40	21	0	0	3	0	3	6	15
200	438	1	4	782	782	0	0.0	39	5.2	4.00	0	7	29	13	45	5.0	30	13	0	0	2	0	2	4	13
201	440	1	5	812	761	51	6.7	47	6.2	4.00	0	26	20	7	35	6.4	17	8	0	0	2	0	1	3	18
202	441	1	6	822	773	49	6.3	122	17.4	2.00	9	20	26	13	50	1.4	22	14	0	0	3	0	3	6	27
203	443	1	1	687	715	-28	-3.9	-14	-2.0	2.00	4	41	27	13	48	10.4	25	13	1	0	0	0	3	4	16
204	444	1	4	794	784	10	1.3	27	3.5	4.00	6	13	33	17	52	7.4	32	18	0	0	2	0	0	2	6
205	445	1	4	797	783	14	1.8	72	9.9	2.67	6	29	19	8	42	5.8	16	8	0	0	2	0	1	3	19
206	446	1	3	778	782	-4	-0.5	-11	-1.4	2.67	25	24	18	9	50	3.4	17	7	0	0	0	0	0	0	0
207	447	1	7	848	861	-13	-1.5	41	5.1	4.00	8	14	42	23	55	5.9	43	23	0	2	7	3	0	12	28
208	448	1	9	895	893	2	0.2	-3	-0.3	4.00	0	18	27	14	52	10.1	27	14	0	0	7	2	1	10	37
209	453	1	5	807	808	-1	-0.1	39	5.1	2.67	0	19	26	12	46	9.9	26	12	0	1	2	2	2	7	27
210	455	1	6	829	831	-2	-0.2	9	1.1	8.00	5	28	21	12	57	15.4	19	12	0	0	1	0	1	2	11
211	457	1	9	905	866	39	4.5	75	9.0	4.00	5	10	22	10	45	0.4	22	9	0	0	3	0	1	4	18
212	458	1	8	866	851	15	1.8	54	6.6	2.00	8	23	27	1	4	1.2	27	3	0	1	2	0	2	5	19
213	459	1	2	731	727	4	0.6	46	6.7	2.67	7	26	32	10	31	11.4	33	11	0	0	3	4	1	8	24
214	460	1	4	789	809	-20	-2.5	91	13.1	4.00	3	14	35	20	57	1.8	33	19	0	2	3	0	2	7	21
215	462	1	4	787	777	10	1.3	51	6.9	4.00	7	26	32	16	50	13.1	30	15	0	0	3	0	2	5	17
216	464	1	5	814	807	7	0.9	10	1.2	4.00	3	17	34	10	29	6.9	32	10	0	0	4	6	2	12	38
217	465	1	2	743	752	-9	-1.2	5	0.7	8.00	4	44	32	13	41	18.5	31	14	0	1	1	1	4	7	23
218	466	1	5	805	819	-14	-1.7	56	7.5	4.00	7	21	29	9	31	3.2	26	9	0	0	9	0	3	12	46
219	468	1	9	901	864	37	4.3	-1	-0.1	1.60	4	18	27	15	56	1.4	28	15	1	0	4	0	3	8	29
220	469	1	4	792	724	68	9.4	94	13.5	4.00	0	19	41	20	49	12.4	36	20	0	2	9	0	1	12	33
221	471	1	8	869	855	14	1.6	10	1.2	4.00	14	26	38	29	76	6.3	39	28	1	0	6	0	0	7	18
222	472	1	7	844	832	12	1.4	30	3.7	2.00	17	31	32	7	22	1.4	29	6	1	0	4	6	2	13	45
223	473	1	7	837	852	-15	-1.8	-12	-1.4	2.67	23	35	25	12	48	6.8	24	14	0	0	1	0	0	1	4
224	474	1	6	828	821	7	0.9	38	4.8	2.67	13	24	18	6	33	5.0	19	5	0	1	2	0	0	3	16
225	475	1	5	810	792	18	2.3	113	16.2	4.00	7	30	34	18	53	6.4	34	18	0	0	4	0	2	6	18
226	476	1	7	858	842	16	1.9	51	6.3	2.00	4	4	28	10	36	5.3	25	10	0	0	3	0	1	4	16
227	477	1	5	806	803	3	0.4	43	5.6	4.00	6	19	37	7	19	6.4	31	6	0	0	1	4	3	8	26
228	478	1	9	919	912	7	0.8	15	1.7	8.00	12	22	28	14	50	8.3	27	13	0	0	1	0	1	2	7
229	480	1	5	800	778	22	2.8	79	10.9	1.60	8	46	29	13	45	11.4	29	14	1	1	3	0	0	5	17
230	482	1	1	723	706	17	2.4	25	3.6	8.00	5	10	46	23	50	14.7	40	20	0	2	6	0	7	15	38
231	484	1	4	792	815	-23	-2.8	-27	-3.3	8.00	5	9	23	14	61	11.3	21	14	0	0	4	0	3	7	33
232	485	1	2	730	721	9	1.2	25	3.5	4.00	5	25	44	20	45	7.8	39	16	0	1	7	0	4	12	31
233	486	1	7	840	846	-6	-0.7	44	5.5	4.00	14	32	23	11	48	7.4	22	14	0	2	4	0	0	6	27
234	487	1	9	899	896	3	0.3	19	2.2	1.60	24	42	27	12	44	4.3	24	10	1	2	2	1	3	9	38
235	488	1	7	858	859	-1	-0.1	4	0.5	4.00	4	25	25	5	20	3.4	24	5	0	0	1	0	0	1	4
236	489	1	3	773	765	8	1.0	45	6.2	2.67	11	31	48	11	23	5.2	45	14	1	2	5	0	3	11	24
237	493	1	10	931	926	5	0.5	38	4.3	2.00	0	9	21	12	57	0.4	22	12	0	0	0	0	0	0	0
238	494	1	2	737	750	-13	-1.7	16	2.2	2.00	5	32	25	10	40	4.5	27	10	0	1	1	0	2	4	15
239	497	1	7	839	794	45	5.7	40	5.0	4.00	6	33	19	5	26	7.6	20	6	0	0	3	0	2	5	25
240	498	1	8	878	858	20	2.3	75	9.3	2.67	4	28	31	21	68	7.4	27	21	0	0	1	0	0	1	4
241	500	1	4	789	798	-9	-1.1	47	6.3	2.67	18	47	31	4	13	7.4	27	5	0	1	7	0	1	9	33
242	501	1	2	752	746	6	0.8	61	8.8	4.00	7	50	17	8	47	17.1	13	6	0	0	3	0	0	3	23
243	502	1	10	931	914	17	1.9	65	7.5	8.00	9	26	34	17	50	8.3	31	14	0	0	3	0	2	5	16
244	504	1	10	965	954	11	1.2	41	4.4	2.67	6	13	33	6	18	4.3	32	6	0	0	2	0	1	3	9
245	505	1	10	929	917	12	1.3	33	3.7	4.00	7	17	29	17	59	3.3	30	18	0	0	7	0	1	8	27
246	506	1	5	806	782	24	3.1	64	8.6	2.00	0	13	26	11	42	14.7	23	11	0	1	1	0	0	2	9

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
247	507	1	8	880	859	21	2.4	14	1.6	2.67	0	19	25	6	24	1.4	24	6	3	0	1	1	2	7	29
248	509	1	10	960	955	5	0.5	-9	-0.9	2.00	14	27	29	13	45	2.7	27	14	0	0	1	0	3	4	15
249	565	4	2	732	692	40	5.8	22	3.1	2.00	37	48	22	20	91	1.4	23	17	1	3	0	0	0	4	17
250	566	4	1	670	658	12	1.8	-60	-8.2	4.00	20	52	24	13	54	4.1	21	10	1	0	3	0	3	7	33
251	568	4	5	802	779	23	3.0	88	12.4	4.00	7	15	31	6	19	3.9	27	7	0	0	3	0	0	3	11
252	569	4	6	817	828	-11	-1.3	20	2.5	2.67	3	20	32	13	41	2.4	33	12	0	0	5	0	0	5	15
253	570	4	3	761	778	-17	-2.2	44	6.2	8.00	6	22	40	6	15	0.4	41	8	1	1	4	2	2	10	24
254	571	4	9	908	907	1	0.1	13	1.5	4.00	6	28	18	9	50	2.1	17	9	0	0	1	0	0	1	6
255	572	4	6	822	786	36	4.6	70	9.3	4.00	4	18	30	12	40	5.4	26	12	0	0	3	0	3	6	23
256	573	4	7	845	851	-6	-0.7	32	3.9	8.00	11	23	38	24	63	9.3	36	24	0	0	4	0	3	7	19
257	574	4	8	870	860	10	1.2	30	3.6	2.67	0	24	25	1	4	3.2	23	1	0	0	3	2	0	5	22
258	575	4	3	774	766	8	1.0	39	5.3	4.00	14	40	40	0	0	13.5	39	1	0	0	7	13	1	21	54
259	576	4	2	733	747	-14	-1.9	21	2.9	4.00	9	33	38	0	0	4.4	37	3	1	0	8	2	5	16	43
260	577	4	3	760	742	18	2.4	86	12.8	8.00	4	26	60	27	45	15.0	55	23	3	0	5	7	7	22	40
261	578	4	8	879	852	27	3.2	29	3.4	4.00	0	20	24	15	63	3.4	24	15	0	0	2	0	0	2	8
262	579	4	5	816	788	28	3.6	38	4.9	4.00	13	28	35	22	63	7.3	37	17	2	2	3	1	1	9	24
263	580	4	2	731	735	-4	-0.5	-15	-2.0	2.00	6	24	53	25	47	0.3	50	25	1	1	8	0	4	14	28
264	581	4	6	821	796	25	3.1	74	9.9	4.00	8	18	42	24	57	5.3	41	24	0	0	8	0	2	10	24
265	582	4	6	835	790	45	5.7	52	6.6	2.67	4	20	25	13	52	0.3	23	13	0	0	2	1	4	7	30
266	583	4	7	841	801	40	5.0	71	9.2	4.00	6	17	39	9	23	5.4	36	9	1	1	4	0	0	6	17
267	584	4	3	765	738	27	3.7	36	5.0	2.00	25	44	17	7	41	8.5	12	6	0	0	2	1	0	3	25
268	585	4	5	800	744	56	7.5	79	11.0	8.00	10	27	11	10	91	12.1	18	12	0	0	1	0	1	2	11
269	586	4	6	826	800	26	3.3	65	8.5	8.00	6	25	20	13	65	15.4	19	12	0	1	1	0	1	3	16
270	588	4	4	778	801	-23	-2.9	45	6.1	4.00	11	28	39	14	36	2.4	35	13	0	1	5	0	5	11	31
271	591	4	5	802	787	15	1.9	23	3.0	2.00	13	23	25	8	32	2.1	25	10	0	1	2	0	4	7	28
272	592	4	4	797	757	40	5.3	47	6.3	2.67	3	26	39	25	64	13.4	35	23	0	2	2	0	1	5	14
273	593	4	4	787	781	6	0.8	64	8.9	2.67	0	44	13	4	31	4.4	15	4	0	0	1	2	0	3	20
274	594	4	7	851	842	9	1.1	60	7.6	1.60	3	16	38	21	55	4.4	38	21	0	1	4	0	2	7	18
275	595	4	4	779	785	-6	-0.8	39	5.3	2.67	18	40	20	16	80	1.3	20	17	1	1	3	0	4	9	45
276	598	4	7	849	848	1	0.1	44	5.5	4.00	7	16	32	8	25	7.4	32	7	0	0	4	0	6	10	31
277	599	4	3	781	807	-26	-3.2	0	0.0	4.00	0	28	33	13	39	8.4	31	13	1	1	3	1	2	8	26
278	600	4	8	876	863	13	1.5	83	10.5	2.00	0	10	22	8	36	11.1	24	8	0	0	1	0	2	3	13
279	601	4	2	732	786	-54	-6.9	-24	-3.2	8.00	7	20	50	15	30	25.3	45	14	0	1	8	0	6	15	33
280	602	4	2	753	725	28	3.9	85	12.7	2.00	15	53	16	16	100	14.5	17	16	0	0	4	0	1	5	29
281	603	4	2	753	754	-1	-0.1	11	1.5	2.67	5	25	43	0	0	19.8	42	0	0	0	8	1	2	11	26
282	604	4	7	841	796	45	5.7	43	5.4	8.00	4	4	27	10	37	22.4	25	10	0	0	4	10	3	17	68
283	608	4	5	809	827	-18	-2.2	-9	-1.1	8.00	5	21	21	0	0	8.7	21	1	0	0	1	2	3	6	29
284	609	4	7	840	839	1	0.1	45	5.7	2.67	11	22	38	8	21	2.4	37	9	0	0	5	0	3	8	22
285	611	4	6	832	834	-2	-0.2	50	6.4	2.00	0	26	29	8	28	4.4	27	8	0	0	5	4	0	9	33
286	612	4	4	789	758	31	4.1	37	4.9	1.33	7	24	30	13	43	6.4	26	12	0	3	1	6	1	11	42
287	618	4	7	843	819	24	2.9	34	4.2	4.00	7	20	33	9	27	3.4	29	8	0	0	4	0	2	6	21
288	619	4	6	824	786	38	4.8	87	11.8	2.67	10	26	32	20	63	5.3	29	18	0	0	4	0	3	7	24
289	621	4	5	800	742	58	7.8	59	8.0	2.67	13	44	42	14	33	5.4	39	12	0	0	2	2	0	4	10
290	622	4	3	775	735	40	5.4	76	10.9	4.00	12	47	29	10	34	6.4	25	11	0	1	2	0	1	4	16
291	624	4	4	790	780	10	1.3	45	6.0	1.60	11	23	30	10	33	7.8	26	9	0	0	1	0	1	2	8
292	625	4	3	774	772	2	0.3	18	2.4	2.67	12	36	36	6	17	12.8	30	6	0	0	4	2	4	10	33
293	626	4	2	741	752	-11	-1.5	61	9.0	1.33	10	26	35	4	11	0.9	34	5	0	0	7	0	3	10	29
294	627	4	2	735	732	3	0.4	22	3.1	2.67	15	28	30	0	0	8.2	28	1	0	0	6	1	2	9	32
295	628	4	6	828	805	23	2.9	100	13.7	1.60	3	33	42	21	50	2.5	41	19	0	0	4	0	2	6	15
296	629	4	6	830	842	-12	-1.4	29	3.6	2.00	4	13	30	14	47	9.3	27	12	1	0	3	0	0	4	15
297	630	4	6	816	791	25	3.2	83	11.3	2.00	4	15	28	16	57	2.2	28	15	0	1	1	1	3	6	21

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
298	633	4	7	837	841	-4	-0.5	54	6.9	4.00	12	37	36	22	61	2.2	29	18	0	0	3	1	0	4	14
299	634	4	4	794	801	-7	-0.9	35	4.6	4.00	9	13	39	12	31	3.3	34	11	0	1	5	0	2	8	24
300	635	4	1	708	710	-2	-0.3	-2	-0.3	2.67	23	43	15	3	20	1.4	14	3	0	0	3	0	3	6	43
301	636	4	3	772	780	-8	-1.0	-25	-3.1	1.33	4	24	28	12	43	1.0	26	12	0	0	8	0	3	11	42
302	637	4	3	763	733	30	4.1	-4	-0.5	1.60	8	28	41	21	51	2.9	40	22	1	0	2	1	2	6	15
303	638	4	4	798	783	15	1.9	13	1.7	2.33	13	17	26	11	42	6.4	22	11	0	0	1	1	0	2	9
304	639	4	4	787	794	-7	-0.9	51	6.9	2.67	3	24	38	5	13	1.4	35	5	1	1	1	3	4	10	29
305	644	4	4	783	773	10	1.3	56	7.7	4.00	7	31	16	14	88	7.4	16	13	0	1	0	1	1	3	19
306	645	4	6	818	813	5	0.6	4	0.5	1.33	0	13	31	12	39	2.4	31	12	0	1	4	0	5	10	32
307	646	4	4	782	761	21	2.8	24	3.2	8.00	8	39	28	11	39	10.5	28	12	0	0	2	0	1	3	11
308	647	4	3	770	770	0	0.0	12	1.6	4.00	4	24	29	4	14	9.8	26	3	0	0	4	1	0	5	19
309	648	4	4	794	775	19	2.5	66	9.1	4.00	3	25	43	17	40	6.4	37	16	0	0	5	0	0	5	14
310	649	4	9	895	885	10	1.1	35	4.1	2.00	16	33	40	15	38	2.4	39	12	2	0	4	2	4	12	31
311	651	4	6	836	789	47	6.0	37	4.6	8.00	0	20	30	12	40	8.3	27	12	0	0	5	0	1	6	22
312	652	4	4	782	770	12	1.6	87	12.5	4.00	10	26	47	10	21	8.5	37	6	0	4	4	16	2	26	70
313	655	4	8	872	878	-6	-0.7	42	5.1	4.00	14	10	25	11	44	2.4	23	11	0	1	0	3	0	4	17
314	656	4	1	725	717	8	1.1	7	1.0	4.00	6	15	36	13	36	5.4	32	12	0	0	6	1	4	11	34
315	657	4	2	743	760	-17	-2.2	-8	-1.1	1.60	8	28	39	7	18	15.3	35	8	0	0	5	3	3	11	31
316	658	4	3	763	778	-15	-1.9	11	1.5	4.00	6	34	52	18	35	2.4	47	16	0	0	6	1	4	11	23
317	661	4	5	804	782	22	2.8	45	5.9	2.67	13	48	52	7	13	14.2	43	5	0	2	5	18	1	26	60
318	662	4	1	718	728	-10	-1.4	-18	-2.4	1.33	3	33	40	9	23	7.4	38	9	0	1	4	3	3	11	29
319	663	4	1	676	700	-24	-3.4	-12	-1.7	2.67	13	49	54	6	11	1.4	42	4	0	1	8	1	3	13	31
320	664	4	2	746	776	-30	-3.9	-4	-0.5	4.00	10	24	45	15	33	8.9	40	15	0	0	6	3	0	9	23
321	666	4	4	786	766	20	2.6	47	6.4	2.67	6	36	20	10	50	6.4	21	10	1	1	2	0	3	7	33
322	667	4	6	817	815	2	0.2	-20	-2.4	1.14	2	16	51	17	33	14.3	49	18	0	3	6	1	2	12	24
323	670	4	6	819	801	18	2.2	59	7.8	4.00	2	23	45	17	38	7.3	44	15	0	0	4	1	3	8	18
324	671	4	5	802	772	30	3.9	57	7.7	2.00	3	9	34	9	26	5.4	31	10	0	0	4	0	1	5	16
325	672	4	10	947	952	-5	-0.5	6	0.6	2.67	3	14	31	12	39	3.4	32	12	0	0	4	2	0	6	19
326	673	4	2	745	737	8	1.1	36	5.1	2.67	10	18	47	12	26	0.0	42	8	0	0	6	2	1	9	21
327	675	4	7	854	832	22	2.6	61	7.7	1.33	23	38	15	9	60	8.3	15	8	0	0	3	0	2	5	33
328	676	4	5	810	784	26	3.3	45	5.9	4.00	4	9	27	11	41	12.7	26	10	0	0	4	1	3	8	31
329	677	4	4	787	774	13	1.7	63	8.7	2.00	4	25	28	12	43	2.9	27	12	1	0	0	4	2	7	26
330	679	4	2	748	753	-5	-0.7	39	5.5	4.00	7	23	47	18	38	9.5	42	16	0	1	8	5	3	17	40
331	680	4	4	778	794	-16	-2.0	-19	-2.4	2.67	3	27	37	14	38	2.8	33	13	0	0	3	0	0	3	9
332	681	4	3	763	745	18	2.4	23	3.1	2.00	6	26	34	13	38	13.1	31	12	0	0	6	0	3	9	29
333	682	4	3	776	777	-1	-0.1	31	4.2	8.00	6	13	54	23	43	18.9	48	22	0	3	4	1	6	14	29
334	687	4	3	759	747	12	1.6	-11	-1.4	4.00	13	27	43	9	21	4.5	45	8	0	2	9	6	1	18	40
335	690	4	9	893	895	-2	-0.2	0	0.0	8.00	5	24	22	13	59	12.1	21	12	0	0	2	0	1	3	14
336	692	4	3	775	747	28	3.7	32	4.3	4.00	14	44	30	13	43	5.3	24	11	0	0	7	0	2	9	38
337	695	4	2	732	741	-9	-1.2	11	1.5	4.00	14	38	31	12	39	5.3	28	13	0	1	5	1	0	7	25
338	696	4	10	921	867	54	6.2	81	9.6	4.00	4	16	29	14	48	10.2	27	14	1	0	3	0	3	7	26
339	697	4	7	848	840	8	1.0	61	7.8	8.00	13	26	17	0	0	15.8	16	0	0	0	3	7	1	11	69
340	698	4	5	802	785	17	2.2	54	7.2	4.00	3	17	34	13	38	4.4	32	13	0	2	5	0	0	7	22
341	699	4	4	788	773	15	1.9	-7	-0.9	2.67	9	39	25	11	44	0.3	23	10	1	1	2	0	1	5	22
342	700	4	5	814	813	1	0.1	52	6.8	1.33	0	15	14	10	71	1.4	12	10	0	0	1	0	1	2	17
343	701	4	3	772	792	-20	-2.5	16	2.1	4.00	8	37	27	12	44	4.4	23	11	0	0	3	0	0	3	13
344	702	4	5	805	758	47	6.2	42	5.5	8.00	11	27	40	2	5	13.9	38	3	0	0	4	1	3	8	21
345	707	4	8	872	863	9	1.0	13	1.5	8.00	11	28	20	6	30	8.4	19	5	0	0	3	0	3	6	32
346	711	4	6	817	817	0	0.0	43	5.6	2.67	8	34	44	24	55	3.4	39	24	0	3	4	0	1	8	21
347	713	4	3	774	785	-11	-1.4	-9	-1.1	4.00	3	20	41	11	27	3.4	38	10	0	0	3	0	1	4	11
348	714	3	5	807	780	27	3.5	47	6.2	1.60	16	35	51	8	16	1.4	45	10	0	1	7	8	2	18	40

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
349	715	3	10	948	939	9	1.0	22	2.4	4.00	6	28	34	19	56	20.2	32	18	0	0	10	6	0	16	50
350	716	3	1	671	668	3	0.4	23	3.5	2.67	20	62	34	13	38	2.7	38	12	1	0	6	4	0	11	29
351	717	3	3	765	775	-10	-1.3	-52	-6.4	1.60	11	40	20	9	45	16.4	18	11	1	1	1	2	2	7	39
352	718	3	1	697	760	-63	-8.3	20	3.0	4.00	6	11	20	7	35	2.3	18	8	0	0	1	0	3	4	22
353	719	3	3	765	757	8	1.1	47	6.5	4.00	0	39	32	5	16	14.4	30	6	0	1	3	0	2	6	20
354	720	3	1	693	679	14	2.1	37	5.6	4.00	10	33	35	11	31	6.4	35	11	0	0	5	4	1	10	29
355	721	3	7	849	834	15	1.8	20	2.4	2.67	13	42	27	0	0	12.4	26	2	0	0	4	8	3	15	58
356	722	3	3	761	718	43	6.0	62	8.9	1.33	5	21	47	15	32	10.6	41	16	0	1	6	3	6	16	39
357	723	3	4	789	779	10	1.3	20	2.6	2.00	15	29	30	7	23	14.1	29	6	0	0	3	1	1	5	17
358	724	3	1	685	710	-25	-3.5	37	5.7	2.00	21	63	21	17	81	3.3	25	16	0	1	2	0	1	4	16
359	725	3	3	762	756	6	0.8	75	10.9	8.00	14	20	31	8	26	14.6	29	8	0	4	4	2	2	12	41
360	727	3	8	870	832	38	4.6	46	5.6	4.00	0	32	22	4	18	0.4	21	5	0	1	2	0	5	8	38
361	729	3	9	902	888	14	1.6	24	2.7	2.00	13	17	18	0	0	9.3	16	0	0	0	2	1	0	3	19
362	730	3	5	807	815	-8	-1.0	24	3.1	2.67	7	31	32	12	38	2.4	31	11	0	3	3	0	2	8	26
363	731	3	7	839	852	-13	-1.5	52	6.6	2.67	6	20	22	5	23	2.8	18	3	0	0	2	0	1	3	17
364	732	3	7	850	855	-5	-0.6	-2	-0.2	2.67	18	37	52	16	31	2.4	45	16	2	1	9	1	4	17	38
365	733	3	8	885	869	16	1.8	137	18.3	4.00	17	57	21	9	43	5.4	21	7	0	0	2	0	0	2	10
366	734	3	4	796	760	36	4.7	41	5.4	8.00	7	28	17	7	41	13.1	15	7	0	0	1	0	3	4	27
367	735	3	2	754	744	10	1.3	107	16.5	2.00	0	19	40	16	40	5.4	41	16	0	1	5	0	2	8	20
368	737	3	9	898	892	6	0.7	-4	-0.4	4.00	5	14	21	7	33	8.4	19	7	0	0	0	0	0	0	0
369	738	3	10	971	951	20	2.1	22	2.3	2.67	6	31	17	3	18	4.3	19	4	0	0	1	0	1	2	11
370	740	3	5	816	786	30	3.8	35	4.5	4.00	13	45	17	0	0	0.2	14	1	0	0	2	2	1	5	36
371	741	3	9	897	905	-8	-0.9	20	2.3	1.60	4	16	25	0	0	0.4	25	0	0	0	3	1	2	6	24
372	742	3	4	790	743	47	6.3	113	16.7	4.00	9	25	24	12	50	6.4	21	12	2	0	4	2	2	10	48
373	743	3	4	797	784	13	1.7	18	2.3	4.00	12	42	19	8	42	5.4	18	8	0	1	2	0	1	4	22
374	744	3	7	845	818	27	3.3	62	7.9	2.00	15	43	14	4	29	1.2	15	6	0	0	1	1	0	2	13
375	745	3	3	768	777	-9	-1.2	12	1.6	2.67	13	18	36	5	14	2.4	34	5	0	1	3	0	4	8	24
376	746	3	3	769	736	33	4.5	13	1.7	2.67	5	32	21	10	48	0.1	19	10	1	0	3	0	2	6	32
377	747	3	10	957	955	2	0.2	9	0.9	8.00	4	12	27	22	81	8.4	27	23	0	0	3	0	1	4	15
378	748	3	10	926	900	26	2.9	36	4.0	2.67	9	19	23	9	39	4.3	23	9	0	2	3	3	0	8	35
379	749	3	10	963	930	33	3.5	33	3.5	4.00	0	20	20	0	0	1.4	20	0	0	0	1	0	1	2	10
380	750	3	7	840	852	-12	-1.4	13	1.6	8.00	8	65	13	4	31	11.0	16	4	0	0	2	4	1	7	44
381	751	3	6	820	779	41	5.3	35	4.5	2.67	6	17	20	5	25	0.1	18	5	0	0	3	1	1	5	28
382	753	3	3	776	758	18	2.4	-6	-0.8	1.14	14	41	23	0	0	0.9	28	1	0	0	3	0	4	7	25
383	755	3	10	975	954	21	2.2	18	1.9	8.00	11	31	19	13	68	12.1	19	13	0	0	2	1	0	3	16
384	758	3	8	871	861	10	1.2	46	5.6	4.00	21	21	21	10	48	0.3	16	9	0	1	4	1	2	8	50
385	759	3	3	777	770	7	0.9	62	8.7	2.67	7	27	31	14	45	5.2	33	17	0	0	4	0	5	9	27
386	760	3	4	782	769	13	1.7	38	5.1	2.00	15	28	30	12	40	5.4	27	12	0	1	3	0	1	5	19
387	762	3	9	913	903	10	1.1	10	1.1	4.00	3	33	35	18	51	4.3	34	17	0	0	7	0	5	12	35
388	763	3	7	845	856	-11	-1.3	9	1.1	4.00	22	44	26	17	65	12.0	24	16	0	2	1	0	1	4	17
389	766	3	2	737	735	2	0.3	55	8.1	4.00	31	55	18	9	50	8.9	17	8	0	3	1	0	1	5	29
390	768	3	10	945	953	-8	-0.8	-2	-0.2	8.00	4	36	25	17	68	12.5	24	18	1	3	2	2	2	10	42
391	769	3	8	878	850	28	3.3	16	1.9	4.00	17	13	19	5	26	7.9	18	6	0	0	3	0	0	3	17
392	770	3	4	798	775	23	3.0	28	3.6	8.00	0	38	24	22	92	13.1	22	21	0	1	1	0	4	6	27
393	774	3	8	862	872	-10	-1.1	39	4.7	8.00	5	23	22	9	41	9.6	19	8	0	0	2	0	1	3	16
394	775	3	1	672	650	22	3.4	-1	-0.1	2.00	6	41	19	6	32	2.4	18	6	2	0	1	0	1	4	22
395	776	3	9	922	919	3	0.3	-3	-0.3	2.67	7	20	28	9	32	2.8	27	9	0	0	5	0	1	6	22
396	780	3	10	928	935	-7	-0.7	23	2.5	2.67	12	18	27	7	26	2.3	32	10	0	0	2	14	0	16	50
397	781	3	5	801	795	6	0.8	14	1.8	2.67	5	21	41	9	22	2.4	41	9	0	0	5	2	2	9	22
398	783	3	8	881	873	8	0.9	166	23.2	4.00	33	53	21	12	57	8.1	18	8	0	1	1	0	0	2	11
399	784	3	4	782	761	21	2.8	110	16.4	4.00	7	39	32	15	47	5.5	30	17	0	2	3	0	3	8	27

No. of Schools	Loc No.	ESC	API Rank	2012 API	2011 API Base	API Growth 1-Year	API Growth 1-Year %	API Growth 3-Year	API Growth 3-Year %	Average years of principal duration (last 8 years)	1-Year Teacher Turnover	3-Year Teacher Turnover	Cert Staff last year (Norm Day)	Evaluations Completed in Previous Year	%	Current Principal Years of Experience	Current K-12 Teachers	Current Teachers Evaluated in Previous Year	BSE	NI	SGOT	NO EVAL	13+	LEAD indicators	LEAD indicators %
400	785	3	6	819	772	47	6.1	38	4.9	2.67	42	57	17	4	24	16.1	10	2	0	0	4	0	1	5	50
401	787	3	2	733	740	-7	-0.9	48	7.0	4.00	11	19	49	15	31	10.4	43	15	4	2	2	8	4	20	47
402	788	3	9	914	919	-5	-0.5	33	3.7	4.00	0	6	17	17	100	1.4	19	18	0	1	0	0	2	3	16
403	789	3	10	958	956	2	0.2	32	3.5	4.00	10	32	22	9	41	9.6	22	8	0	1	0	0	3	4	18
404	790	3	10	947	937	10	1.1	19	2.0	2.00	10	24	21	5	24	5.7	26	5	0	0	2	2	0	4	15
405	791	3	6	830	769	61	7.9	94	12.8	4.00	5	29	21	4	19	5.4	22	4	0	0	2	8	1	11	50
406	793	3	8	883	877	6	0.7	34	4.0	8.00	14	33	23	0	0	11.3	21	1	0	0	3	2	1	6	29
407	795	3	9	891	843	48	5.7	45	5.3	1.60	0	29	14	6	43	3.3	13	6	0	0	0	0	1	1	8
408	797	3	6	835	806	29	3.6	74	9.7	2.00	13	40	18	8	44	11.5	17	7	0	0	1	0	0	1	6
409	798	3	4	785	779	6	0.8	32	4.2	4.00	12	22	38	26	68	0.3	33	24	2	3	5	0	3	13	39
410	799	3	1	717	689	28	4.1	40	5.9	4.00	0	23	25	11	44	1.4	23	9	0	0	7	0	2	9	39
411	801	3	4	784	808	-24	-3.0	-2	-0.3	2.67	7	35	17	7	41	1.4	15	6	0	1	1	0	1	3	20
412	802	3	10	963	958	5	0.5	12	1.3	8.00	5	20	22	15	68	19.9	21	15	0	0	2	0	0	2	10
413	803	3	6	832	817	15	1.8	-12	-1.4	4.00	27	50	16	10	63	4.4	14	8	0	1	1	0	3	5	36
414	804	3	4	791	789	2	0.3	11	1.4	4.00	5	15	25	8	32	15.4	22	8	0	0	3	2	2	7	32
415	805	3	4	787	760	27	3.6	46	6.2	1.60	25	64	13	8	62	1.4	13	6	0	0	0	1	1	2	15
416	806	3	2	755	758	-3	-0.4	5	0.7	2.67	15	28	30	13	43	6.4	25	12	1	1	0	0	1	3	12
417	810	3	5	800	783	17	2.2	-29	-3.5	4.00	0	17	19	6	32	8.8	17	4	0	0	0	3	4	7	41
418	811	3	4	787	765	22	2.9	63	8.7	2.67	12	36	20	3	15	5.3	17	3	0	0	1	0	0	1	6
419	812	3	1	668	708	-40	-5.6	-51	-7.1	4.00	0	27	20	2	10	28.9	18	2	1	1	2	0	4	8	44
420	813	3	10	939	937	2	0.2	25	2.7	2.00	0	21	12	3	25	3.3	14	3	0	0	1	0	1	2	14
421	815	3	6	833	846	-13	-1.5	5	0.6	4.00	11	54	10	3	30	2.9	11	3	0	0	1	0	0	1	9
422	816	3	7	850	855	-5	-0.6	42	5.2	8.00	17	23	14	5	36	16.4	17	6	1	0	0	0	2	3	18
423	818	3	3	758	740	18	2.4	17	2.3	2.67	12	32	28	20	71	14.5	27	20	0	1	4	0	1	6	22
424	819	3	2	734	733	1	0.1	-73	-9.1	2.00	22	38	20	16	80	1.4	20	13	1	0	2	0	1	4	20
425	820	3	5	811	808	3	0.4	74	10.0	2.67	5	22	20	12	60	4.4	20	12	0	2	2	2	1	7	35
426	821	3	10	959	963	-4	-0.4	-12	-1.2	4.00	8	25	28	17	61	4.3	28	16	1	2	0	0	0	3	11
427	823	3	2	741	766	-25	-3.3	41	5.8	4.00	11	38	40	19	48	12.2	33	17	0	0	6	0	5	11	33
428	824	3	1	716	705	11	1.6	49	7.3	2.67	33	57	38	22	58	2.4	31	21	0	4	1	1	2	8	26
429	825	3	10	932	907	25	2.8	81	9.5	1.60	7	33	17	9	53	0.2	16	8	1	0	3	1	0	5	31
430	827	3	3	759	739	20	2.7	96	14.5	2.67	10	38	35	27	77	0.4	28	19	0	3	3	0	3	9	32
431	829	3	7	844	785	59	7.5	50	6.3	4.00	15	25	21	4	19	0.2	19	4	0	0	0	0	0	0	0
432	831	3	10	940	945	-5	-0.5	18	2.0	1.60	12	15	34	0	0	0.4	36	2	0	0	0	24	0	24	67
433	832	3	5	813	758	55	7.3	133	19.6	8.00	24	41	19	8	42	16.4	15	8	0	2	1	0	1	4	27
434	833	3	6	833	820	13	1.6	46	5.9	7.00	8	35	26	5	19	7.9	24	6	0	0	2	0	2	4	17
435	834	3	6	821	807	14	1.7	27	3.4	4.00	4	15	50	19	38	14.4	45	16	0	0	8	0	7	15	33
436	835	3	4	781	798	-17	-2.1	25	3.3	4.00	12	41	28	1	4	9.4	25	1	0	1	4	6	2	13	52
437	836	3	10	979	974	5	0.5	8	0.8	4.00	16	35	21	13	62	5.3	22	13	0	0	4	0	2	6	27
		ELEMENTARY								**3.59**			**12,934**	**4,967**	**41**	**6.7**	**11,929**	**4,745**	**100**	**233**	**1,395**	**460**	**726**	**2,914**	**24**
		DISTRICT TOTAL								**3.42**	**11%**	**31%**	**33,303**	**10,587**	**32%**	**6.2**	**25,810**	**9,853**	**311**	**774**	**2,792**	**1,457**	**1,869**	**7,203**	**28%**