



June 1, 2015

Dr. Monique M. Chism
Director
Office of State Support (OSS.Pennsylvania@ed.gov)
U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-6132

Dear Dr. Chism:

I am pleased to submit a copy of Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students to the U.S. Department of Education's Office of State Support. The commonwealth's plan was collaboratively developed by the offices of elementary and secondary education and postsecondary and higher education; superintendents and teachers, representing school districts with diverse demographics, including, but not limited to, urban-rural-suburban; high minority/low minority; poorest/wealthiest. Representatives from Pennsylvania's charter schools, intermediate units; educational organizations and associations; both of Pennsylvania's teachers' unions; parent-teacher organization; traditional and non-traditional preparation programs; community-based organizations; business, and a student assisted in identifying equity gaps, root causes, strategies to narrow or mitigate gaps and causes, and performance measures. The engagement of Pennsylvania's equity stakeholders will continue beyond the June 1st submission date. Highlights of Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students are presented below.

Pennsylvania schools were divided into three samples: (1) all school districts, (2) school districts excluding Philadelphia School District and (3) charter schools. Hence, three samples were used in and are reported for each data analysis done. In addition, the analyses developed wealth or poverty groups and minority percentage groups for each of the three samples. Tables developed to report comparison data between Pennsylvania's wealthiest and poorest and highest and lowest minority schools include the "n" count, along with the corresponding ranges for wealth and minority enrollments.

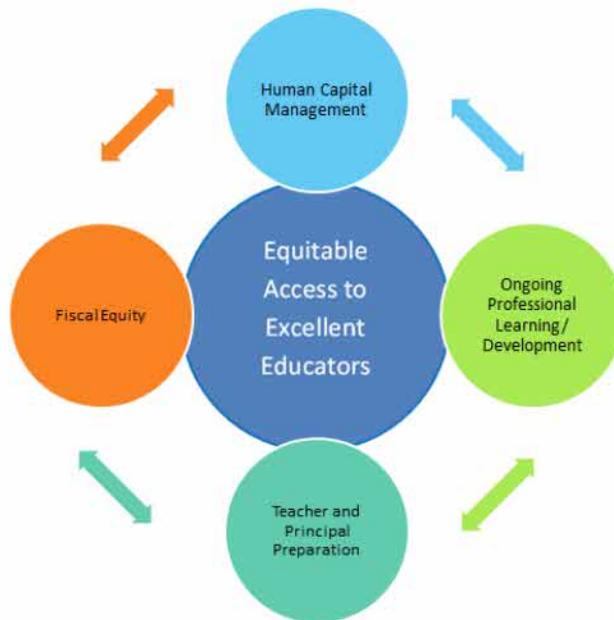
Data presented in Pennsylvania's state plan include:

- Comparison of Type 01 emergency permits across poverty and minority groups
- Comparison of highly qualified/not highly qualified statics across poverty and minority groups
- Comparison of years of experience as a teacher or a principal across poverty and minority groups

- Comparison of teacher and principal salaries across poverty and minority groups
- Classroom teacher and principal effectiveness; data by poverty and minority groups are not available
- Strategic management of human capital (recruitment, hiring, retention, support); data by poverty and minority are not available
- School learning environments (climate); data by poverty and minority groups are not available
- Expenditures per student across poverty and minority groups

Pennsylvania’s theory of action is built around four strategies, starting with strategically improving the management of Pennsylvania’s human capital in our schools—especially in the poorest and highest minority schools--to enable them to recruit, hire, retain, and support a pool of highly effective, qualified, fully certified teachers, principals, and other school staff. Implementation of all strategies will be monitored to identify which are more effective in mitigating Pennsylvania’s equity gaps; progress will be reported first to Pennsylvania’s equity stakeholders and second to the public; and adjustments will be made to the plan if desired results are not achieved.

Pennsylvania’s Theory of Action



Activities will focus on eliminating the underlying causes that result in Pennsylvania’s eight equity gaps; a ninth gap dedicated to incomplete, inadequate or data that cannot be readily accessed was also included. The schematic below depicts Pennsylvania’s equity gaps, root causes, and activities. Equity gaps are numbered in the plan and coincide with the gaps included in the “Equity Gaps Narrowed/Mitigated” arrow below.



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The plan carefully includes activities that are under the purview of the Pennsylvania Department of Education and local education agencies to improve the commonwealth's abilities in narrowing and/or mitigating equity gaps and root causes. For example, as a collective bargaining state, salary schedules, furloughing of teachers and other employees represented by a union, pay incentives, hours in a work day, work days in a school year, etc. are all determined through collective bargaining that occurs at each one of Pennsylvania's 499 school districts. Consequently, it would be futile for Pennsylvania's equitable access plan to identify salary differences between Pennsylvania's wealthiest and poorest and highest and lowest minority schools, because setting salary schedules is outside the purview and control of the Pennsylvania Department of Education or the Pennsylvania legislative branch.

It is my understanding that since the Department of Education voluntarily participated in the May virtual technical assistance opportunity, USDE will review our plan upon its receipt. Our team looks forward to receiving your feedback.

Sincerely,

(b)(6)

Linda J. Beredetto
Bureau of School Leadership and Teacher Quality

Enclosures: Pennsylvania's Equity Plan
Appendices A-H

Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students

June 1, 2015



**COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF EDUCATION**

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Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students

Executive Summary

Background. The U.S. Department of Education (USDE) requires each state to submit a state plan¹ by June 1, 2015. In guidance provided by the USDE, “a state’s plan must describe the steps it will take to ensure that “*poor and minority children* are not taught at higher rates than other children by **inexperienced, unqualified, or out-of-field teachers** and the measures that it will use to evaluate and publicly report on its progress with respect to such steps.” (emphasis added)

Each state’s plan is to include the following six (6) requirements:

1. Describe and document stakeholder engagement
2. Analyze data to identify “equity gaps”
3. Explain the likely causes of the equity gaps
4. Identify strategies to eliminate equity gaps
5. Describe measures to evaluate progress in eliminating equity gaps
6. Describe how the state will publicly report on its progress

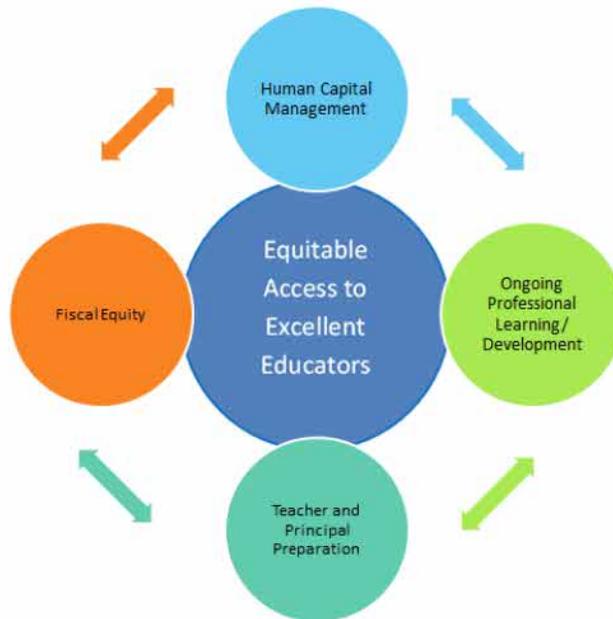
An agency external to the USDE provided technical assistance, coaching, and feedback. To develop Pennsylvania’s plan, staff used written guidance from USDE, a sample educator equity plan template, a sample plan prepared by Center on Great Teachers and Leaders, American Institutes for Research, and Council of Chief State School Officers; and ideas that were obtained during a conference devoted to preparing state equity plans.

At a minimum a state’s equitable access plan was to address the statutory requirements related to “poor and minority students” being taught by “inexperienced, unqualified, or out-of-field teachers” and to define these terms, along with other key terms associated with the state plan.

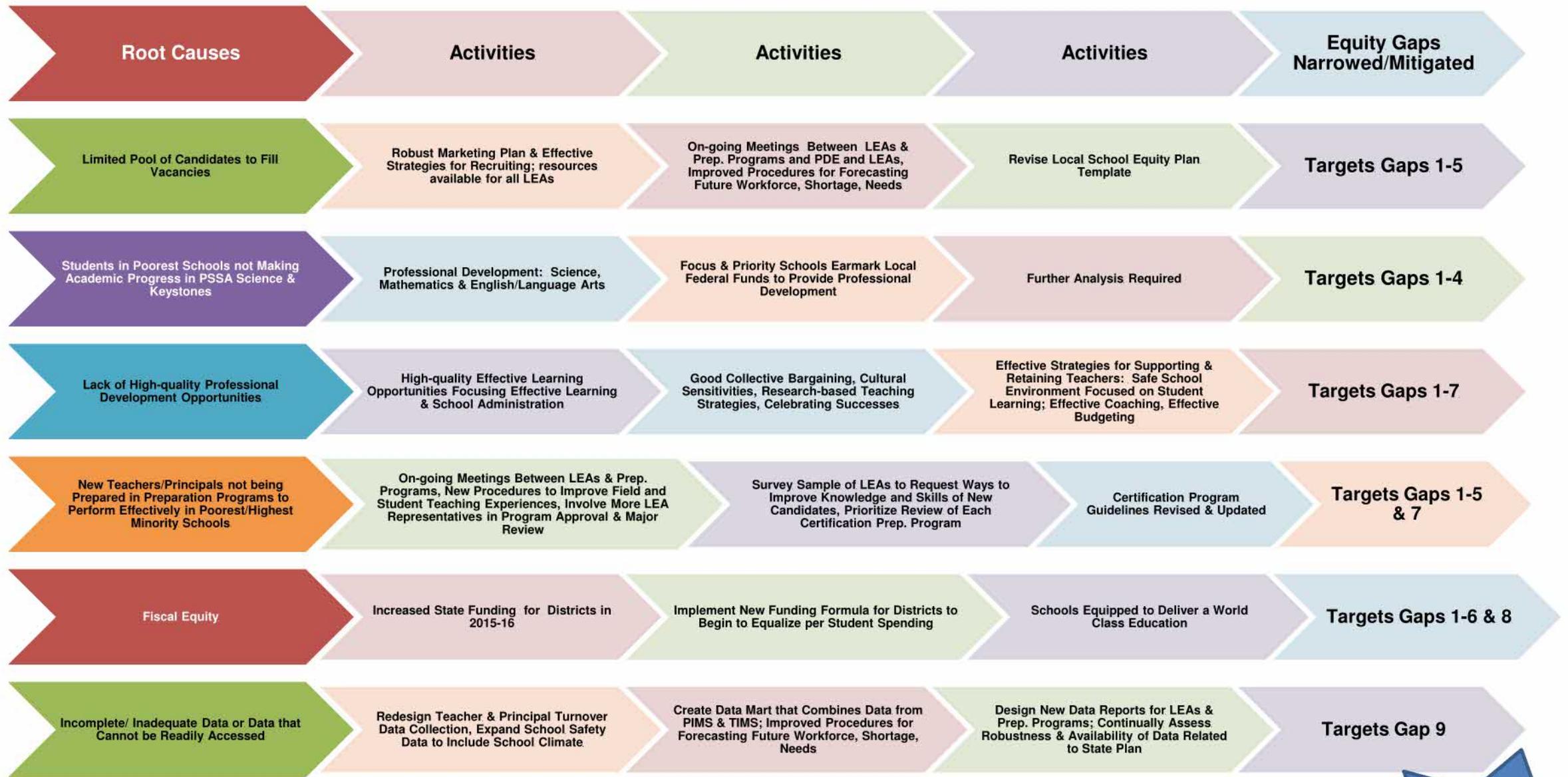
Pennsylvania’s Theory of Action to Ensure Equitable Access to Excellent Educators for All Children. Pennsylvania’s theory of action is built around strategically improving the management of Pennsylvania’s human capital in our schools--especially in the poorest and highest minority schools--to enable them to recruit, hire, retain, and support a pool of highly effective, qualified, fully certified teachers, principals, and other school staff. Pennsylvania’s activities are organized around four strategies: human capital management; ongoing professional learning; teacher and principal preparation; and fiscal equity, as follows:

¹ The plan is required by section 1111(b)(8)(C) of the Elementary and Secondary Education Act of 1965 (ESEA).

Pennsylvania's Theory of Action



Activities will focus on eliminating the underlying causes that result in Pennsylvania's eight equity gaps; a ninth gap dedicated to incomplete, inadequate or data that cannot be readily accessed. The schematic below depicts Pennsylvania's equity gaps, root causes, and activities. A complete list of the equity gaps follows.



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Equity gaps identified as a result of data analysis; the numbers below coincide with the gaps that are targeted by activities designed to overcome each root cause pictured above:

1. Students in Philadelphia School District's poorest and highest minority schools are being taught by unqualified, not highly qualified teachers
2. Students in Pennsylvania's poorest and highest minority charter schools are being taught by unqualified, not highly qualified teachers
3. Seventy-seven (77) percent of all type 01 emergency permits issued in Pennsylvania, excluding all trade/technical subjects, are issued in core academic subjects, affects Pennsylvania's highly qualified/not highly qualified percentages; 303 or nearly 35% of the 872 emergency permits are issued in special education; it is important to note that the subjects of mathematics, English language arts, and the sciences are all included in Pennsylvania's System of Statewide Assessment; students are also required to pass Keystone exams in Algebra I, biology and literature in order to graduate from high school beginning in 2017
4. Qualified principals are not hired by all schools in Pennsylvania; a total of 21 principals in 2013-14 served on 01 emergency permits
5. School nurses (a total of 49 01 emergency permits) and guidance counselors (a total of 19 01 emergency permits) are being hired on a type 01 emergency permit; these individuals are unqualified since they do not hold valid, appropriate Pennsylvania certificates
6. Schools have inconsistent leadership or have high rates of turnover
7. Some teacher preparation programs fail to graduate high quality and well-prepared new teachers for today's classrooms, including the poorest and highest minority schools
8. Inequity of financial resources
9. Incomplete/inadequate data or data not easily accessed in a timely manner

Section 1. Introduction

Pennsylvania's 2006 state plan focused on the highly qualified status of Pennsylvania's core academic teachers and the distribution across districts and schools. Strategies incorporated into Pennsylvania's plan for increasing the number of classes taught by highly qualified core academic teachers were grounded in a system of supports that existed at that time. In light of new guidance from the United States Department of Education it is no longer feasible for a state's equity plan to concentrate solely on the number of classes taught by highly qualified core academic teachers.

1. Overview of Pennsylvania's State Plan for Ensuring Equitable Access to Excellent Educators for All Students

Definitions that are statutorily required to be included in a state's equity plan appear first, followed by other definitions that are used throughout the plan:

- a. Inexperienced teacher – is a teacher who has one year or less experience teaching.
- b. Unqualified teacher – a professional or temporary professional employee who:
 - Has not completed an approved teacher preparation program,
 - Is teaching without an appropriate, valid teaching certificate,
 - Is teaching a subject that is outside the scope of his/her valid teaching certificate, or
 - Is teaching on a lapsed certificated because he/she failed to convert an instructional I certificate to an instructional II.

Teachers teaching on a Type 01 emergency permit or who are not highly qualified are unqualified teachers in Pennsylvania.

- 1) Type 01 permit – is issued to fill a professional or temporary professional vacancy created as a new position or by the resignation, termination, retirement or death of an incumbent when there is a consistent and persistent inability to fill a position with a fully qualified and properly certified individual. An applicant for a Type 01 must have at least a bachelor's degree and must earn nine (9) semester hours annually in a teacher preparation program for a Type 01 permit to be issued the following school year. All Type 01 permits expire June 30 of each year regardless of when the permit is issued by the PDE. An educator who holds a Type 01 permit is unqualified since they have not completed an approved preparation program to receive a Pennsylvania certificate. A teacher who provides

direct instruction in a core academic subject is not highly qualified when he/she holds a Type 01 permit.

2) Highly qualified teacher² (HQT) – a school district teacher responsible for direct instruction in one or more core academic subjects³ and must satisfy each of the following requirements to meet Pennsylvania’s highly qualified definition:

- Hold at least a bachelor’s degree
- Hold a valid Pennsylvania teaching certificate (i.e., Instructional I, Instructional II or intern certificate, but not an emergency permit)
- Demonstrate subject matter competency for the core content area they teach

A charter schoolteacher responsible for one or more core academic subjects must:

- Hold at least a bachelor’s degree; and
- Demonstrate subject matter competence in each core content area and grade level they teach.

- c. Out-of-field teacher – is a teacher who is assigned to teach outside his/her area of Pennsylvania certification. An out-of-field teacher may or may not have applied for a Type 01 emergency permit since his/her teaching assignment is outside the scope of his/her current teaching certificate. An out-of-field teacher is “not highly qualified” when he/she provides direct instruction in a core academic subject (English, reading/language arts, mathematics, foreign languages, music and art and social studies (history, economics, geography and civics and government); an out-of-field teacher is unqualified to teach the subject assigned outside the scope of his/her Pennsylvania certificate.
- d. Poor students – the poverty level of a school is determined by the number of students who are eligible for Free and Reduced Lunch; Pennsylvania’s poorest schools, those with the highest percentage of students on Free and Reduced Lunch, are compared throughout this plan to Pennsylvania’s wealthiest schools, those with smaller percentage of students on Free and

² Different avenues exist for school district teachers and charter school teachers to satisfy PA’s highly qualified definition; regardless of the avenue prescribed, any core academic teacher, regardless of whether he/she teaches in a school district or a charter school, must be highly qualified.

³ Pennsylvania’s core academic subjects are English, reading/language arts, mathematics, sciences, foreign languages, music and art and social studies (history, economics, geography and civics and government). Core content teachers who provide direct instruction in any of the following areas are subject to Pennsylvania’s HQT requirements: elementary level (grades K-6) teachers who teach all subjects; middle- and secondary-level (grades 7-12); special education teachers; English as a second language (ESL) teachers; and alternative education teachers.

Reduced Lunch. The ranges used to disaggregate Pennsylvania's wealthiest and poorest school buildings for 2013-14 school year are presented in Table 1. The distribution of poverty students across schools is not a normal distribution. Some urban and rural schools were more likely to have higher poverty percentages than suburban schools, which frequently had higher levels of wealth.

- e. Minority students – minority students are not simply classified by ethnicity, but can also include disability, gender, or country of origin; often African Americans, American Indian/Alaskan Native, Asian/Pacific Islanders and Hispanics are identified as historically underrepresented; the ranges used to identify Pennsylvania's highest minority and lowest minority school buildings for 2013-14 school year are presented in Table 2; for purposes of determining equity gaps between Pennsylvania highest and lowest minority school buildings, the percent of students who are not white or Caucasian was calculated for the total school enrollment. The distribution of students by race is not a normal distribution. Higher percentages of minority students were most often located in urban schools; both rural and suburban schools reported minority students, but their percentages were lower than in Pennsylvania's urban schools.
- f. Educator(s) – teachers and/or principals from local districts and charter schools; Pennsylvania's plan uses "teacher" when referencing members of the teaching profession and "principal" when referencing individual/s who are responsible school leaders.
- g. Excellent educator(s) – teachers and/or principals who hold appropriate and valid certification in the areas they teach and or administer. In accordance with Pennsylvania's new educator effectiveness system, teachers and principals, whose overall performance evaluation is "proficient" or "distinguished" are "effective educators." When a teacher teaches a tested subject (English language arts, mathematics or the sciences) the value contributed to student knowledge by a teacher is incorporated into his/her annual or semi-annual evaluation.
- h. Equity gap – a difference that exists between the rate at which low-income students or students of color are taught by excellent educators and the rate at which their peers in wealthy or low minority schools are taught by excellent educators. Based on guidance from United States Department of Education state equity plans are to examine the differences between the rates that wealthy and non-minority students are taught by inexperienced, unqualified, or out-of-field teachers when compared to their peers in poor and minority schools.
- i. Inexperienced principal – is a school leader who has one year or less serving as the administrative and instructional leader of a public school building, including a charter school.

- j. Pennsylvania's educator effectiveness system – a system of evaluation for classroom teachers and school leaders that is comprised of 50 percent observation⁴ and 50 percent multiple measures.⁵ Educators receive a rating of distinguished, proficient, needs improvement or failing based on established protocols. An overall performance rating of satisfactory or unsatisfactory is given to each educator.⁶
- k. Pennsylvania Value Added Assessment System (PVAAS) – is a statistical analysis of Pennsylvania state assessment data and provides Pennsylvania districts and schools with growth data to add to achievement data. This lens of measuring student learning provides educators with valuable information to ensure they are meeting the academic needs of groups of students, as well as individual students.

PVAAS:

- Measures a student's growth across time; i.e., across years
- Has little to no relationship to student demographics
- Compares student performance to his/her own prior performance
- Is critical to ensuring a student's future academic success

By measuring students' academic achievement and growth, schools and districts have a more comprehensive picture of their own effectiveness in raising student achievement.

- l. Highly effective teacher – is a professional or temporary professional employee who has earned an overall performance evaluation of “distinguished” on Pennsylvania's Classroom Teacher Evaluation (PDE 82-1). A classroom teacher is a professional or temporary professional employee who provides direct instruction to students related to a specific subject or grade level and usually holds an Instructional I or Instructional II certificate⁷ issued by the Pennsylvania Department of Education.

⁴ Classroom teacher observation is based on Danielson's 2007 or later Framework for Teaching and school leader observation is based on Pa.'s Framework for School Leadership.

⁵ Classroom teacher multiple measures include Building Level Data (15 percent), Teacher-Specific Data (15 percent) and Elective Data (20 percent) and school leader multiple measures include Building Level (15 percent), Correlation Data Based on Teacher-Level Measures (15 percent) and Elective Data (20 percent).

⁶ An educator's performance rating of distinguished or proficient is given a final rating of satisfactory; an educator's rating of needs improvement is given a satisfactory. The second overall performance rating of Needs Improvement issued by the same employer within 10 years of the first rating of Needs Improvement where the employee is in the same certification shall be considered unsatisfactory. A rating of failing is always unsatisfactory.

⁷ PA's definition also includes Vocational Instructional I and II certificates, both of which are outside the scope of this equity plan (see § 49.142).

- m. Highly effective principal/school leader – is a school principal, assistant principal, vice principal,⁸ etc. who has earned an overall performance evaluation of “distinguished” on Pennsylvania’s Principal/School Leader Rating Form (PDE 82-2). A principal/school leader is responsible for the teaching staff, students, school facilities, curriculum, etc. in a Pennsylvania public school.
- n. Unqualified principal – a professional or temporary professional employee who has the role and responsibility of a principal, but who does not hold a valid, appropriate administrator certificate or who holds a Type 01 emergency permit.

2. Overview of Plan Development

Pennsylvania Department of Education (PDE) leadership met to discuss the United States Department of Education’s November 10, 2014 letter announcing the need for states to develop and submit a state plan devoted to identifying equity gaps that exist between high poverty/high minority students being taught by inexperienced, unqualified or out-of-field teachers more often than their peers at low poverty/low minority schools. After this initial discussion, a small workgroup of PDE staff representing the Offices of Elementary and Secondary Education, Postsecondary and Higher Education and Administration. To create this plan, a team of leaders from PDE, led by the executive secretary, took the following steps:

- a. Developed and began implementing a long-term strategy to involve Pennsylvania’s stakeholders in identifying equity gaps, developing strategies that target root-causes that underlie Pennsylvania’s equity gaps.
- b. Prioritized data available and relevant to the development and implementation of Pennsylvania’s equitable access plan in lieu of using the data profile provided by the United States Department of Education and raw data from the Office of Civil Rights.
- c. Approved a two-person team to travel to San Diego, Calif. to learn more about the requirements of and expectations for the equitable access state plan.
- d. Authorized the co-leads of Pennsylvania’s equitable access state plan to complete the Equity Plan Readiness/Planning Tool to apply for targeted coaching from the Equitable Access Support Network.
- e. Designated an external contractor to analyze and prepare a summary related to each data metric analyzed.

⁸ PA’s definition also includes director of vocational education, which is outside the scope of this equity plan.

- f. Met regularly with the co-leads on Pennsylvania's state plan to provide feedback, guidance, direction, designate funds to support activities and to answer questions.

3. Context for Pennsylvania's Equitable Access to Excellent Educators State Plan

Before addressing the six mandatory sections of a state's equitable access plan, it is important to establish that since the United States Department of Education approved Pennsylvania's equitable distribution state plan in 2006, equity has been a priority of Pennsylvania's policies and initiatives. The following list is not exhaustive, but instead it is representative of the important role equity has had in fostering Pennsylvania policy:

- a. Pennsylvania's New Secretary of Education – Governor Tom Wolf selected Pedro Rivera, an educator with extensive experience in urban, diverse and poor schools (Philadelphia School District and Lancaster City School District) and a graduate from the Philadelphia School District, as Pennsylvania's new secretary of education. In a joint statement issued by school and administrative organizations and the Pennsylvania School Boards Association, Mr. Rivera's appointment was heralded as a sign that the governor "is committed to ensuring equity in education throughout the state."⁹
- b. Governor Wolf's First Budget – Governor Wolf proposed a historic investment in education for the 2015-16 fiscal year. The investment includes funds to support early childhood (K-12) education, support for Pennsylvania's higher education institutions, adult education and anticipated relief from future property taxes for Pennsylvania's citizenry to enable districts to recover from several years of budget shortfalls and for the commonwealth to be more competitive.

In addition to his proposed historic investment in education, Governor Wolf has also committed to work closely with the bi-partisan legislative Basic Education Funding Commission which is working to develop and recommend to the General Assembly a new formula for distributing state funding for basic education to Pennsylvania school districts. The new formula will take into account relative wealth, local tax effort, geographic price differences, enrollment levels, local support as well as other factors. The commission is expected to complete its work in early June.

- c. Pennsylvania's Educator Effectiveness System – Passed by the Pennsylvania Legislature, Act 82 of 2012 implements on a staggered schedule, new evaluation systems for professional and temporary professional employees (classroom teachers, school leaders and non-teaching professionals). The new evaluation systems include observations and multiple measures to incorporate student achievement and growth into evaluation systems.

⁹ Mary Niederberger, Pittsburgh Post-Gazette, Wolf's picks arrives with a full career in urban school districts, February 22, 2015.

Pennsylvania Value Added Assessment System (PVAAS) is incorporated into the teacher-specific component for classroom teachers; however, since a three-year rolling average is used for PVASS, this component will not be fully implemented until 2015-16 school year. Also school districts were not required to implement student learning objectives (SLOs) (as part of the multiple performance elective data measure) for teachers until the 2014-15 school year and for school leaders until the 2015-16 school year. Teacher and principal evaluation data for 2013-14 school year is included in this plan; however, it is important to note that school principal evaluation data is based on an evaluation system that pre-dates Act 82 of 2012.

- d. Pennsylvania's Information Management System (PIMS) – Pennsylvania began to develop its PreK-12 longitudinal data system in 2007, known as Pennsylvania's Information Management System or PIMS. Over 770 different local education agencies (LEA) submit a variety of data to PIMS during each school year.
- e. Pennsylvania's Teacher Information Management System (TIMS) – A new, comprehensive data base was launched in December 2012 to maintain information applicable to all individuals who hold/held emergency permits, instructional, administrative, supervisory and educational specialists' certificates issued by the Pennsylvania Department of Education. Currently, 25,442 educator certification records are maintained in TIMS. In addition to serving as a comprehensive database for educator certification in Pennsylvania, TIMS is used by charter schools to submit documentation and evidence relating to the subject area mastery of their uncertified core academic teachers. TIMS is used by school districts to apply for emergency permits for anyone who is not yet certified or who is teaching out-of-field. During the 2013-14 school year, a total of 9,927 (909 were out of state applications) Instructional I certificates were issued; no new principal Level I certificates were issued in 2013-14.
- f. New Requirements for All Currently Certified Personnel – Pennsylvania implemented new requirements for all previously certified personnel to ensure they had the knowledge, skills and competencies to accommodate and adapt instruction for students with disabilities in an inclusive setting and are also able to meet the needs of English Language Learners.
- g. New Mechanism for Evaluating Knowledge, Skills and Dispositions of Student Teacher – Pennsylvania is investigating the implementation of a new system/process for evaluating the knowledge, skills and dispositions of student teachers. Pennsylvania is considering replacing the current student teacher evaluation system with a third-party system external to the preparation program or with a home grown evaluation system developed by representatives of Pennsylvania's teacher preparation programs. The goal of replacing the evaluation system is to improve the overall caliber of students who complete a Pennsylvania certification preparation program.

- h. New Certification and Preparation Programs Approved – in an effort to improve Pennsylvania’s highly qualified percentage (in 2004-05 school year, 97.7% of Pennsylvania’s core academic subjects were taught by teachers who were highly qualified), the following new certificate programs were approved and were implemented in Pennsylvania beginning in late 2008 although the majority of the new programs were approved in 2009-12:
- Special Education PreK-8 (dual certificate required before this special education certificate is issued)
 - Special Education Grades 8-12 (dual certificate required before this special education certificate is issued)
 - PreK-4
 - Grades 4-8 (concentrations in mathematics, English language arts, social studies and/or science)
- i. Pennsylvania’s Standards Aligned System (SAS) – SAS was launched for and with a multitude of resources for teachers, principals, school superintendents, higher education representatives and teacher candidates. Annually, a SAS professional development experience is offered by PDE for school district, intermediate unit, charter school and higher education representatives
- j. Pennsylvania Core Standards – March 2014, the State Board of Education approved regulations incorporating PA’s Core Standards for English language arts, reading in history and social studies, writing in history and social studies, mathematics, reading in science and technology and writing in science and technology into Pennsylvania’s academic standards¹⁰

Data from PIMS and TIMS were analyzed and used to identify Pennsylvania’s equity gaps (Section 3) rather than using the data supplied by the United States Department of Education to create Pennsylvania’s equity profile. The following six data elements for teachers and/or principals were used to develop Pennsylvania’s plan:

- a. Teacher and principal average years of service at the school
- b. Percentage of sections taught by teachers teaching on an 01 emergency permit holder
- c. Percentage of classes taught by teachers who are not HQT
- d. Average teacher and principal salary and adjusted teacher and principal average salary
- e. Teacher and principal turnover rate at the school

¹⁰ 22 Pa. Code, Chapter 4, Academic Standards and Assessment.

f. School or LEA expenditures per student

Three school samples were used for each of the above six data metrics: all school districts, all school districts excluding Philadelphia School District and charter schools. Statistics were calculated for each sample using wealth and minority as follows:

- a. Pennsylvania's poorest (high poverty) schools
- b. Pennsylvania's wealthiest (low poverty) schools
- c. High minority school percentages
- d. Low minority school percentages

Section 2. Stakeholder Engagement

Pennsylvania's Equitable Educator Stakeholders is a diverse group representing schools with the following different characteristics and members from the following associations/organizations:

List of Local Education Agencies, Associations and Organizations Serving on Pennsylvania's Equitable Educator Stakeholders Group		
Name of Local Education Agencies, Associations and Organizations Represented	Population Represented	Characteristics
School District		
Aliquippa School District		rural, poor
Allentown School District		urban, poor, minority, large student enrollment
Bald Eagle Area School District		rural, poor
Council Rock School District		rural
Myersdale School District		rural
Philadelphia City School District		urban, poor, minority, large student enrollment
Parkland School District		suburban, wealthy
Charter Schools		
Mastery Charter School		urban, poor, minority
Fell Elementary Charter School		urban, wealthy, low minority
Other Schools		
Catholic Schools Office, Diocese of Erie		urban
Glen Mills Schools		Title I Delinquent, poor
Non-public schools		Urban, poor, high minority
Traditional and Nontraditional Teacher and Principal Preparation Programs		
Capital Area Intermediate Unit #15 ¹¹	Nontraditional teacher preparation programs	
Carbon Lehigh Intermediate Unit #21 ¹²	Nontraditional teacher and principal preparation programs	
Midwestern Intermediate	Nontraditional teacher	

¹¹ This intermediate unit is also represented on the human resource personnel administrators working group.

¹² Staff from this intermediate unit serves on the human resource personnel administrators working group.

Unit #4	preparation programs	
Grove City College	Traditional teacher preparation programs	
Pennsylvania State University, Harrisburg Campus	Traditional teacher preparation programs	
Pennsylvania Intermediate Units		
Capital Area IU #15	18 school districts, including Harrisburg City School District	Rural, urban, suburban, wealthy, poor, minority, large, small
Midwestern Intermediate Unit #4	19 school districts	Rural, poor, small
Pittsburgh-Mt. Oliver #2	Pittsburgh Public Schools	Large urban, poor, minority
Educational Associations/Organizations		
Pennsylvania's Elementary and Secondary School Principals Association	Elementary and Secondary School Principals	Urban, suburban, rural, small, large, all wealth levels and all minority levels
Pennsylvania's School Administrators Association	School superintendents	Urban, suburban, rural, small, large, all wealth levels and all minority levels
Pennsylvania State Education Association	Pennsylvania largest teachers' union	
Pennsylvania Federation of Teachers	Philadelphia, Pittsburgh and several other district teachers are members of this teachers' union	
Pennsylvania Association of School Personnel Administrators	School Personnel Administrators (Human Resource Administrators)	
Pennsylvania Association of Small and Rural Schools	Pennsylvania's small and rural schools	
Pennsylvania Charter School Choice	Pennsylvania charter schools	
Pennsylvania Association of Intermediate Units	29 Pennsylvania intermediate units that are involved in state system of support for 499 school districts	
Civil Rights Organization		
Pennsylvania Human Relations Commission		

Community-based Organizations		
Young Men's Christian Association	Community relations	Poor and minority
Pennsylvania Business Council	Business organizations	
Parents and Students		
Pennsylvania Parent and Teacher Association	Parents	
Parent/SPAC Consultant	Parents	Title I, poor and minority
Student	Students	

A complete listing of Pennsylvania's equitable access stakeholders group is included in Appendix A.

Staff developed a work plan devoted to Pennsylvania's equitable educator stakeholders group; in addition to identifying responsible individuals, the work plan included a time line of periodic meetings and communications with stakeholders to obtain feedback and recommendations. PDE involved stakeholders beginning with the development of its plan and will continue to involve them throughout the implementation phase after the plan submission.

The first stakeholder meeting was a recorded webinar scheduled for Tuesday April 7, 2015 from 1:00 pm to 3:30 pm. Prior to the webinar, each stakeholder received an email that:

- Highlighted the need for PDE to submit an equitable educator state plan
- Outlined required sections of the plan
- Described the role of each stakeholder member including the expectation they share with their colleagues at their schools and associations
 - assist to identify equity gaps
 - determine root causes of the equity gaps
 - outline strategies for mitigating the identified equity gaps
 - identify metrics for measuring progress and how to report progress to the public
- Described the feedback loop created for stakeholders to submit ideas, suggestions, recommendations
 - the feedback loop includes the creation of a resource account dedicated solely to Pennsylvania's equitable access to excellent educators state plan (RA-EDEQUITY@pa.gov).

The webinar was recorded and is available for any stakeholder to review.¹³ Additionally, an electronic notice was disseminated to all Pennsylvania LEAs (499 school districts, 173 charter schools, 70 area vocational and career and technical centers and 29 Intermediate units) informing them about Pennsylvania’s need to develop an equitable access to excellent educators state plan, creation of a resource account dedicated solely to receive feedback from stakeholders related to Pennsylvania’s equitable access to excellent educators state plan and the URL for the recorded April webinar. Appendix B contains a copy of the Penn*Link notice.

On April 14, 2015 PDE convened a voluntary, representative group of 12 school personnel administrators to identify equity gaps, root causes, strategies for mitigating equity gaps and metrics for determining state progress; two representatives from Pennsylvania’s largest urban district attended this work session. A consultant external to PDE facilitated the day-long working session. The following questions were posed for each small group to discuss and report out:

School Climate	
<ul style="list-style-type: none"> ▪ What gaps exist related to school climate? 	<ul style="list-style-type: none"> ▪ What are likely causes of these gaps?
<ul style="list-style-type: none"> ▪ What strategies could be implemented to remediate the gaps and causes? 	<ul style="list-style-type: none"> ▪ What are common metrics that could be piloted/implemented to determine if strategies are valid measures for eliminating gaps and causes?
Recruitment and Hiring	
<ul style="list-style-type: none"> ▪ What gaps exist related to recruitment and hiring? 	<ul style="list-style-type: none"> ▪ What are likely causes of these gaps?
<ul style="list-style-type: none"> ▪ What strategies could be implemented to remediate the gaps and causes? 	<ul style="list-style-type: none"> ▪ What are common metrics that could be piloted/implemented to determine if strategies are valid measures for eliminating gaps and causes?
Retention and Support	
<ul style="list-style-type: none"> ▪ What gaps exist related to retention; and support)? 	<ul style="list-style-type: none"> ▪ What are likely causes of these gaps?
<ul style="list-style-type: none"> ▪ What strategies could be implemented to remediate the gaps and causes? 	<ul style="list-style-type: none"> ▪ What are common metrics that could be piloted/implemented to determine if strategies are valid measures for eliminating gaps and causes?

Appendix D contains a copy of the April 14, 2015 agenda. To capture a visual image of the equity gaps, root causes, strategies and metrics associated with school climate and strategic management of human capital, a web-based mapping tool, *Webspiration*, was

¹³Due to technical incompatibility between PDE’s webinar software and stakeholders’ hardware/firewall, not all stakeholders were able to participate in the April 7, 2015 webinar; because of these difficulties, the entire PowerPoint presentation was emailed to each stakeholder. The webinar recording is available at URL <http://vclass.cciu.org/>.

used to create concept maps and outlines. The maps and outlines were distributed for feedback to the school personnel administrators.

A sample of stakeholder communication is listed in Appendix B, Engagement of Pennsylvania Stakeholders, rather than being incorporated into this section. Finally, all stakeholders were advised that their role would continue beyond the submission date of Pennsylvania's equity state plan.

Section 3. Data Analysis and Identification of Equity Gaps and Possible Root Causes

Pennsylvania schools were divided into three samples: (1) all school districts, (2) school districts excluding Philadelphia School District and (3) charter schools. Hence, three samples were used in and are reported for each data analysis done. In addition, the analyses developed wealth or poverty groups and minority percentage groups for each of the three samples. The “n” count used for each analysis, unless otherwise specified, is the number of schools in each minority percentage group or each wealth group. Tables developed to report comparison data between Pennsylvania’s wealthiest and poorest and highest and lowest minority schools include the “n” count, along with the corresponding ranges for wealth and minority enrollments.

Pennsylvania’s equity gaps and associated root causes are summarized in a multi-page table (Table 16) at the end of this section.

The ranges generally used to disaggregate Pennsylvania’s wealthiest and poorest school buildings for school districts and charter schools are presented in Table 1 below; the lower and upper bounds of each range may vary in order to distribute the number of schools, buildings, or districts across each range. Each data table in this section identifies ranges for Pennsylvania’s wealthiest, mid-wealth, mid-poor and poorest schools.

Ranges of Wealth for School Districts	Number of School District Buildings	Ranges of Wealth for Charter Schools	Number of Charter School Buildings
0.00% -- 24.26% (Wealthiest)	697	0.00% -- 51.75% (Wealthiest)	43
24.27% -- 40.14% (Mid-Wealth)	704	51.76% -- 71.62% (Mid-Wealth)	44
40.15% -- 58.05% (Mid-Poor)	704	71.63% -- 85.37% (Mid-Poor)	48
58.06% -- 100.00% (Poorest)	701	85.38% -- 100.00% (Poorest)	38

The ranges used to disaggregate Pennsylvania’s highest minority and lowest minority school buildings for school districts and charter schools are presented in Table 2 below; the lower and upper bounds of each range may vary in order to distribute the number of schools, buildings, or districts across each range. Each data table in this section identifies ranges for Pennsylvania’s highest minority, upper mid-minority, lower mid-minority and lowest minority schools.

Table 2. Ranges Used to Disaggregate Pennsylvania’s Highest Minority and Lowest Minority School Buildings for 2013-14 School Year

Ranges of Minority for School Districts	Number of School District Buildings	Ranges of Minority for Charter Schools	Number of Charter School Buildings
100.00% -- 34.35% (Highest Minority)	697	100.00% -- 98.775% (Highest Minority)	38
34.34% -- 13.50% (Upper Mid-Minority)	699	98.774% -- 85.85% (Upper Mid-Minority)	39
13.49% -- 5.70% (Lower Mid-Minority)	713	85.549% -- 32.75% (Lower Mid-Minority)	39
5.69% -- 0.00% (Lowest Minority)	682	32.749% -- 0.00% (Lowest Minority)	38

Cohen's thresholds were used to interpret whether effect sizes existed across or between established ranges for wealth/poverty and high minority/low minority schools and whether the effect sizes were negligible (zero to .10); small (.11 to .39); medium (.40 to .69); large (.70 to .99); and very large (over 1.00). A copy of the data analysis, descriptive statistics, effect size and summary prepared by the external consultant is included in Appendix E.

The first set of data analyzed for identifying equity gaps and root causes relate to Pennsylvania’s unqualified and out-of-field teachers, principals, school nurses and guidance counselors. Included in these analyses are type 01 emergency permits and highly qualified/not HQT status.

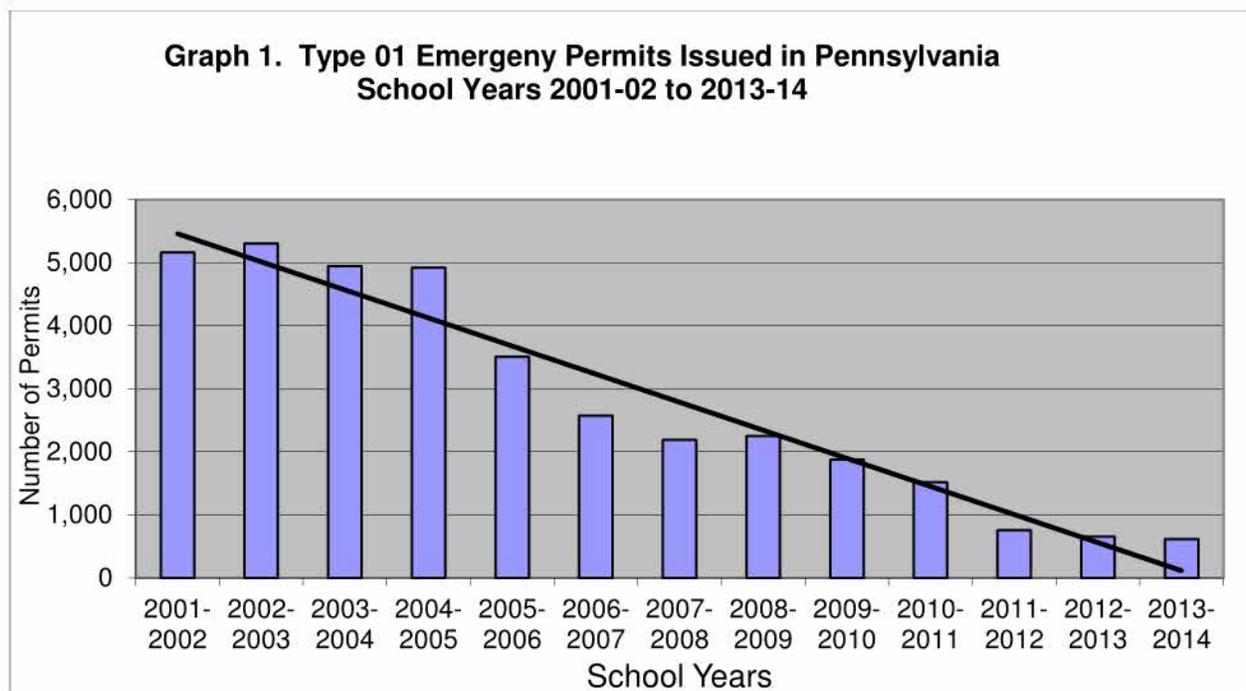
Type 01 Emergency Permits. In Pennsylvania, a type 01 emergency permit is issued to fill a professional or temporary professional vacancy created as a new position or by the resignation, termination, retirement or death of an incumbent when there is a consistent and persistent inability to fill a position with a fully qualified and properly certified individual. Individuals receiving a type 01 emergency permit must (a) hold at least a bachelor’s degree and (b) complete nine semester hours in a teacher certification program in order for the permit to be renewed the following school year. Each type 01 emergency permit expires June 30 of each school year regardless of when the permit was issued. Any teacher of record teaching a core academic subject who holds a type 01 emergency permit is not highly qualified (NHQ). Finally, an individual holding a type 01 emergency permit is considered unqualified since he/she has not completed a traditional or an alternative certification preparation program and does not hold a valid Pennsylvania certificate for the assignment.

After the 2006 equitable teacher distribution state plan was submitted to the United States Department of Education, the Bureau of School Leadership and Teacher Quality began working closely with Pennsylvania districts that struggled to hire appropriately.

certified teaching and administrative staff. Monthly meetings, telephone conference calls and staff presentations were initiated with the following school districts:

- Allentown
- Harrisburg
- Lancaster City
- Reading
- Philadelphia City
- York City

One of the reasons for initiating monthly meetings with the above districts was to help them reduce the number of and their reliance on using type 01 emergency permits to fill vacancies. Graph 1 demonstrates a consistent decrease in type 01 emergency permits over the last 13 years, which documents PDE staff efforts achieved desired results of reducing the number of 01 emergency permits used throughout Pennsylvania schools.



However, it is not until a comparison of the number of emergency permits between Pennsylvania’s wealthiest and poorest schools is done that other trends emerge. Pennsylvania’s poorest school districts have nearly eight (8) times the number of educators working on a type 01 emergency permit than do Pennsylvania’s wealthiest districts. Nearly three (3) times the number of type 01 emergency permits was issued to Pennsylvania’s wealthiest charter schools than to Pennsylvania’s poorest charter schools. Table 3 reports the maximum number of type 01 emergency permits that were issued in the 2013-14 school year disaggregated by LEA samples.¹⁴

¹⁴ The number of emergency permits held by teachers teaching in Pennsylvania’s lowest and highest minority schools is not available.

Table 3. Maximum Number of Pennsylvania Type 01 Emergency Permits Issued by Local Education Agency (LEA) Sample in School Year 2013-14

Samples	Wealthiest	Poorest
All School Districts	6	47
School Districts Excluding Philadelphia	6	21
All Charter Schools	14	5

Pennsylvania's wealthiest charter schools and poorest school districts had the highest number of staff working on a type 01 emergency permit in 2013-14.

Table 4. Percentage of Sections in Pennsylvania Local Education Agencies (LEA) Taught by Teachers on a Type 01 Emergency Permit for School Year 2013-14

Samples	Wealthiest	Poorest	Highest Minority	Lowest Minority
All School Districts	.071% (695 school district buildings) (0.000%-24.780%)	.225% (694 school district buildings) (58.351%-100.0%)	.231% (709 school district buildings) (0.00%-5.80%)	.212% (695 school district buildings) (34.21%-100.0%)
School Districts Excluding Philadelphia	.077% (641 school district buildings) (0.00%-23.5875%)	.188% (641 school district buildings) (52.8626%-100.0%)	.241% (646 school district buildings) (0.00%-5.40%)	.151% (642 school district buildings) (26.51%-100.0%)
All Charter Schools	.744% (41 schools) (0.00%-52.370%)	.660% (41 schools) (84.161%-100.0%)	1.803% (37 schools) (0.00-32.25%)	.880% (37 schools) (98.926-100%)

Effect size calculations indicate small to negligible variances across each mean percentage for all samples with respect to wealthiest and minority student populations.

However, diving deeper into the type 01 emergency permit data indicates that 77% of all of the subject emergency permits were issued to those who teach core academic subjects. In particular the areas of Spanish, secondary mathematics, secondary English and special education teachers responsible for one or more core academic subjects, are the largest categories of core academic subject teachers teaching on a type 01 emergency permit. Principals, school guidance counselors and school nurses are all certificate areas in which PDE issued type 01 emergency permits 2 percent, 2 percent and 6 percent respectively. Next to teachers, school principals significantly impact student achievement through their leadership, institutionalizing scaffolding and other research-based instructional strategies, understanding student data, coaching, mentoring teaching staff and supervising and directing all certified and non-certified staff required for school operations and nurturing a school climate that is safe and conducive

for children to learn.¹⁵ Since a principal serving on an 01 emergency permit is unqualified and the critical role principals play in directing and leading a school to raise student achievement, it is essential that all Pennsylvania schools employ qualified, appropriately certified principals.

While school counselors perform many duties and responsibilities, an educator holding a valid Pennsylvania certificate for elementary and secondary school counselor is qualified to counsel students in the areas of academic, career and personal-social development and assist teachers in developing sensitivity to the particular needs of individual students. They may use test data and psychological assessment findings in utilizing referral procedures and may advise on the selections and use of appropriate group and individual tests, measures and inventories dealing with academic progress and achievement, interest inventories, social adjustment, physical growth and development, special aptitudes and intelligence quotients or factors. They may assist in the educational placement of departing students, conduct classroom guidance activities, provide small group counseling related to academic, career and personal-social development, educational requirements and opportunities. They can participate in individualized education, career planning and other similar activities that supplement the comprehensive and developmental school counseling program.¹⁶ If a guidance counselor doesn't have the knowledge, skills and dispositions necessary for appropriately advising students, mistakes could have long-lasting impact on a student's academic career and personal-social development.

Finally, an educator holding a valid Pennsylvania certificate as a school nurse is qualified to provide information and services in school health-related areas; assess, document and manage the health care needs of children in grades kindergarten to grade 12, including those with disabilities; and to recognize symptoms and consequences of safety and environmental factors.¹⁷ When a school uses an emergency permit to hire a school nurse, the individual must be a registered nurse.

Table 5 below lists the number of 01 emergency permits issued in subject areas (excluding trade and technical subjects) in 2013-14. Each core academic subject is shaded in gray. Percentages are calculated and reported in column three for each core academic subject. The rows reporting the number of 01 emergency permits for principals, guidance counselors and school nurses are colored in red and percentages are reported in the last column.

¹⁵ CSPG No. 95, Pennsylvania Department of Education Staffing Policy Guidelines Principal (Kindergarten-12) (Administrative Code 1115) August 1, 2013.

¹⁶ CSPG No. 76, Pennsylvania Department of Education Staffing Certification Staffing Assignment Elementary and Secondary School Counselor (PreK-12) (Educational Specialist Area Code 1839) September 1, 2013

¹⁷ CSPG No. 80, Pennsylvania Department of Education Certification Staffing Assignment School Nurse (Kindergarten-12) (Educational Specialist Code 1890) July 1, 2004.

Table 5. Number of Type 01 Emergency Permits Issued in Subjects Areas Excluding Trade and Technical Subjects in School Year 2013-14

Certificate and Subject Areas	Number of Permits Issued	Percent of Emergency Permits Issued for Core Academic Subjects	Percent of Emergency Permits Issued for Principals, Guidance Counselors, School Nurse
Agriculture K-12	2		
Art	6	0.0069	
Business Computer-Info Tech K-12	20		
Cooperative Ed 7-12	7		
Curriculum & Instruction (supervisory)	4		
Dance	2		
Grades PK-4	32	4%	
Elementary (K-6)	6	0.0069	
English (44 total)			
▪ Middle level English (7-9)	1	0.0011	
▪ Secondary English (7-12)	42	5%	
▪ Communications (7-12)	1	0.0011	
Family Consumer Science K-12	12		
Foreign Languages (72 total)			
▪ Chinese	7	0.0080	
▪ French	15	2%	
▪ German	6	0.0069	
▪ Italian	1	0.0011	
▪ Japanese	2	0.0023	
▪ Latin	11	1%	
▪ Spanish	28	3%	
▪ Turkish	2	0.0023	
Grades 4-8 (26 total)			
▪ All subjects 4-6, English LA & Reading	11	1%	
▪ All subjects 4-6, Social Studies 7-8	3	0.0034	
▪ All subjects 4-6, Science 7-8	4	0.0046	
▪ All subjects 4-6, Mathematics 7-8	8	0.0091	
Health	10		
Home & School Visitor	6		
Instructional Technology Specialist	9		

Table 5. Number of Type 01 Emergency Permits Issued in Subjects Areas Excluding Trade and Technical Subjects in School Year 2013-14

Certificate and Subject Areas	Number of Permits Issued	Percent of Emergency Permits Issued for Core Academic Subjects	Percent of Emergency Permits Issued for Principals, Guidance Counselors, School Nurse
Library Science	8		
Mathematics (7-12) (43 total)			
▪ Secondary Mathematics (7-12)	42	5%	
▪ Supervisor of Mathematics	1		
Music	15	2%	
Principal K-12	21		2%
Program Specialist ESL	33	4%	
Reading Specialist K-12	19	2%	
Sciences (55 total)			
▪ Biology	6	0.0069	
▪ Chemistry	16	2%	
▪ Earth & Space	2	0.0023	
▪ Environmental Education	1	0.0011	
▪ General Science	11	1%	
▪ Middle Level (7-9)	2	0.0023	
▪ Physics	17	2%	
School Counselor (19 total)	19		2%
Elementary (K-6)	12		
Secondary (7-12)	7		
School Nurse (49 total)	49		6%
School Psychologist	3		
▪ Supervisor School Psychology Services	1		
Social Studies (14 total)	12	1%	
▪ Citizenship	2	0.0023	
Special Education (303 total)			
▪ Special Education	89	10%	
▪ Spec Ed PK-8	60	7%	
▪ Speech & Lang	111	13%	
▪ Hearing Impaired	24	3%	
▪ Visually Impaired	19	2%	
Technology Education	11		
Visual Performing Art	1	0.0011	

Table 5. Number of Type 01 Emergency Permits Issued in Subjects Areas Excluding Trade and Technical Subjects in School Year 2013-14

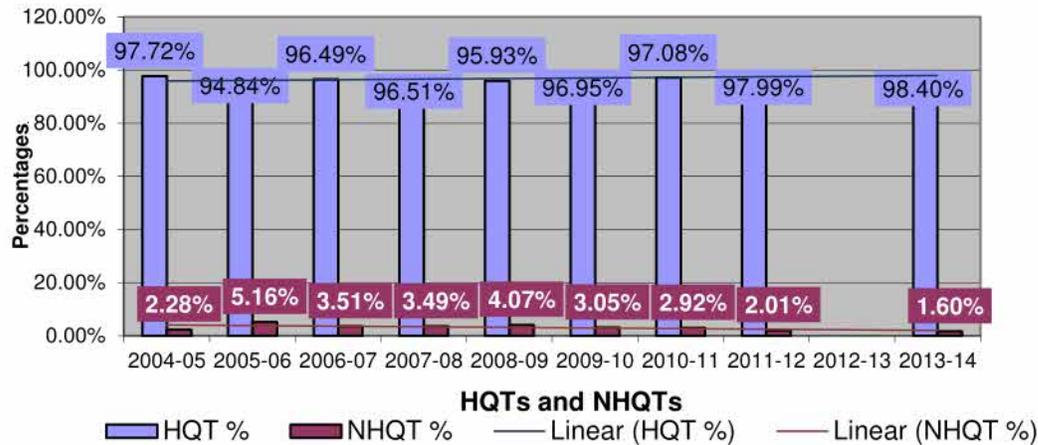
Certificate and Subject Areas	Number of Permits Issued	Percent of Emergency Permits Issued for Core Academic Subjects	Percent of Emergency Permits Issued for Principals, Guidance Counselors, School Nurse
Total Number of Type 01 Emergency Excluding All Trade/ Technical Areas	872	77%	10%

Highly Qualified Teacher (HQT) Status. During the 2004-05 school year, Pennsylvania’s statewide HQT status for core academic subjects was 97.7%; this data precedes the creation of and use of Pennsylvania’s longitudinal data system PIMS for the submission of course, teacher and student enrollment data. Pennsylvania’s HQT percentage has ranged from a low of 94.84% in 2005-06 to a high of 98.40% in 2013-14.¹⁸ Table 6 and Graph 2 below summarizes Pennsylvania’s HQT percentage rates reported beginning in 2004-05 and ending in 2013-14. Teachers of any core academic subjects (English, reading/language arts, mathematics, sciences, foreign languages, music and art and social studies (history, economics, geography and civics and government) and teachers who provide direct instruction for any core content subject in any of the following areas are subject to Pennsylvania’s HQT requirements: elementary level (grades K-6) teachers who teach all subjects; middle- and secondary-level (grades 7-12); special education teachers; English as a second language (ESL) teachers; and alternative education teachers). If any of these teachers are determined to be not highly qualified, they are unqualified teachers. Pennsylvania requires any Title I school to notify parents in writing when their children are taught by a teacher who is not highly qualified.

	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14
HQT %	97.72	94.84	96.49	96.51	95.93	96.95	97.08	97.99	Miss- ing	98.40
NHQT %	2.28	5.16	3.51	3.49	4.07	3.05	2.92	2.01	Miss- ing	1.60

¹⁸ Data summarized from PA’s Consolidated State Performance Reports submitted 2004-05 through 2013-14. PA’s new longitudinal data system PIMS went live for HQT purposes in 2007-08 school year. Reporting requirements prior to 2007-08 were different. (Note: data reported for the 2012-13 school year were incorrect; due to technical difficulties with ED Facts reporting, data corrections were not available for inclusion in this equity state plan.

Graph 2. Comparison of Pennsylvania's HQT and NHQTs Percentages: 2004-05 to 2013-14



The mean percent of core academic sections taught by HQ teachers, disaggregated by school districts, school districts excluding Philadelphia schools, charter schools and the wealthiest and poorest schools for the 2013-14 school year, are summarized in Table 4 below:

Table 7. Mean Percent of Core Academic Sections that are Taught by Highly Qualified Teachers in Pennsylvania Disaggregated by Wealth and Minority Percentage of Enrollments

Sample (A)	Wealthiest Schools (B)	Poorest Schools (C)	Difference (B-C)
All Pennsylvania School Buildings (2,776 buildings)—Total HQT Mean Percentage: 98.71%	99.72% (675 school district buildings) (0.00%-24.230%)	96.41% (699 school district buildings) (58.001%-100.0%)	3.31 percentage points
School District Buildings Excluding All Philadelphia School Buildings (2,563)—Total HQT Mean Percentage: 99.314%	99.73% (621 school district buildings) (0.00-23.130%)	98.72% (645 school district buildings) (52.621%-100.0%)	1.01 percentage points
All Charter School Buildings (198 buildings)—Total HQT Mean Percentage: 92.83%	95.34% (40 schools) (0.00%-51.750%)	92.75% (40 schools) (84.376-100.0%)	2.59 percentage points

Sample (A)	Highest Minority Schools (B)	Lowest Minority Schools (C)	Difference (B-C)
All Pennsylvania School Buildings ¹⁹ (2,774 buildings)—Total HQT Mean Percentage: 98.716%	96.29% (694 school district buildings) (13.501%-100.0%)	99.33% (691 school district buildings) (0.00%-5.700%)	-3.04 percentage points
School District Buildings Excluding All Philadelphia School Buildings (2,563)—Total HQT Mean Percentage: 99.314%	98.71% (641 school district buildings) (26.501%-100.0%) (+ 2.4 percentage points)	99.32% (642 school district buildings) (0.00-5.400%) (-.01 percentage points)	-.61 percentage points
All Charter School Buildings (147 buildings)—Total HQT Mean Percentage: 93.1%	82.84% (-15.50 percentage points)	83.32% (-9.20 percentage points)	.048 percentage points

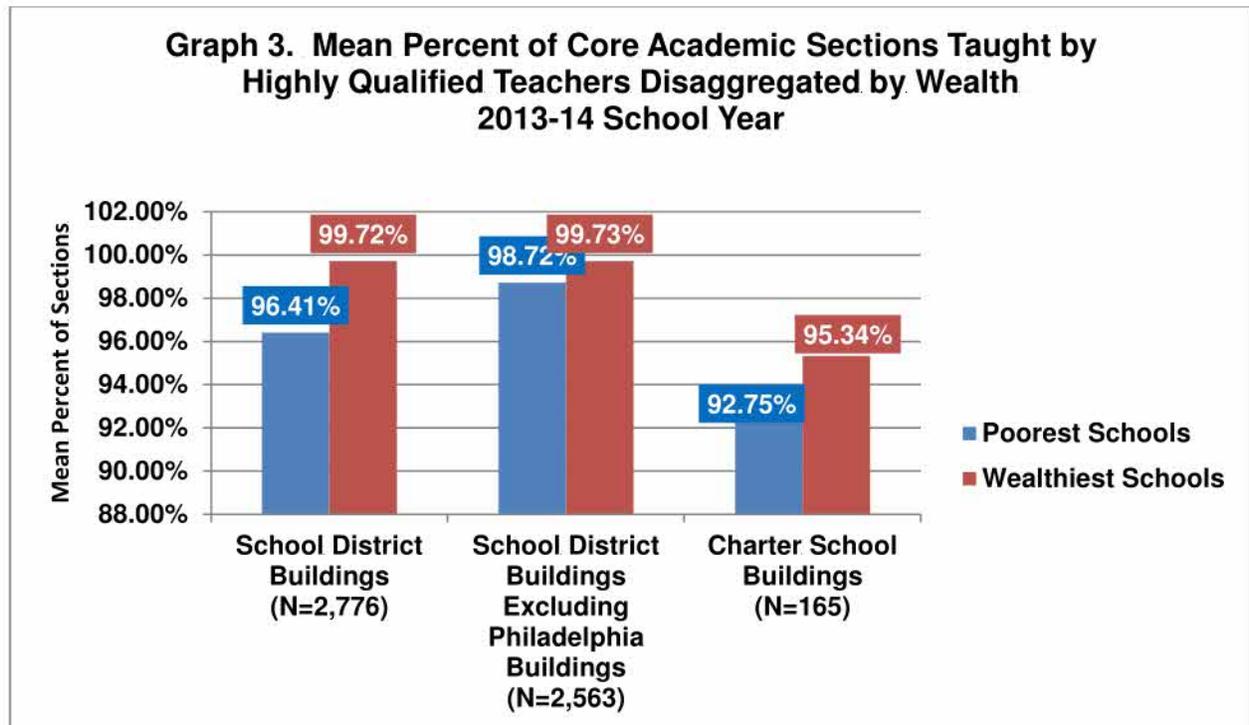
When Philadelphia School District HQT mean percentages are removed from all school district buildings, the gap in HQT between Pennsylvania’s wealthiest and poorest schools closes by 1.01 percentage points, thus, increasing the mean percent of core academic sections in Pennsylvania’s poorest schools to nearly 98.72%. The effect size calculations indicate the meaningful differences for all of the poverty groups ranged from negligible to small, an indication that the mean HQT percentages were similar across all of the poverty groups. This means that when Philadelphia’s HQT mean percentages are removed from all school district buildings, students in most core academic sections were taught by teachers who were HQ, regardless of the poverty levels of the students.

When Philadelphia’s HQT mean percentages are included in the all school districts sample, the HQT mean percentage level falls to 96.41 for Pennsylvania’s highest minority schools; the mean percentages are similar between the highest wealth, mid-wealth and mid-poor schools. Philadelphia’s HQT mean percentages appear to decrease the mean HQT percentages in Pennsylvania’s highest minority schools. Consequently, the effect size calculation indicates a meaningful difference (medium to large differences) exists between the highest minority schools and the other three poverty groups.

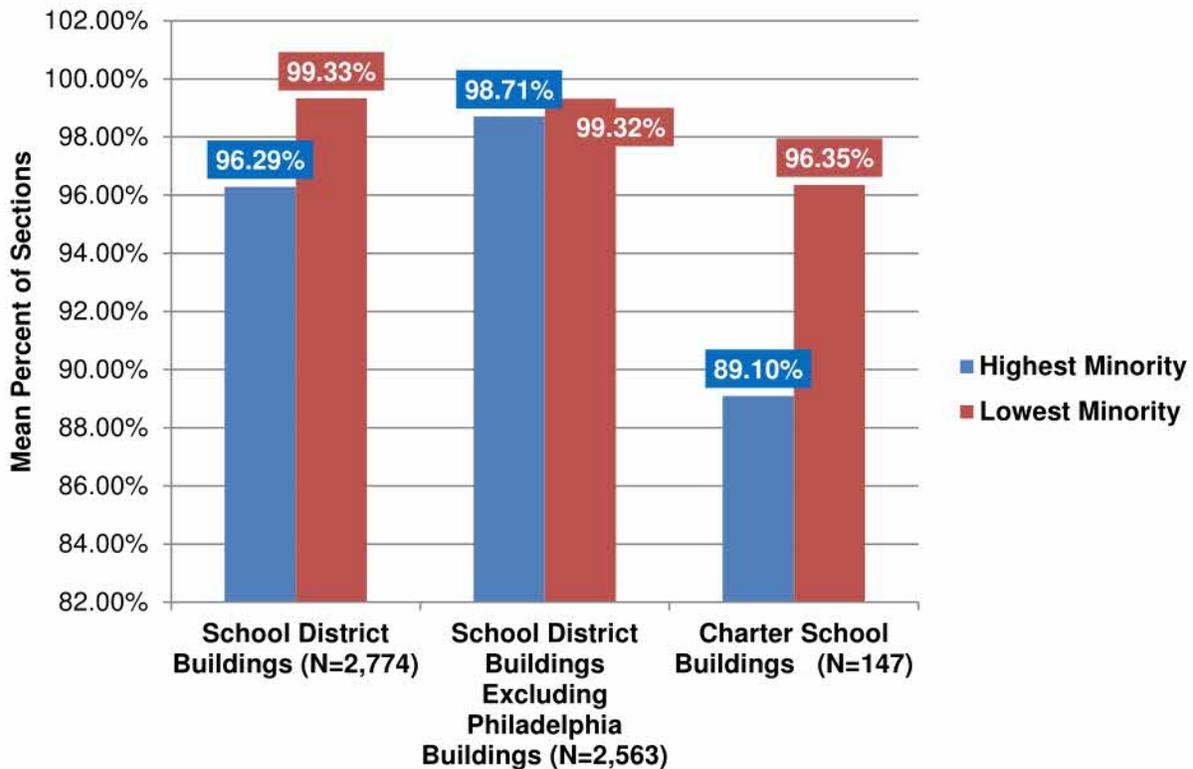
Pennsylvania’s charter schools HQT mean percentages varied across all of the poverty and minority groups. When the HQT mean percentages were compared across the mid-poor and the highest wealth and the mid-poor and the mid-wealth, meaningful differences at the medium level exist. Consequently, a larger percentage of charter school poor students were taught more often by unqualified, not HQTs in 2013-14.

¹⁹ School district and charter schools combined

Graphs 3 and 4 present a visual comparison of Pennsylvania's mean percent of core academic sections taught by HQ teachers in school year 2013-14 disaggregated by wealth and minority, respectively.



Graph 4. Mean Percent of Core Academic Sections Taught by Highly Qualified Teachers Disaggregated by Minority 2013-14 School Year



The effect size calculations for the samples compared across and between schools with the highest and lowest percentages of minority students were small or negligible when Philadelphia was excluded from the sample of school district buildings. The percentages for the sample excluding Philadelphia school buildings were high and similar across each of the minority ranges. The mean percent for school district buildings excluding Philadelphia for highest and lowest minority schools was 98.71% 99.32% respectively.

However, this same pattern was not evident in the all school district building and charter school samples. When Philadelphia’s school building HQT section means are taken into account, the mean percentage of sections taught by teachers who were HQ for Pennsylvania’s highest minority schools dropped to 96.29%, even though the overall mean percentage for the sample was 98.72%. The highest minority schools had more meaningful variances at the medium to large levels. Consequently, more core academic sections were taught more often by unqualified, not HQTs in Pennsylvania’s highest minority schools. Mathematics, English language arts and the sciences, all core academic subjects, are included in Pennsylvania’s System of Statewide Assessment.

Pennsylvania charter schools’ core content sections were taught at a higher rate by unqualified, not HQTs. The effect size calculations differ between all four of the minority

ranges from negligible to large. The total HQT mean percentage of 93.1% was considerably lower than the mean of 98.7% for the all school district sample. The minority group means varied with a range of 89.0% for the highest minority schools to 96.3% for the lowest minority and lower mid-minority charter schools.

Striving to reach and maintain 100% HQT status for all core academic subjects was an initial strategy to improve teaching and learning, but policymakers soon discovered that having HQT was a jumping off point rather than the silver bullet to improving student achievement. Research began to estimate that the difference in annual achievement growth between having a good and a bad teacher could be more than one grade level equivalent in test performance. Moreover, these teacher effects appear to be cumulative. For example, Tennessee students who had three highly effective teachers in a row scored more than 50 percentile points above their counterparts who had three ineffective teachers in a row, even when they initially had similar scores. An analysis in Dallas found essentially the same pattern there: initially similar students were separated by about 50 percentile points after three consecutive years with high- or low-effectiveness teachers. The cumulative impact of teacher quality is biggest for initially low-achieving students. A recent study in Tennessee suggested that students who fail the state's fourth grade examination are six times more likely to pass the graduation examination if they have a sequence of highly effective teachers than if they have a sequence of low-effectiveness teachers.²⁰

Even though the mean percentages of sections taught by 01 emergency permit holders and the percentage of sections taught by teachers who are not highly qualified are low, PDE believes that its prior success in reducing the number of 01 emergency permits and increasing its highly qualified percentage will benefit student academic performance in Pennsylvania's poorest and highest minority schools.²¹ Consequently, based on this past success, PDE will continue its work with Pennsylvania's poorest and highest minority school districts and will begin to work with Pennsylvania's poorest and highest minority charter schools.

Other data presented below include:

- Comparison of years of experience as a teacher or a principal across poverty and minority groups
- Comparison of teacher and principal salaries across poverty and minority groups
- Classroom teacher and principal effectiveness; data by poverty and minority groups are not available

²⁰ Testimony of Kati Haycock, President, The Education Trust Before the U.S. House of Representatives Committee on Education and the Workforce Subcommittee on 21st Century Competitiveness, March 19, 2003.

²¹ Based on the preliminary analysis of PVAAS, there is a difference in student growth (as measured by PVAAS teacher specific reporting) for science in Pennsylvania's poorest schools.

- Strategic management of human capital (recruitment, hiring, retention, support); data by poverty and minority are not available
- School learning environments (climate); data by poverty and minority groups are not available
- Expenditures per student across poverty and minority groups

Years of Experience.²² At first glance, the number of Pennsylvania teachers and principals with one (1) year of experience appears to be quite small, until you compare the numbers and percentages between Pennsylvania's wealthiest and poorest schools. Pennsylvania defines an inexperienced teacher as one that has one year or less teaching experience. Pennsylvania's wealthiest school district buildings employed nearly one and one-third (1.3) times the number of teachers with one year teaching experience than did the state's poorest schools in 2013-14. Approximately 94% of Pennsylvania's teachers reported in the PIMS staff collection have three or more years teaching experience. The trend with respect to employing first year principals, however, is the opposite. Pennsylvania's wealthiest school district buildings employed nearly one and one-half (1.5) times the number of new principals in 2013-14. Similar to Pennsylvania's overall teaching workforce, about 97% of Pennsylvania's principals reported in the PIMS staff collection for 2013-14 have three years or more experience as a principal.

Pennsylvania's poorest charter schools employed one and one-half (1.5) times the number of teachers with one year or less teaching experience representing 28.7% and 19% respectively of the 1,015 first year charter school teachers reported in the PIMS staff collection. About 73% of Pennsylvania's charter school teachers were reported to have three or more years teaching experience. Altogether, Pennsylvania's charter schools reported employing only eight (8) principals with one year's experience; Pennsylvania's poorest charter schools reported employing three (3) times the number of first year principals compared to the wealthiest charter schools. Ninety-four percent (94%) of Pennsylvania's charter school principals were reported to have three or more years of experience as a principal.

Table 8 on the following page presents the number and percentage of Pennsylvania's school district teachers and principals with one year of experience, two years of experience and three or more years of experience; Table 9 presents similar data for Pennsylvania's charter school teachers and principals. Graphs 5 and 6 present the years of teaching experience in Pennsylvania's wealthiest and poorest school districts respectively in 2013-14. Graphs 7 and 8 present the principals' years of experience in Pennsylvania's wealthiest and poorest school districts respectively in 2013-14. Graphs 9 and 10 compare the years of teaching experience for Pennsylvania's wealthiest and poorest charter schools respectively in 2013-14, while graphs 11 and 12 compare

²² When a teacher leaves the employment of a school district or charter school, the number of years begin at one year when a teacher returns to a different school district or charter school. Therefore, it is not known whether a first year teacher reported in Tables 8 and 9 has additional teaching years in another LEA.

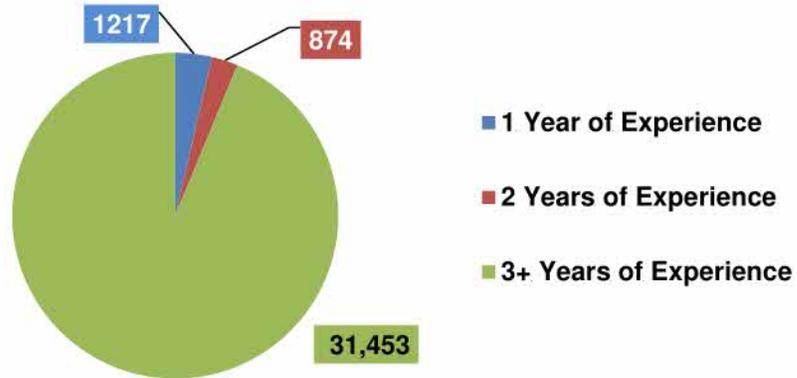
principals' years of experience for Pennsylvania's wealthiest and poorest charter schools respectively in 2013-14.

Ranges of Wealth	Wealth Quartile	Number of Teachers			Number of Principals		
		1 Year of Experience (% of n)	2 Years of Experience (% of n)	3+ Years of Experience (% of n)	1 Year of Experience (% of n)	2 Years of Experience (% of n)	3+ Years of Experience (% of n)
0.0 - 24.26	Wealthiest	1,217 (28.2%) ²³ (3.63%) ²⁴	874 (28.2%) (2.61%)	31,453 (29.1%) (93.77%)	26 (37.1%) (3.77%)	11 (33.3%) (1.60%)	652 (23.7%) (94.63%)
24.27-40.14	Mid-Wealth	1,101 (25.6%) (3.85%)	753 (24.3%) (2.63%)	26,790 (24.8%) (93.53%)	13 (18.6%) (1.83%)	8 (24.2%) (1.13%)	688 (25.0%) (97.04%)
40.15-58.05	Mid-Poor	992 (23.0%) (3.86%)	689 (22.3%) (2.68%)	24,013 (22.2%) (93.46%)	13 (18.6%) (1.82%)	7 (21.2%) (.98%)	693 (25.2%) (97.19%)
58.06-100.0	Poorest	950 (22.1%) (3.60%)	744 (24.0%) (2.82%)	24,697 (22.8%) (93.58%)	18 (25.7%) (2.56%)	7 (21.2%) (1.00%)	678 (24.6%) (96.44%)
Poverty Not Reported		48	35	1,158	0	0	44
Total Teachers/ Total Principals		4,308 (3.7%)	3,095 (2.7%)	108,111 (93.6%)	70 (2.4%)	33 (1.2%)	2,755 (96.4%)
State Total Teachers/ Principals	115,514				2,858		

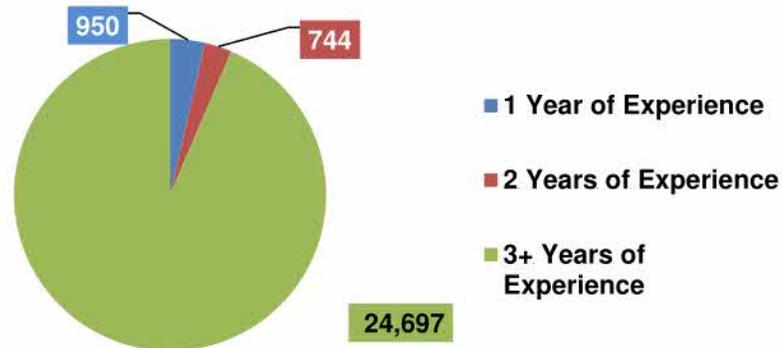
²³ Percent in each cell's second row represents the overall percent of teachers or principals compared to the total with the same number of years of experience.

²⁴ Percent in each cell's third row represents the overall percent of teachers or principals compared to the total number of teachers or principals within each range of wealth.

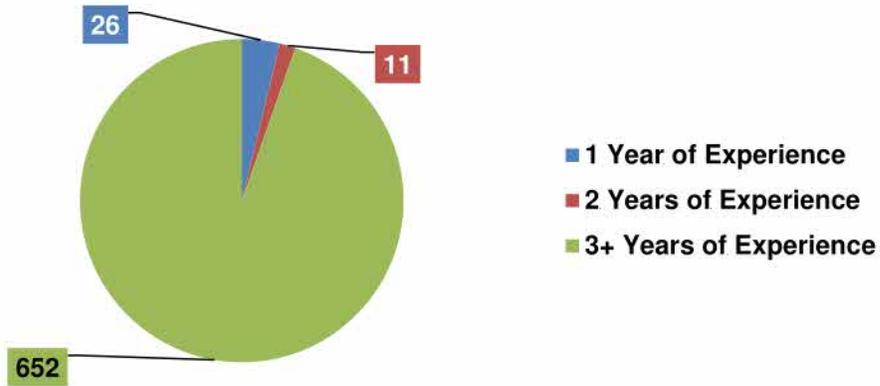
Graph 5. Years of Teaching Experience for Teachers in Pennsylvania's Wealthiest School District Buildings in 2013-14



Graph 6. Years of Teaching Experience for Teachers in Pennsylvania's Poorest School District Buildings in 2013-14



Graph 7. Principals' Years of Experience in Pennsylvania's Wealthiest School District Buildings 2013-14



Graph 8. Principals' Years of Experience in Pennsylvania's Poorest School District Buildings 2013-14

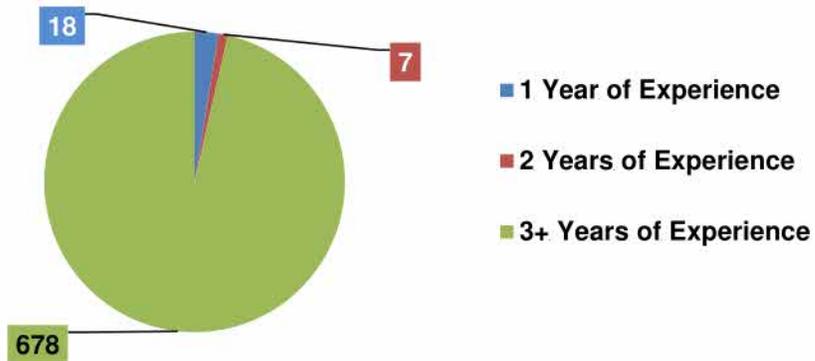


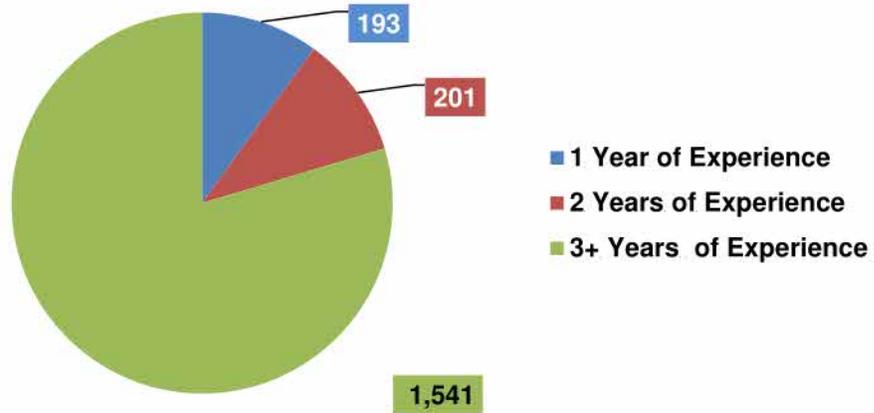
Table 9. Pennsylvania Charter School Teachers and Principals Years of Experience as of 2013-14 School Year

		Number of Teachers			Principals		
Ranges of Wealth	Wealth Quartile	1 Year of Experience (% of n)	2 Years of Experience (% of n)	3+ Years of Experience (% of n)	1 Year of Experience (% of n)	2 Years of Experience (% of n)	3+ Years of Experience (% of n)
0.0 - 51.75	Wealthiest	193 (19.0%) ²⁵ (9.97%) ²⁶	201 (20.1%) (10.39%)	1,541 (27.9%) (79.64%)	1 (12.5%) (2.32%)	0 (0.00%) (0.00%)	42 (21.5%) (97.67%)
51.76-71.62	Mid-Wealth	240 (23.6%) (11.48%)	199 (19.9%) (9.52%)	1,652 (29.9%) (79.01%)	2 (25%) (3.00%)	4 (100.00%) (5.8%)	63 (32.3%) (91.30%)
71.63-84.375	Mid-Poor	290 (28.6%) (15.41%)	321 (32.1%) (17.06%)	1,271 (23.0%) (67.53%)	2 (25%) (5.00%)	0 (0.00%) (0.00%)	38 (19.5%) (95.00%)
84.375-100.0	Poorest	286 (28.7%) (17.82%)	278 (27.8%) (17.32%)	1,041 (18.8%) (64.86%)	3 (37.5%) (5.88%)	0 (0.00%) (0.00%)	48 (24.6%) (94.11%)
Poverty Not Reported		6	2	26	0	0	4
Total Teachers/ Total Principals		1,015 (13.4%)	1,001 (13.3%)	5,531 (73.3%)	8 (3.9%)	4 (1.9%)	195 (94.2%)
State Total Teachers/ Principals	7,547				207		

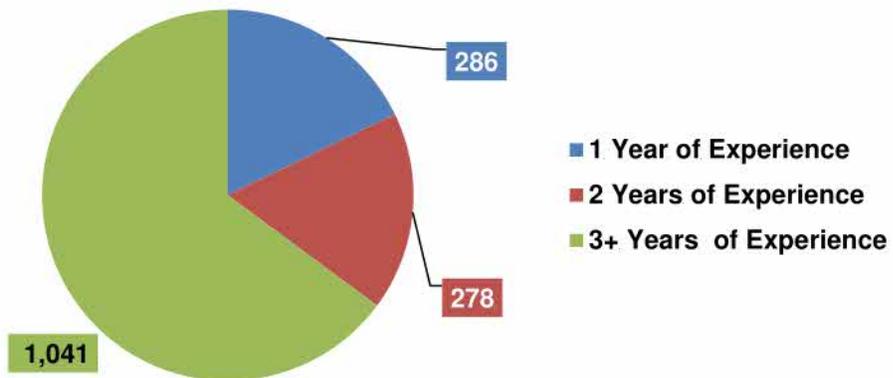
²⁵ Percent in each cell's second row represents the overall percent of teachers or principals compared to the total with the same number of years of experience.

²⁶ Percent in each cell's third row represents the overall percent of teachers or principals compared to the total number of teachers or principals within each range of wealth.

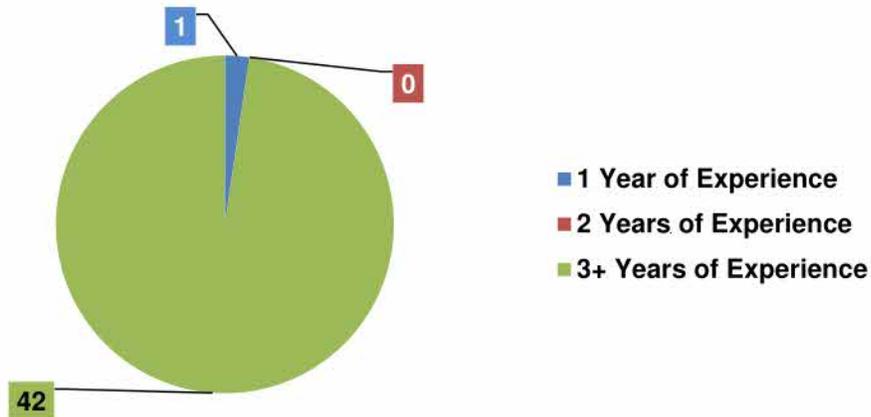
Graph 9. Years of Teaching Experience in Pennsylvania's Wealthiest Charter Schools 2013-14



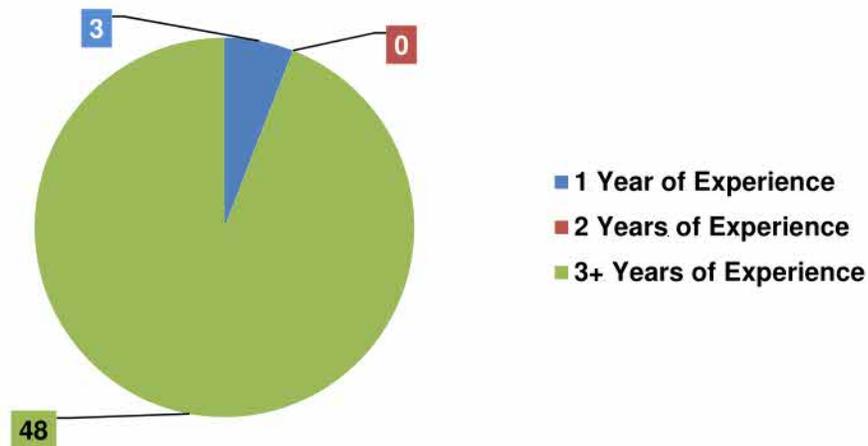
Graph 10. Years of Teaching Experience in Pennsylvania's Poorest Charter Schools 2013-14



Graph 11. Principals' Years of Experience in Pennsylvania's Wealthiest Charter Schools 2013-14



Graph 12. Principals' Years of Experience in Pennsylvania's Poorest Charter Schools 2013-14



SAS EVAAS conducted a preliminary analysis of teacher effectiveness (as measured by PVAAS teacher specific reporting) and the number of years of teaching experience for each state tested subject/grade/Keystone. From the preliminary analyses for PSSA mathematics and reading in grade levels 4 to 8, science grades 4 and 8 and Keystone algebra and biology examinations it appears that there is *not* a significant relationship between the number of years of teaching experience and student growth (as measured by PVAAS teacher specific reporting). There *does* appear to be a small relationship with the Keystone literature examination. There is a slight increase in value-added measures for teachers, who have more years of teaching experience.

Teacher Salaries. An analysis was done to determine if a salary differential exists between Pennsylvania's wealthiest/poorest and lowest/highest minority schools that might contribute to Pennsylvania's poorest and highest minority schools being able to compete for or retain the most effective and qualified teachers. Teacher salary data were analyzed using salaries for first year teachers and teachers with more than one year of service.

When all school district salaries are taken into account, the average salary for a first year teacher in Pennsylvania's wealthiest schools is only \$708.34 higher than the average first year teacher in Pennsylvania's poorest schools, \$44,333.04 and 43,624.70 respectively. Pennsylvania's maximum salary in the state's poorest schools is \$1,343 higher than the maximum salary in the state's wealthiest schools. However, the maximum salary paid in the state for first year teachers is \$85,622, which was reported by one of the schools classified as mid-wealth. When Philadelphia School District salaries are excluded from the salary analysis, the mean salary for first year teachers in Pennsylvania's poorest schools falls from \$43,624.70 to \$41,796.43, a reduction of \$1,828.27. The average salary for Pennsylvania's lowest minority schools is \$693.15 less than the average salary for Pennsylvania's poorest schools. When average salaries for Philadelphia School District first year teachers are excluded from the analysis, the average in the state's lowest minority schools is no longer the smallest, \$42,567.82 and \$41,796.43 respectively. When Philadelphia teacher salaries are excluded from the analysis, the lowest average salary is not in Pennsylvania's poorest schools; instead, the average salary is the lowest (\$59,344.30) in the mid-poor districts where poverty percentages fall within poverty ranges 40.15 percent to 58.05 percent.

Based on the salary data reported by charter schools, the average salary of first year charter school teachers teaching in the poorest charter schools is \$9,289.46 higher than the average salary paid by the wealthiest charter schools. The maximum salary reported by charter schools in 2013-14 was \$50,986, which was reported by one of the poorest charter schools. The average salary paid to first year charter school teachers is smaller than other LEA averages as evidenced by the green bars in Graph 13 below. The human resource administrators speculated that the salary differential for first year teachers and teachers with more than one year of teaching experience that exists between the wealthiest and poorest schools is not a major detriment in their recruitment or hiring of qualified and effective teachers. Table 10 lists salary means for teachers with one year of teaching experience and more than one year teaching experience disaggregated by LEA samples for school year 2013-14.²⁷ The effect size for the difference in mean salaries for first year teacher salary were large to medium when mean salaries were compared between Pennsylvania's highest and lowest minority percentage groups for the school districts sample excluding Philadelphia School District; the effect size was a medium difference when Pennsylvania's mid-minority schools were compared to lowest minority schools for the district sample that excluded Philadelphia School District.

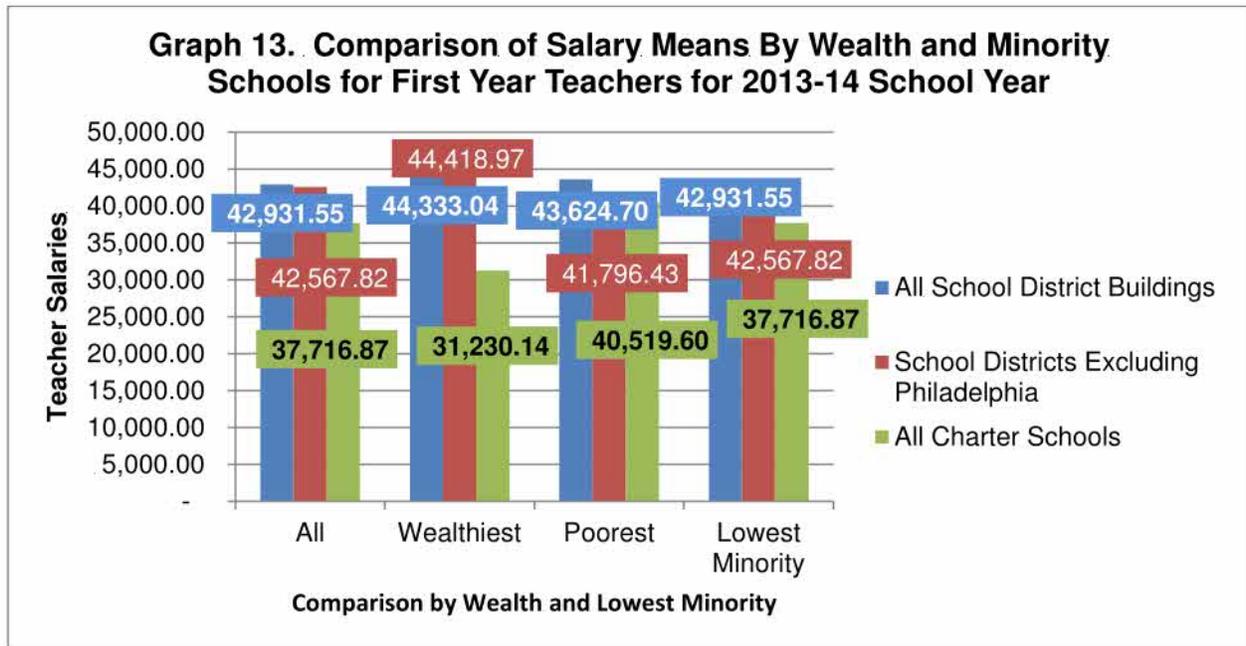
Table 10. Comparison of Salary Means Based on Years of Teacher Experience Disaggregated by School Wealth and Percentage of Minority Enrollments for 2013-14 School Year

Teachers with One Year Teaching Experience						
Samples	All	Wealthiest	Poorest	All	Lowest Minority	Highest Minority
All School District Buildings	42,931.55 (419 school buildings)	44,333.04 (419 schools) (0.00%-23.745%)	43,624.70 (419 schools) (56.331%-100.00%)	42,937.07 (1,673)	39,391.71 (412 schools) (6.19%-0.00%)	46,090.25 (420 schools) (31.60%-100.00%)
School Districts Excluding Philadelphia	42,567.82 (1,587 schools)	44,418.97 (397 schools) (0.00%-22.82%)	41,796.43 (396 schools) (52.341%-100.00%)	42,577.63 (1,585)	39,325.58 (1,587 schools) (0.00%-5.89%)	44,945.85 (397 schools) (27.0%-100.00%)
All Charter Schools	37,716.87 (141 schools)	31,230.14 (35 schools) (0.00%-53.13%)	40,519.60 (35 schools) (85.151%-100.00%)	37,560.98 (131 schools)	42,528.55 (33 schools) (99.20%-100.00%)	30,849.91 (32 schools) (35.99%-0.00%)

²⁷ While the maximum salaries and the mean salaries resulting from the data analysis appear realistic and logical, several minimum salaries reported (\$3,500 and \$6,500) are cause to question the accuracy or consistency of salary reporting.

Teachers with More than One Year Teaching Experience						
Samples	All	Wealthiest	Poorest	All	Lowest Minority	Highest Minority
All School District Buildings	63,981.96 (2,806 school district buildings)	69,732.09 (701 schools) (0.00%-24.3675%)	64,308.59 (419 schools) (58.096%-100.00%)	63,951.86 (2,790 schools)	56,818.83 (682 schools) (0.00%-5.69%)	67,796.36 (698 schools) (34.20%-100.00%)
School Districts Excluding Philadelphia (498)	63,360.22 (2,593 schools)	70,125.81 (649 schools) (0.00%-23.24%)	60,983.03 (648 schools) (52.685%-100.00%)	63,328.79 (2,579 schools)	39,325.58 (634 schools) (0.00%-5.39%)	66,487.99 (645 schools) (26.40%-100.00%)
All Charter Schools	45,221.30 (172 schools)	40,934.30 (35 schools) (0.00%-52.21%)	46,936.84 (35 schools) (84.4175%-100.00%)	44,931.31 (153 schools)	41,141.42 (38 schools) (0.00%-32.49%)	49,045.64 (39 schools) (98.70-100.00%)

The salary values for teachers with more than one year of experience were higher than the salary reported for first year teachers in 2013-14 school year. Graph 13 compares the salary means across Pennsylvania's wealthiest, poorest and highest minority schools for teachers with one year experience.

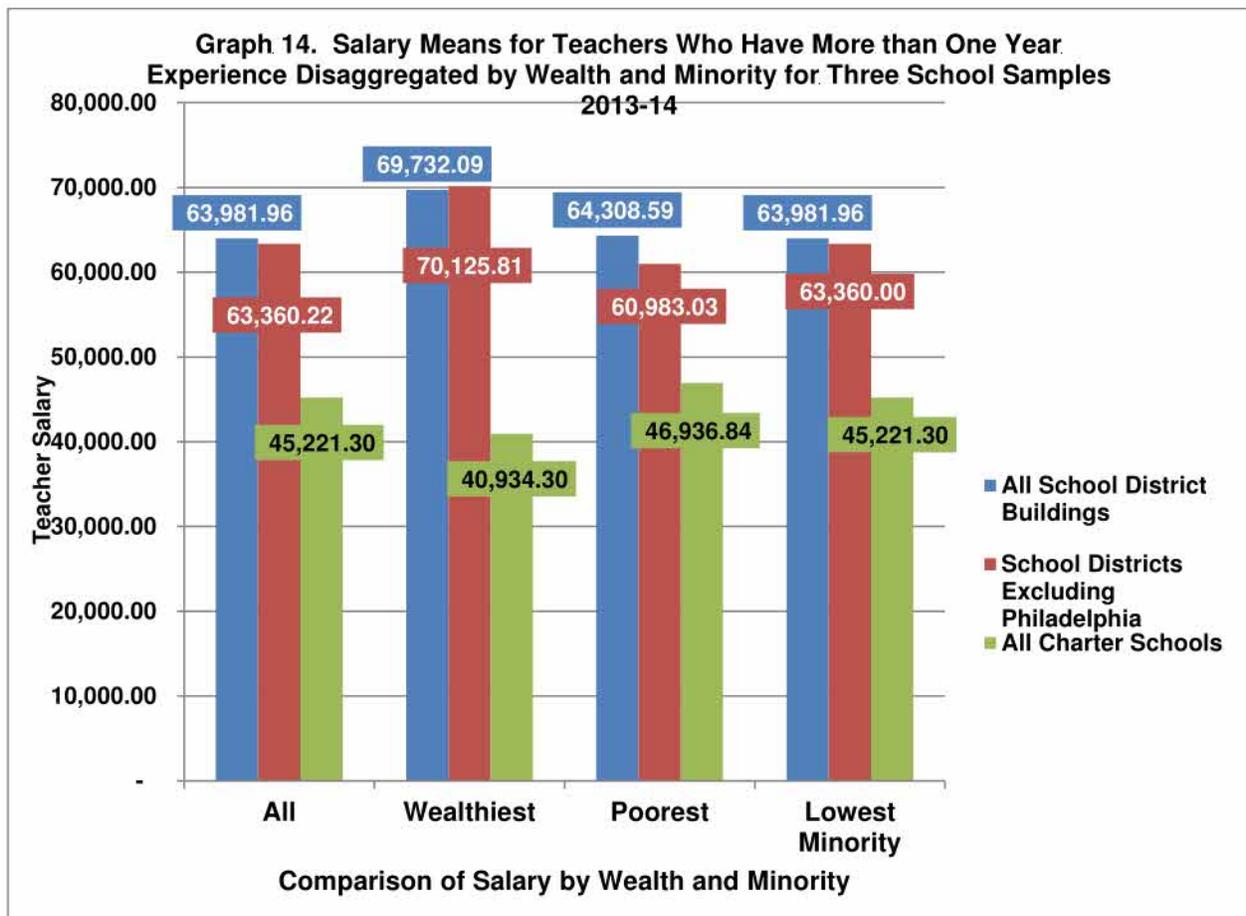


An analysis was done to determine if a salary differential exists between Pennsylvania's wealthiest and poorest schools that might contribute to the poorest schools' abilities to compete for or retain the most effective, experienced and qualified teachers. Although there was a modest difference between the average salaries for first year teachers teaching in Pennsylvania's wealthiest and poorest schools, the same condition does not exist when the average salaries for experienced teachers are examined.

The difference between the average salaries for the wealthiest and poorest Pennsylvania schools is the greatest when Philadelphia School District teacher salaries are excluded from the analysis. A difference of \$9,142.78 exist when the average salaries of teachers with more than one year of experience in Pennsylvania's wealthiest and poorest schools are compared, \$70,125.81 and \$60,983.03 respectively. The average salary in the lowest minority schools is \$63,360.00 when

Philadelphia teacher salaries are excluded; this average is \$2,376.97 higher than the average salary in the poorest schools. When Philadelphia teacher salaries are included in the analysis to determine if a difference exists in the average salary between all of the wealthiest and all of the poorest schools, the difference is \$5,423.50, about one-half of the difference when Philadelphia salaries are excluded. The maximum salary reported for all teachers (includes Philadelphia salaries) with more than one year experience in the state's wealthiest schools is \$99,546, nearly \$7,000 more than the maximum salary reported in the poorest schools. Likewise, the average salary for teachers in the lowest minority schools is smaller than the average salary in Pennsylvania's poorest schools, \$63,981.96 and \$64,308.59 respectively. However, when Philadelphia teacher salaries are excluded from the analysis, the average salary in Pennsylvania's lowest minority schools is \$2,376.97 higher than the average in Pennsylvania's poorest schools. This appears to indicate that the salaries paid to Philadelphia teachers with more than one year teaching experience is higher than in other poor Pennsylvania districts.

The average teacher salaries paid by charter schools lag behind the average salaries paid by the wealthiest and poorest school districts, almost \$30,000 and \$17,371.75 respectively. The group of charter schools that have the highest average salary for teachers with more than one year experience fall within the mid-poor charter schools where the poverty percentages range from 71.63 percent to 85.37 percent. This group of charter schools reported the highest salary of \$64,338. Graph 14 compares mean salaries for all school district buildings, school districts excluding Philadelphia School District and charter schools.



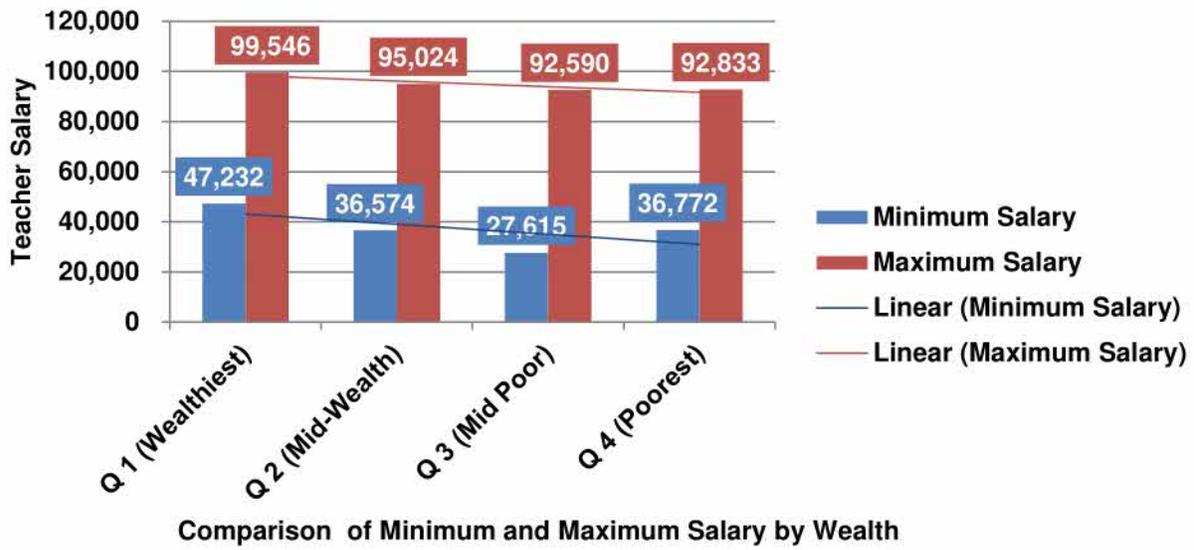
A closer look at the average salaries for teachers, who have more than one year experience, the lowest average salary does not fall among Pennsylvania's poorest schools; instead, the average salary is the lowest (\$59,299.79) in the mid-poor districts where poverty percentages fall within the poverty ranges 40.15 percent to 58.05 percent. Table 11 compares minimum and maximum salaries

paid to teachers with more than one year experience in school year 2013-14 reported in the all school districts sample. Likewise, Graph 15 displays the minimum (represented by the blue bars and the blue trend line) and maximum salaries (represented by the red bars and red trend line) for teachers with more than one year experience in 2013-14 school year.

Table 11. Comparison of Minimum and Maximum Salaries by Wealth and Minority Distributions for Teachers with More than One Year Experience in 2013-14 School Year

Wealth Distribution	Minimum Salary for the All School Districts Sample	Maximum Salary for the All School Districts Sample	Difference between Maximum and Minimum Salary
Wealthiest (0.00%-24.3675%) 701	\$47,232	\$99,546	+ \$52,314
Mid-Wealth (24.3676%-40.15%) 703	36,574	95,024	+ 58,450
Mid Poor (40.151%-58.095%) 701	27,615	92,590	+ 64,975
Poorest (58.096%-100.00%) 701	36,772	92,833	+ 56,061
Total (2,806)	27,615	99,546	+ 71,931
Minority Distribution	Minimum Salary for the All School Districts Sample	Maximum Salary for the All School Districts Sample	Difference between Maximum and Minimum Salary
Highest Minority (34.20%-100.00%) 698	\$40,287	\$95,024	+54,737
Upper Mid Minority (13.45%-34.19%) 697	43,476	99,546	+ 56,070
Lower Mid Minority (5.70%-13.44%) 713	38,458	97706	+ 59,248
Lowest Minority (5.69%-0.00%) 682	27,615	81,719	+ 54,104
Total (2,790)	27,615	99,546	+ 71,931

Graph 15. Comparison of Minimum and Maximum Salaries Paid to All School District Teachers with More than One Year Experience Disaggregated by Wealth in School Year 2013-14



Teacher Turnover. In addition to analyzing the years of experience teaching, Pennsylvania analyzed teacher turnover. The PIMS October 2013 data reported by all Pennsylvania LEAs was used to analyze teacher turnover.²⁸ LEAs report teachers who are no longer employed in the district; educators who retire, die, resign, or otherwise leave the district are included in the turnover data. The average rate of teacher turnover for Pennsylvania’s school district buildings is 6.2%. The average rate of teacher turnover for Pennsylvania’s wealthiest school buildings is 4.91%, while the average rate of teacher turnover for Pennsylvania’s poorest school district buildings is 8% nearly two times the rate of turnover in the wealthiest district buildings. The average rate of teacher turnover in Pennsylvania’s poorest charter schools is nearly two times as high as the rate in the wealthiest charter schools, 21.40% and 10.84% respectively.

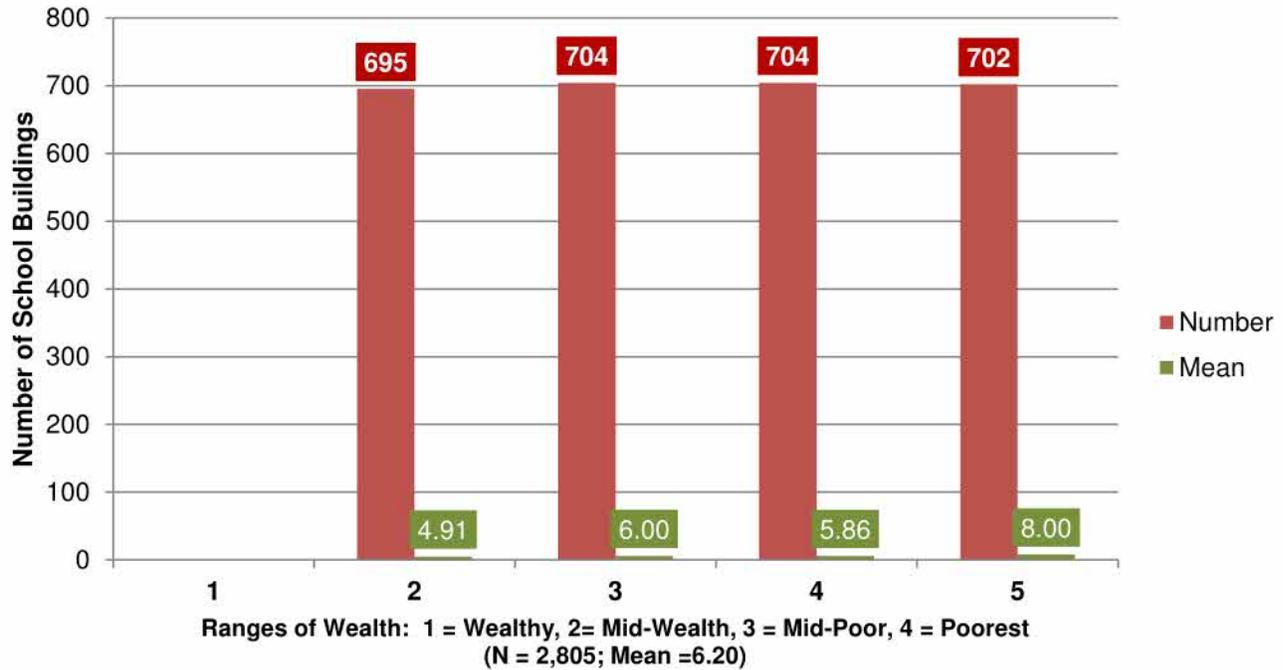
When the minority makeup of the student body is taken into account to analyze teacher turnover, the turnover rate for all of Pennsylvania’s 697 highest minority school district buildings is about 1.4 times higher than it is for Pennsylvania’s 682 lowest minority school buildings. The average rate of turnover for all of Pennsylvania’s 2,792 school buildings taking into consideration the minority composition of the student body is 6.21%. When Philadelphia School District buildings are removed from the teacher turnover analysis, the average rate of teacher turnover is about the same regardless of the minority composition of the buildings, 5.60%, 5.81% and 5.68% respectively. The average rate of teacher turnover in Pennsylvania’s highest minority charter schools is 2.6 times higher than the average turnover rate in the lowest minority charter schools (23.79% and 9.08% respectively). Table 12 reports the teacher turnover rates by wealth and minority for all three school samples for 2013-14 school year. Graph 16 represents the mean percentage of teacher turnover in all school districts by wealth, Graph 17 reports the mean percentage of teacher turnover by wealth in charter schools and Graph 18 presents the mean percent of teacher turnover by minority for all three school samples.

²⁸ PA does not collect the number of days a teacher or principal is absent during a school year or the reasons why teachers or principals leave a school district or charter school.

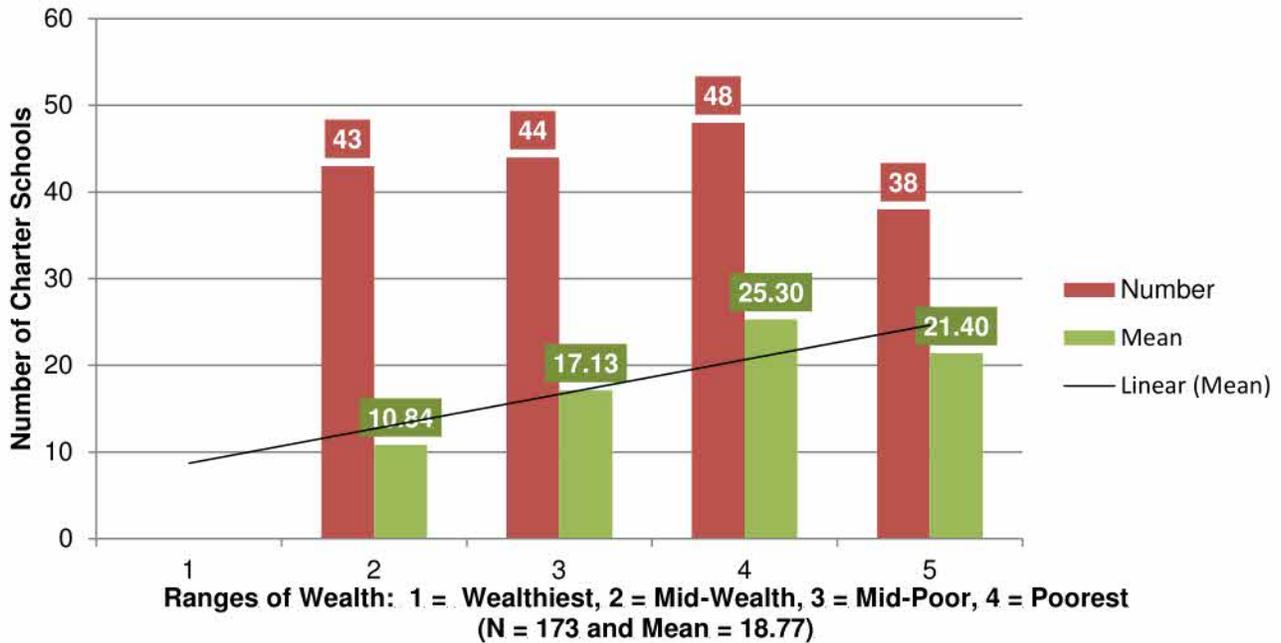
Table 12. Teacher Turnover Rates by Wealth and Minority in School Year 2013-14

Samples	All	Wealthiest	Poorest	All	Lowest Minority	Highest Minority
All School District Buildings	6.2% (2,805 school district buildings)	4.91% (695 school district buildings)	8% (702 school district buildings)	6.21% (2,792 school district buildings)	5.91% (682 school district buildings)	8.10% (697 school district buildings)
School Districts Excluding Philadelphia (498)	5.58% (2,592 school district buildings)	4.83% (641 school district buildings)	5.99% (650 school district buildings)	5.60% (2,580 school district buildings)	5.81% (634 school district buildings)	5.68% (645 school district buildings)
All Charter Schools	18.77% (173 schools)	10.84% (43 schools)	21.40% (38 schools)	18.05% (154 schools)	9.08% (38 schools)	23.79% (38 schools)

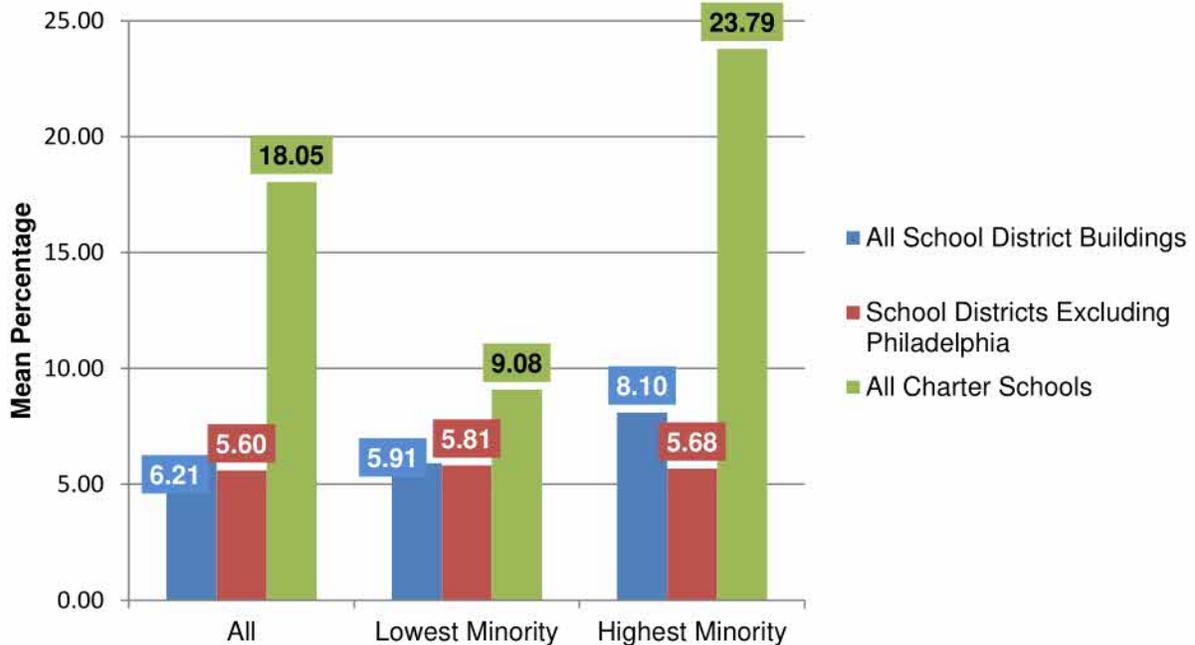
Graph 16. Mean Percentage of Teacher Turnover by Wealth in Pennsylvania School District Buildings in 2013-14 School Year



Graph 17. Mean Percentage of Pennsylvania Charter School Building Teacher Turnover by Wealth in 2013-14 School Year



Graph 18. Mean Percentage Rate of Teacher Turnover by Minority for 2013-14 School Year



Strategic Management of Human Capital. Strategic management of human capital in school districts and charter schools relates to the processes and procedures of recruiting, hiring, retaining and supporting teachers, principals and other staff. Information or data related to school district and charter school management of their human capital is not submitted to PDE. Consequently, it was essential for school human resource administrators to identify gaps that exist when their districts recruit, hire, retain and support effective educators. Some of the equity gaps and root causes identified for recruitment and hiring also were identified as gaps and root causes for school learning

environment. The equity gaps, root causes and ways to measure stemming from the human relations personnel administrators are included in the concept maps that were developed by a representative group of human resource personnel administrators.

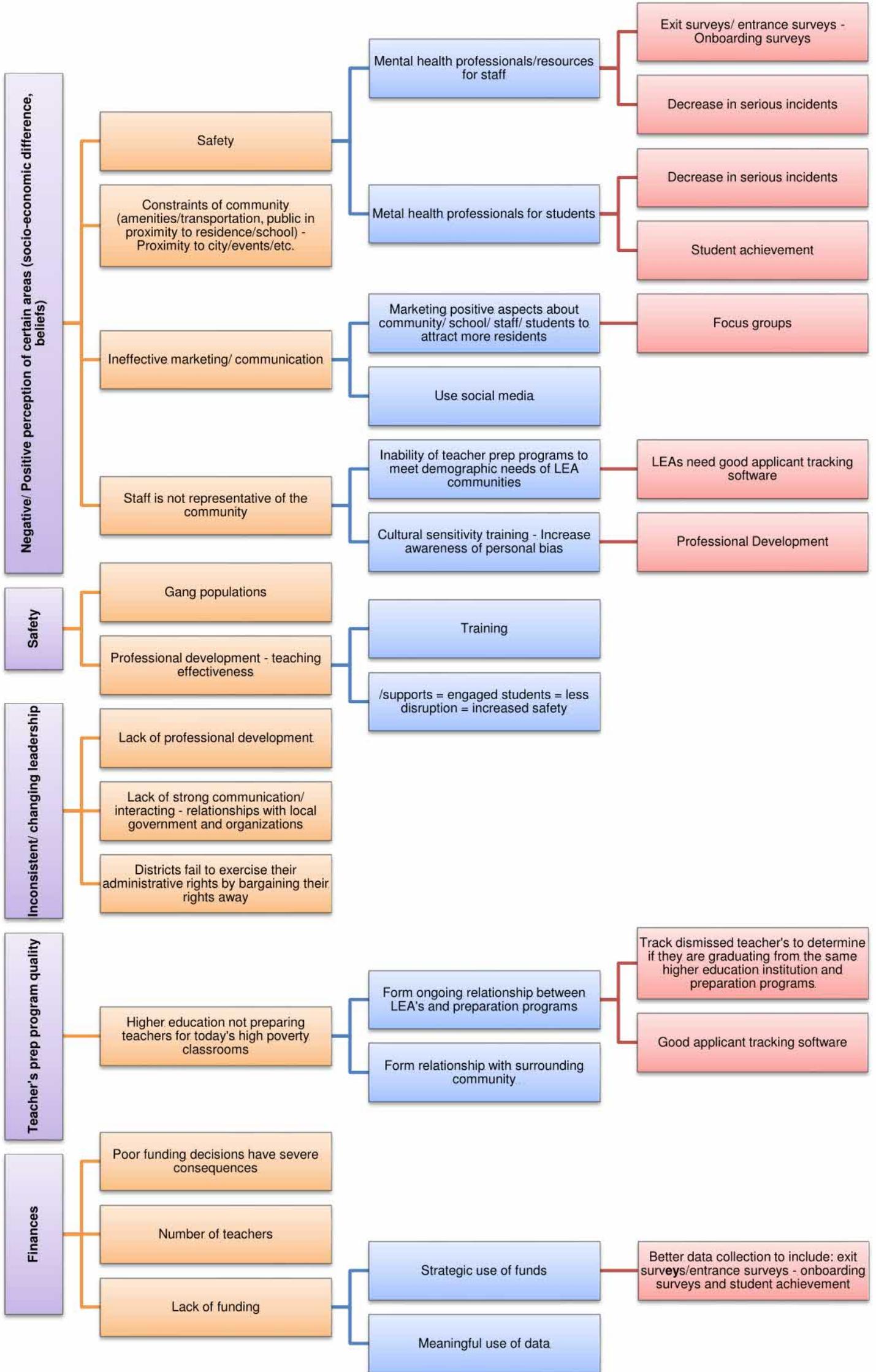
Due to the absence of data and information about a school’s learning environment, PDE convened a working group of volunteer human resource personnel and administrators to assist in identifying equity gaps, likely causes, strategies to remediate the gaps and measures PDE can use to determine progress in remediating identified equity gaps. A listing of the human resource administrators invited to participate in a day-long working session is included in Appendix C; individuals, who attended, are shaded light grey. Appendix D contains the day’s agenda.²⁹

Each of the concept maps (climate, recruiting/hiring and retaining/supporting teachers and principals) developed by school district human resource personnel is included on the following pages. The following colors are used in the maps to designate equity gaps, root causes, strategies and metrics:

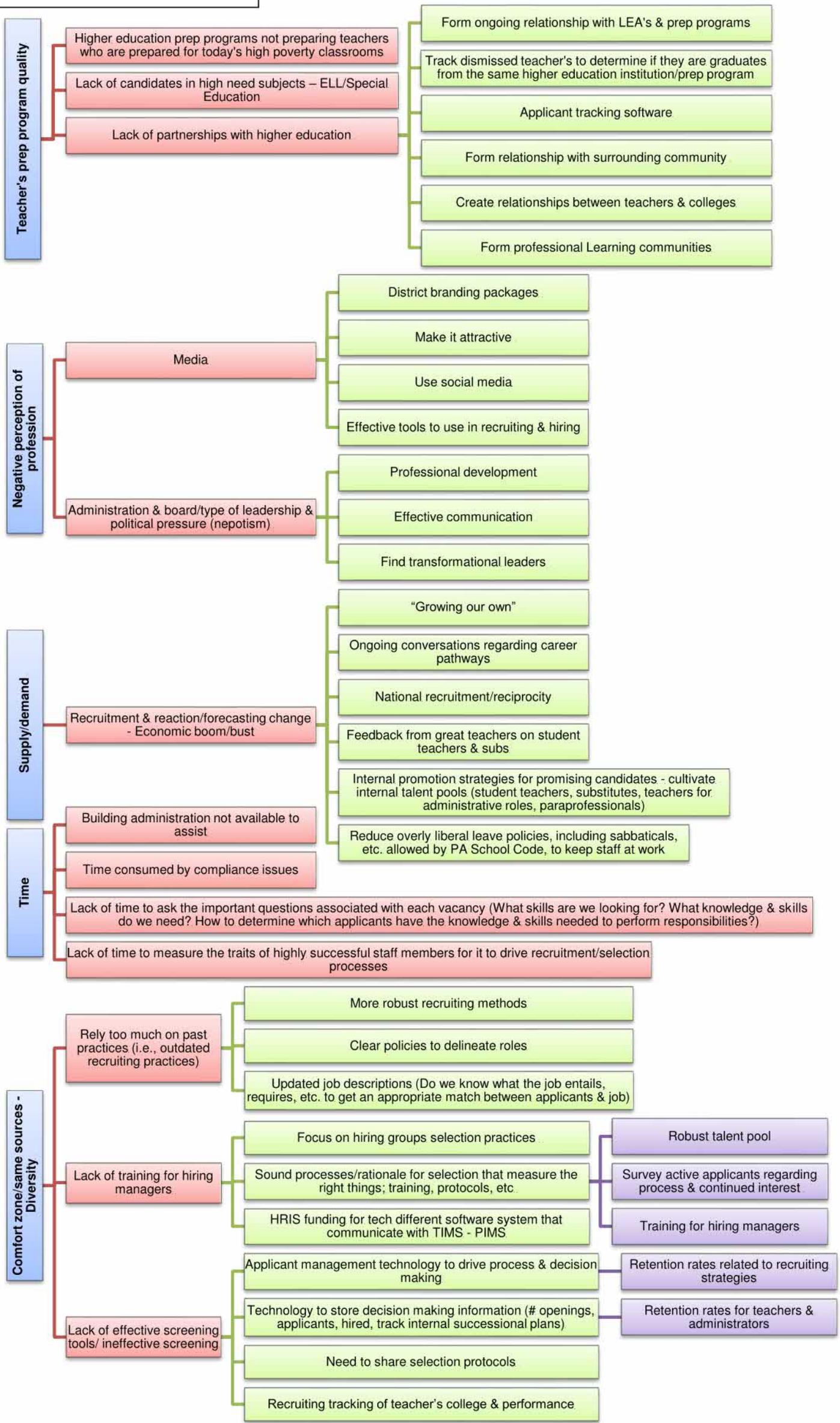
Concept Maps	Colors for Each			
	Equity Gaps	Root Causes	Strategies	Metrics
Climate	Purple	Tan	Blue	Pink
Recruiting and Hiring	Light Blue	Pink	Lemon-Lime	Purple
Retaining and Supporting	Light Blue	Pink	Lemon-Lime	Purple

²⁹ School districts and charter schools report to PDE in areas related to safety; data associated with a school’s learning environment are not part of the PIMS annual data collection. Instead, LEAs report on things like assaults on other students and staff; robbery; terroristic threats; disorderly conduct; possession of weapons; sanctions and adjudication, etc. A copy of Pennsylvania’s Safe Schools – Statewide Report for the 2013-14 school year is included in Appendix F.

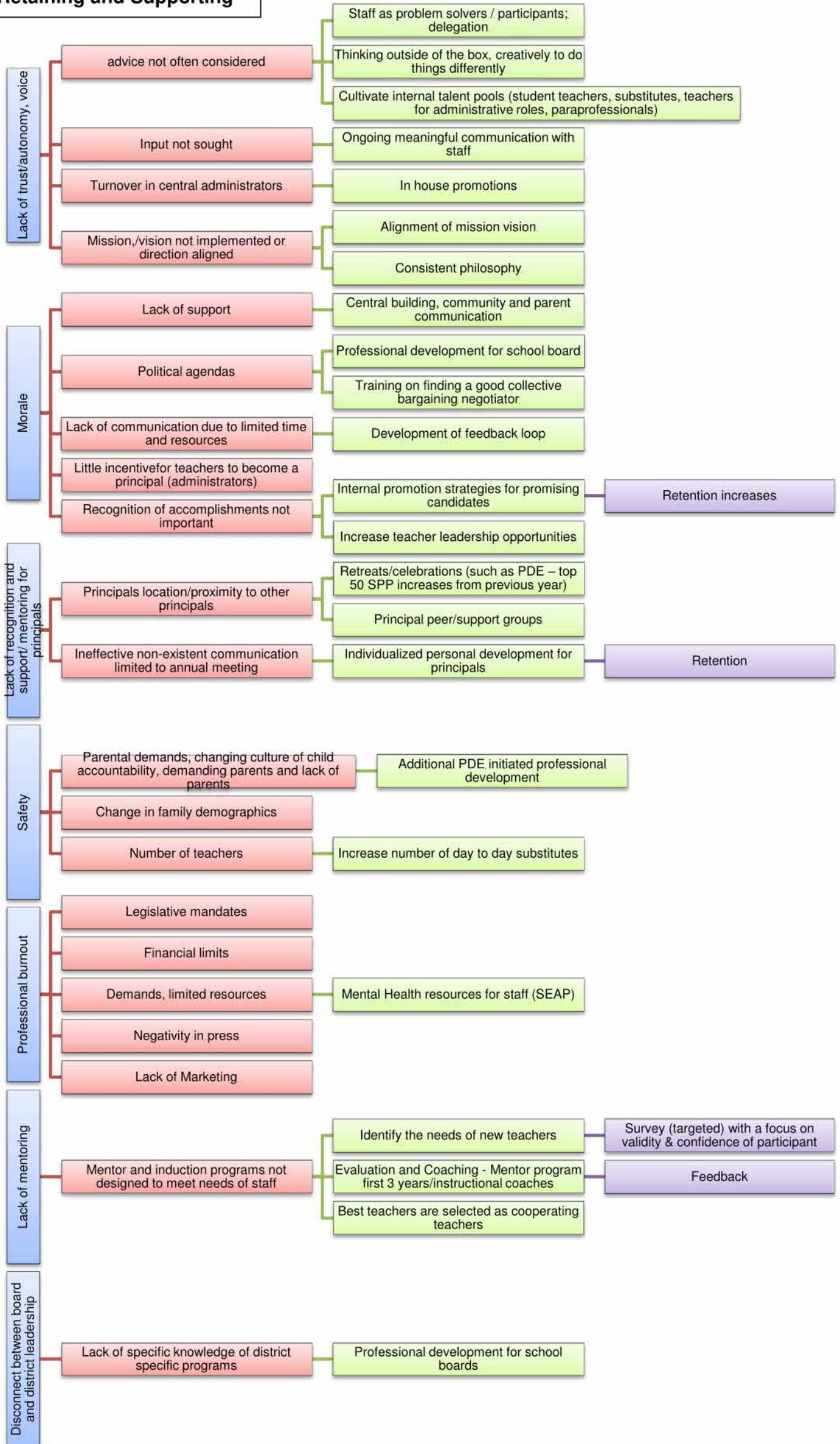
Climate



Recruiting and Hiring



Retaining and Supporting



Educator Effectiveness. The Pennsylvania Legislature passed Act 82 of 2012³⁰ which implemented a new educator effectiveness system for professionals and temporary professionals in Pennsylvania's school districts; none of the provisions of Act 82 of 2012 apply to Pennsylvania charter schools. New evaluation forms were implemented on a staggered basis for each type of educator being evaluated. The new evaluation system was implemented for all classroom teachers in the 2013-14 school year and for principals, school leaders and non-teaching temporary and professional employees during the 2014-15 school year.

Statewide, evaluation data reported by school districts and charter schools, show that 98.40% and 96.99% of all school district teachers and principals respectively who were evaluated during the 2013-2014 school year received a "Satisfactory" rating. The statewide evaluation results show that for charter school teachers and principals who were evaluated during the 2013-14 school year 96.31% and 91.19% respectively received a "Satisfactory" rating. Table 13 below provides a more detailed look at the evaluation results for charter school and school district teachers and principals.

Since the percentages of teachers and principals who received a "Satisfactory" rating were so high, no further analysis was conducted to look at differences between Pennsylvania's wealthiest/poorest schools and highest/lowest minority schools.

Finally, even though 2013-14 school year was the first time teachers were evaluated using performance levels of "Distinguished," "Proficient," "Needs Improvement," and "Failing," school districts were not prepared to report the number of teachers who earned each of these performance levels. Therefore, they were instructed to report the number of teachers and principals who were rated "satisfactory" or "unsatisfactory."³¹ The number of teachers receiving each performance level will be reported for the 2014-15 school year.

For PSSA mathematics and reading in grades 4 to 8, it appears that there is *not* a significant relationship between the poverty level of the school and student growth (as measured by teacher specific reporting). While there may be a small relationship in some grades, there is no relationship between poverty level and student growth in certain grades, while in others the relationship may be a little more pronounced. This little to no relationship when looking at mathematics and reading results in schools of all poverty levels leads to a similar distribution of teacher effectiveness levels, which seems to indicate equity of teacher effectiveness across regardless of a school's poverty level.³²

It is apparent that students in Pennsylvania's higher poverty schools are not making as much progress (as defined by PVAAS teacher specific reporting) in PSSA Science 4 and 8 and the 3 Keystone examinations (Algebra I, biology, literature) compared to Pennsylvania's low poverty schools. In the 3 Keystone examinations this appears to be a gradual relationship, but in science it appears that the highest poverty schools have students making a lot less growth and not as much of a difference among the other groups of schools.³³

³⁰ The overarching goal of Pennsylvania's new educator evaluation system (24 P.S. § 11-1123) is to improve student achievement by focusing on the effectiveness of teacher, principal and non-teaching temporary and professional employees. It is intended that the system will provide summative scores for accountability purposes, inform decisions about tenure or dismissal, identify educators in need of remediation and provide formative feedback to improve practice.

³¹ School districts were informed that for the 2014-15 school year they will be expected to report the aggregate number of teachers and principals who were rated at each of the four performance levels of "Distinguished," "Proficient," "Needs Improvement," and "Failing."

³² These are results from a preliminary analysis of teacher effectiveness (as measured by PVAAS teacher reporting); further analyses and discussion will continue.

³³ Ibid.

Table 13. Pennsylvania's Teacher and Principal Evaluation Results 2013-14 School Year				
	Charter Schools³⁴	Percentage	School Districts	Percentage
Number of LEA's in Pennsylvania	176	100%	499	100%
Classroom Teachers				
Number Identified	4,528	100%	104,504	100%
Number Rated as Satisfactory	4,361	96.31%	102,836	98.40%
Number Rated as Unsatisfactory	69	1.05%	183	.18%
Number Not Rated	98	2.16%	1,485	1.42%
Principals				
Number Identified	172	100%	3,026	100%
Number Rated as Satisfactory	158	91.19%	2,935	96.99%
Number Rated as Unsatisfactory	4	2.32%	21	.69%
Number Not Rated	10	5.81%	70	2.31%

Expenditures Per Student. Recent articles highlight the need for equitable education spending for states to level out the amount of local and state funds that are spent per student to educate students from the poorest and highest minority schools across the nation. In HOMEROOM, the official blog of the United States Department of Education, Secretary Duncan “called on Pennsylvania to step up and fund education.”³⁵

Pennsylvania has a -33.5% difference between the 2011-12 expenditures (minus federal revenue other than impact aid per pupil in membership)³⁶ by high- and low-poverty districts. The following Pennsylvania expenditures were extracted from tables that list all 50 states and the District of Columbia (see Appendix G for a complete table of each state's 2011-12 expenditures based on poverty and race/ethnicity that are ranked from high to low). Based on the U.S. Department of Education's 2011-12 data, Pennsylvania's per student expenditures exceed the average calculated for the entire United States across all of the levels of wealth reported in Table 14; there is a difference between the per student expenditures between Pennsylvania's wealthiest and poorest schools, a pattern that is also similar for the average calculated for the United States. Pennsylvania's expenditures reported in Table 15 exceed the average calculated for the United States in all but one category “Greater than 50% Black Enrollment,” where the per student expenditure is \$753 less than the United States' average.

³⁴ Evaluation system used for evaluating charter school teachers and principals is not comparable to the evaluation system school districts used for their teachers in 2013-14; Pennsylvania's new principal/school leader evaluation system was not implemented until 2014-15 school year and, therefore is not reflected in the table above.

³⁵ **Secretary Duncan: “Step Up and Fund Education”** notice posted on HOMEROOM, the official blog of the U.S. Department of Education [http://www.ed.gov/blog/2015/03/secretary-duncan-step-up-and-fund-education/.](http://www.ed.gov/blog/2015/03/secretary-duncan-step-up-and-fund-education/)

³⁶ SOURCE: U.S. Department of Education, Office of Planning, Evaluation and Policy Development, unpublished tabulations. Data based on U.S. Department of Commerce, Census Bureau, “Small Area Income and Poverty Estimates,” 2011; U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “School District Finance Survey (F-33),” fiscal year 2012, Version Preliminary 0d; and U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), “Local Education Agency Universe Survey,” 2011-12, Version Provisional 1a.

Table 14. Pennsylvania's 2011-12 School Year Per Student Expenditures by Poverty Quartile Compared to the United States

(No Adjustment for Students in Poverty)						
2011-12						
State	Total	Low-Poverty Districts	Low-middle Poverty Districts	High-middle Poverty Districts	High-poverty Districts	Percent difference between high- and low-poverty districts³⁷
Pennsylvania	\$11,021	\$12,529	\$11,111	\$11,069	\$9,387	-33.5
United States	\$9,210	\$10,721	\$8,804	\$8,040	\$9,270	-15.6

Table 15. Pennsylvania's 2011-12 School Year Per Student Expenditures by Percentage of Enrollment of Students in Various Racial/Ethnic Categories Compared to the United States

(No Adjustment for Students in Poverty)							
2011-12							
State	Total	Greater than 50% White Enrollment	Greater than 50% Hispanic Enrollment	Greater than 50% Black Enrollment	Greater than 50% Other Racial/Ethnic Categories Enrollments³⁸	Reported Racial/Ethnic Data, All Other Districts	Districts with Greater than 50% Minority Enrollment³⁹
Pennsylvania	\$11,021	\$11,393	\$9,100	\$9,232	Not Available	\$10,940	\$9,562
United States	\$9,210	\$9,406	\$7,754	\$9,985	\$9,598	\$9,519	\$8,986

Note: Per student expenditures reported in Tables 14 and 15 do not include federal revenue other than impact aid per pupil in membership. Data contained in Tables 14 and 15 were reported by the U.S. Department of Education and were not independently verified by Pennsylvania Department of Education; the entire data reported by the U.S. Department of Education is included in Appendix G.

³⁷ Percent difference was calculated by dividing the difference between expenditures in the high-poverty districts from that in low-poverty districts by the expenditures in high-poverty districts.

³⁸ Other includes Asian/Pacific Islander, American Indian and Two or more races.

³⁹ Minority includes Black, Hispanic, Asian/Pacific Islander, American Indian and Two or more race.

While there always have been inequalities among the nation's public schools, the gap in spending between public schools in the poorest and most-affluent communities has grown during the past decade.

Nowhere is that gap wider than in Pennsylvania, according to 2011-12 federal data. School districts with the highest poverty rates receive one-third fewer state and local tax dollars, per pupil, than the wealthiest districts. This spring, Governor Tom Wolf outlined an ambitious plan to address the inequities by proposing significantly higher funding to support Pennsylvania's elementary, secondary, postsecondary, and higher education. Governor Wolf's budget is the first step in a multi-tier, multi-year approach to improve funding for Pennsylvania's educational systems.

In an attempt to increase school district funding, a lawsuit over inadequate school funding was filed in Commonwealth Court. Commonwealth Court said it was Pennsylvania's General Assembly's responsibility to address school funding instead of the court's responsibility. The lower court's decision is being appealed to the Pennsylvania Supreme Court.⁴⁰ Recognizing the need for a new funding formula to support the commonwealth's school districts after the previous formula was abandoned, Act 51 of 2014 created the Basic Education Funding Commission, charged with developing and recommending to the Pennsylvania legislature a new formula for distributing state funding for basic education for Pennsylvania schools. The new formula will take into account relative wealth, local tax efforts, geographic price differences, enrollment levels, local support, and other factors. Approvals are needed by both the legislature and the Governor before a new funding formula can be implemented.

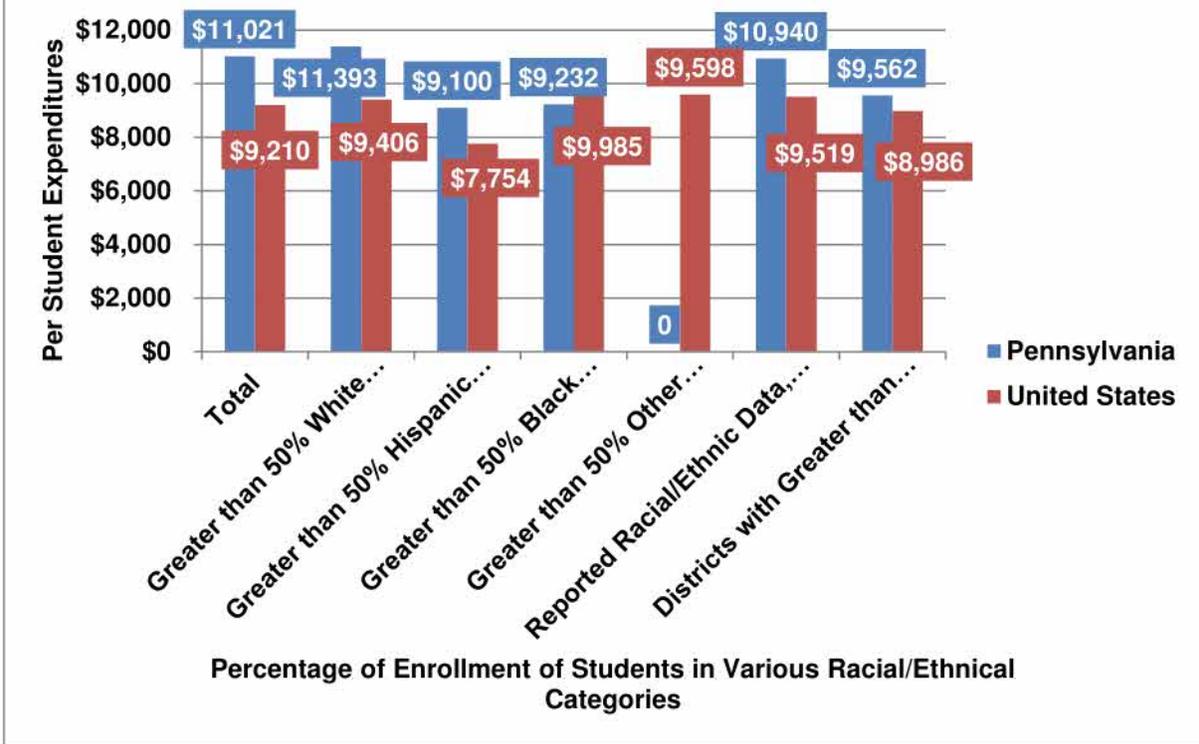
⁴⁰ Eleanor Chute, Commonwealth Court decision on Pa. school funding appealed, Pittsburgh Post-Gazette, May 20, 2015 (see <http://www.post-gazette.com/news/education/2015/05/20/Organizations-appeal-Commonwealth-Court-decision-on-Pennsylvania-school-funding/stories/201505200213.print>)

Graph 19. Comparison of Pennsylvania's 2011-12 Student Expenditures to Student Expenditures for All States Combined Across Wealth



Note: Per student expenditures reported above do not include federal revenue other than impact aid per pupil in membership. The data for the above graph were reported by the U.S. Department of Education and were not independently verified by Pennsylvania Department of Education.

Graph 20. Pennsylvania's 2011-12 School Year Per Student Expenditures Disaggregated by Racial/Ethnic Enrollment



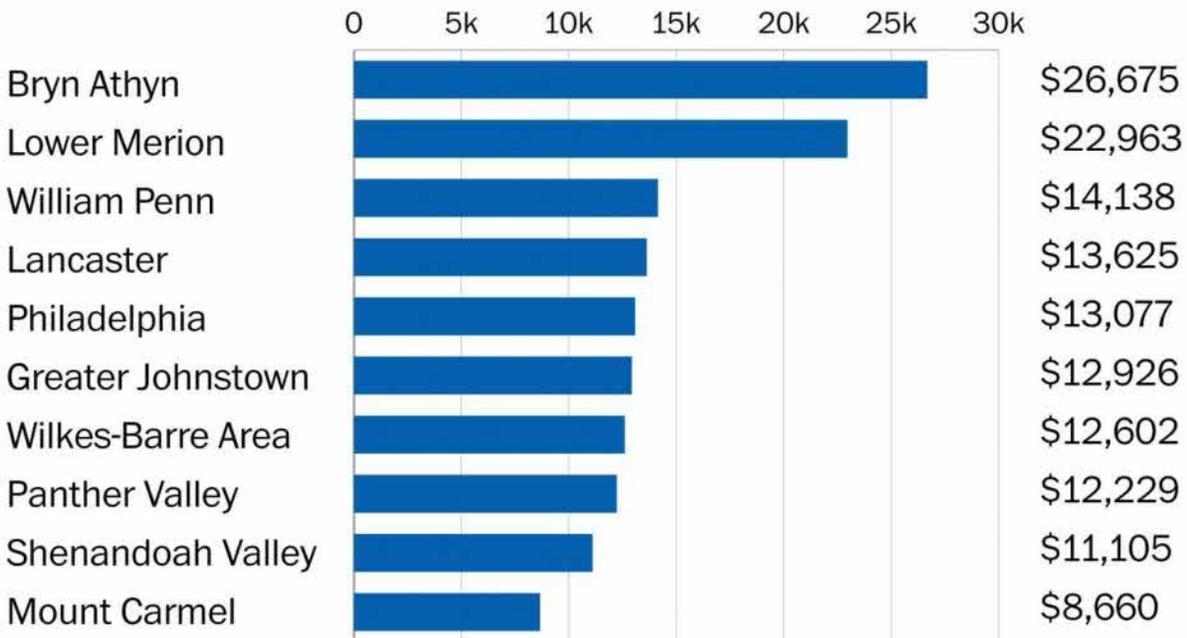
Note: Other includes Asian/Pacific Islander, American Indian and Two or more races. Minority includes Black, Hispanic, Asian/Pacific Islander, American Indiana and Two or more races. U.S. Department of Education data were used to develop Graph 20; data were not independently verified by PDE.

Table 16. Funding Inequality in Pennsylvania

Funding inequality in Pennsylvania

American public schools have always been unequal. Pennsylvania has the biggest gap in the country between spending in its most affluent districts, such as Bryn Athyn, and its poorest, such as Mount Carmel. Several districts in the middle, such as Lancaster and Panther Valley, have sued the state over what they say is inadequate funding.

PER-PUPIL SPENDING ON SCHOOL OPERATIONS



Source: Pennsylvania Department of Education

THE WASHINGTON POST

Note: Bryn Athyn, a small secular community, does not maintain its own schools, but “tuitions out” the small number of students, who choose not to attend their church school.

Spending on school operations — not including school construction or debt payments — ranges from less than \$8,700 per student in a coal country district, one of the state’s lowest-achieving, to more than \$26,600 in a tiny Philadelphia suburb. Philadelphia spends about \$13,000 per student to operate schools, compared to \$23,000 per child in Lower Merion.

Summary of Pennsylvania's Equity Gaps and Root Causes

Although equity gaps do not exist for all of the data sets that were analyzed in conjunction with the preparation of Pennsylvania's equitable access state plan, it is important to note that some of the differences that exist between Pennsylvania's wealthiest and poorest and highest and lowest minority schools helped in the identification of root causes to the bigger equity gaps that can be mitigated. For example, as a collective bargaining state, salary schedules, furloughing of teachers and other employees represented by a union, pay incentives, hours in a work day, work days in a school year, etc. are all determined through collective bargaining that occurs at each one of Pennsylvania's 499 school districts. Consequently, it would be futile for Pennsylvania's equitable access plan to identify salary differences between Pennsylvania's wealthiest and poorest and highest and lowest minority schools, because setting salary schedules is outside the purview and control of the Pennsylvania Department of Education or the Pennsylvania legislative branch. Instead, we could postulate that lower salaries in some of Pennsylvania's schools make it difficult for those schools to recruit, hire, retain and support a highly effective teacher and school leadership teams as a way to inform local communities, businesses and parents.

Pennsylvania has made great strides in reducing the number of 01 emergency permits used to staff teaching, leadership and education specialists positions in schools. Even though Pennsylvania has made great strides in reducing the reliance on 01 emergency permits to staff teaching, leadership and education specialists positions, in school and our current statewide HQT percentage rate is 98.40 per cent, that doesn't suggest that further improvement is needed especially in Philadelphia School District and Pennsylvania's charter schools – especially since all schools were to have 100 percent of their core academic teachers highly qualified by 2006.

Equity Gaps	Root Causes
Students in Philadelphia School District's poorest and highest minority schools are being taught by unqualified, not HQTs (Gap #1)	<ul style="list-style-type: none"> ▪ Philadelphia School District has difficulties recruiting/retaining HQTs who provide direct instruction in core academic subjects (this includes English language learners, special education, alternative education, elementary, middle and secondary grade levels) ▪ Individual bias may preclude teachers from applying for vacancies in Pennsylvania's poorest and highest minority schools, especially since the school's workforce may look different than the local community ▪ Supply of highly qualified core academic subject teachers in and around Philadelphia may be inadequate to fill the district's vacancies ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership positions, paraprofessionals for vacancies

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<ul style="list-style-type: none"> ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ School safety is a concern ▪ Ineffective marketing and communications that do not portray positive images of school, students, staff and community ▪ Philadelphia School District’s collective bargaining agreement permits teachers to request reassignments based on seniority rather than based on the recommendation of a hiring committee ▪ Schools utilize outdated recruiting practices ▪ Lack of training for managers involved in hiring to ensure they are conducting comprehensive screenings of candidates and selecting the most effective teacher ▪ Lack of effective screening tools
<p>Students in Pennsylvania’s poorest and highest minority charter schools are being taught by unqualified, not HQT (Gap #2)</p>	<ul style="list-style-type: none"> ▪ Pennsylvania’s poorest and highest minority charter schools have difficulties recruiting or retaining HQT who provide direct instruction in core academic subjects (this includes English language learners, special education, alternative education, elementary, middle and secondary grade levels) ▪ Individual bias may preclude teachers from applying for vacancies in Pennsylvania’s poorest and highest minority schools, especially since the school’s workforce may look different than the local community ▪ Pennsylvania’s poorest and highest minority charter schools may not register their non-certified teachers in TIMS for PDE staff to determine whether or not these teachers are highly qualified ▪ Schools utilize outdated recruiting practices ▪ Lack of training for managers involved in hiring to ensure they are conducting comprehensive screenings of

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<p>candidates and selecting the most effective teacher</p> <ul style="list-style-type: none"> ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership positions, paraprofessionals for vacancies ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ Lack of effective screening tools ▪ Salaries are generally lower for both first year charter school teachers and those with more than one year of service teaching in Pennsylvania’s highest minority charter schools than they are in lower minority schools ▪ Salaries are generally lower for both first year charter school teachers and those with more than one year of service teaching in Pennsylvania’s mid-wealth charter schools than for those teaching in higher poverty schools ▪ The mean for first year charter school teachers was \$18,760 less than the salary for first year teachers in the all school district sample (\$45,221 and \$63,981 respectively) ▪ Salary differences between the charter school sample and the all school district sample could explain why Pennsylvania’s highest minority and poorest charter schools experience higher teacher turnover rates and higher mean percentage rates of core academic courses that are taught by teachers who are not highly qualified
<p>Seventy-seven (77) percent of all type 01 emergency permits issued in Pennsylvania, excluding all trade/technical subjects,</p>	<ul style="list-style-type: none"> ▪ Limited supply of highly qualified core academic subject teachers pose challenges for Pennsylvania’s poorest and highest minority schools and charter schools to hire teachers who satisfy Pennsylvania’s HQT requirements ▪ Individual bias may preclude teachers from applying for vacancies in Pennsylvania’s poorest and highest

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
<p>are issued in core academic subjects, affects Pennsylvania’s highly qualified/not highly qualified percentages; 303 or nearly 35% of the 872 emergency permits are issued in special education; it is important to note that the subjects of mathematics, English language arts and the sciences are all included in Pennsylvania’s System of Statewide Assessment; students are also required to pass Keystone exams in Algebra I, biology and literature in order to graduate from high school beginning in 2017 (Gap #3)</p>	<p>minority schools, especially since the school’s workforce may look different than the local community</p> <ul style="list-style-type: none"> ▪ Limited supply of newly certified special education teachers, who also hold another acceptable certificate, creates a challenge for school districts and charter schools to assign qualified special education teachers to teach children with special needs ▪ Although teacher preparation institutions have been reporting on strategies and steps they are taking to help Pennsylvania overcome supply issues in core academic subjects, especially special education and English language learners, they have not succeeded in increasing the pool of highly qualified teachers ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership positions, paraprofessionals for vacancies ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ School safety is a concern ▪ Ineffective marketing and communications that do not portray positive images of school, students, staff and community ▪ Pennsylvania changed the grade level span of its special education certificate (originally PreK-12) to PreK-8 and grades 7-12 and now requires a special education teacher to hold a second certificate before a new Pennsylvania special education certificate will be issued; changing the grade level span and requiring a second certificate before a new special education certificate will be issued makes it difficult for other states’ certified special education teachers to apply for and be certified in Pennsylvania since the certificates are not

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<p>comparable to Pennsylvania’s – thus creating a barrier for out-of-state special education certified teachers to obtain Pennsylvania certification</p> <ul style="list-style-type: none"> ▪ Schools utilize outdated recruiting practices ▪ Lack of training for managers involved in hiring to ensure they are conducting comprehensive screenings of candidates and selecting the most effective teacher ▪ Lack of effective screening tools
<p>Not all schools in Pennsylvania have qualified principals; a total of 21 principals in 2013-14 served on 01 emergency permits (Gap #4)</p>	<ul style="list-style-type: none"> ▪ Poor school climate contributes to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Individual bias may preclude principals from applying for vacancies in Pennsylvania’s poorest and highest minority schools, especially since the school’s workforce may look different than the local community ▪ Lack of amenities and public transportation in the school’s community contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Few job opportunities for spouses or significant others in and around the school community contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ School safety is a concern ▪ Ineffective marketing and communications that do not portray positive images of school, students, staff and community ▪ Inadequate funding levels contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Lack of sufficient pool of qualified principals even though there are non-traditional principal preparation avenues available in Pennsylvania; skills and knowledge are needed for principals to transform low performing schools ▪ Negative perceptions or beliefs associated with highest minority and poorest schools contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership positions, paraprofessionals for vacancies ▪ Not much incentive is seen for teachers or others to become principals

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<ul style="list-style-type: none"> ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ Schools utilize outdated recruiting practices ▪ Lack of training for managers involved in hiring to ensure they are conducting comprehensive screenings of candidates and selecting the most effective principals ▪ Lack of effective screening tools ▪ Principals in Pennsylvania’s highest and upper-mid high minority schools were paid at higher levels than principals in lower minority schools; salary differences exist between Pennsylvania’s urban schools (those with higher minority levels) and rural schools (those with low minority levels) ▪ The mean salary for principals in Pennsylvania’s wealthiest (\$113,653.43) and poorest (\$107,484.22) schools were higher than the mid-wealth and the mid-poor samples (\$98,352.59 and \$91,864.05 respectively) implying there are other reasons why some schools cannot hire qualified and highly effective principals
<p>School nurses (a total of 49.01 emergency permits) and guidance counselors (a total of 19.01 emergency permits) are being hired on a type 01 emergency permit; these individuals are unqualified since they do not hold valid, appropriate Pennsylvania certificates (Gap #5)</p>	<ul style="list-style-type: none"> ▪ Poor school climate contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Individual bias may preclude school nurses, guidance counselors and others from applying for vacancies in Pennsylvania’s poorest and highest minority schools, especially since the school’s workforce may look different than the local community ▪ Lack of amenities and public transportation in the school’s community contribute to hiring/retention challenges in Pennsylvania’s poorest and highest minority schools ▪ Inadequate funding levels contribute to hiring/retention

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<p>challenges in Pennsylvania’s poorest and highest minority schools</p> <ul style="list-style-type: none"> ▪ Lack of sufficient pool of qualified nurses and guidance counselors. ▪ Schools utilize outdated recruiting practices ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership positions, paraprofessionals for vacancies ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ Lack of training for managers involved in hiring to ensure they are conducting comprehensive screenings of candidates and selecting the most effective school nurses and guidance counselors ▪ Lack of effective screening tools
<p>Schools have inconsistent leadership or have high rates of turnover (Gap #6)</p>	<ul style="list-style-type: none"> ▪ Lack of professional development ▪ Strong communication and interaction with local government and community organizations ▪ Policies and philosophies are applied inconsistently across the district ▪ School safety is a concern. ▪ School climate is such that teachers, other staff and school leaders are not asked to contribute to or be involved in decision making or they feel their opinions are not valued ▪ Districts fail to exercise their administrative rights by bargaining away some of their rights ▪ Time spent on compliance issues by administrators, teachers, human resource personnel administrators and other staff ▪ Schools do not cultivate internal talent pools, such as student teachers, substitutes, teachers for leadership

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<p>positions, paraprofessionals for vacancies</p> <ul style="list-style-type: none"> ▪ Time constraints do not allow the important questions to be asked: <ul style="list-style-type: none"> ○ What skills and knowledge are districts looking for in this position? ○ What skills and knowledge do districts need in the building to fill gaps? ○ How do districts determine which applicants have the knowledge and skills needed to perform responsibilities? ▪ No time to measure characteristics of highly successfully staff for them to drive recruitment and selection processes ▪ Lack of applicant management technology to assist administrators in recruitment and decision making ▪ Lower salaries in Pennsylvania’s charter schools may contribute to the high teacher turnover rate
<p>Some teacher preparation programs fail to graduate high quality and well-prepared new teachers for today’s classrooms, including the poorest and highest minority schools (Gap #7)</p>	<ul style="list-style-type: none"> ▪ Many new teachers are not prepared to teach or function in the highest minority and poorest classrooms ▪ Supply of new teachers doesn’t always meet the demand created by vacancies, including inadequate supply of teachers for special education and English language learners ▪ Lack of day-to-day substitutes ▪ Many new teachers are not prepared to teach or function in the poorest schools’ classrooms ▪ Supply of new teachers doesn’t always meet the demand created by vacancies ▪ Lack of on-going relationships/ partnerships with preparation institutions and programs ▪ Pennsylvania cannot adequately forecast school staffing needs due to an absence of data associated with schools’ strategic management of human resources
<p>Inequity of financial resources (Gap #8)</p>	<ul style="list-style-type: none"> ▪ Poor funding decisions have severe consequences, especially when fiscal resources are limited ▪ Inadequate financial resources limit classroom instructional materials, affects the number of teachers and other staff who can be hired, and limits the financial resources that are available for per pupil spending ▪ Need to reduce overly liberal leave policies, such as those allowed by the Pennsylvania School Code (sabbaticals), because a high cost is associated with them ▪ Some school districts do not have sufficient tax bases to

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
<p>Incomplete, inadequate or data not easily accessed in a timely manner (Gap #9)</p>	<p>add to their state subsidy and federal funding to increase per student expenditures</p> <ul style="list-style-type: none"> ▪ When the Equitable Access Support Network’s “Equity Plan Readiness/Planning Tool” was completed, it became evident that a number of data metrics essential for conducting analyses to identify equity gaps were not collected as part of PDE’s longitudinal data system. Therefore, an important long-term strategy will be the expansion of relevant data that creates a more complete picture regarding equitable access to excellent educators for Pennsylvania’s poorest and highest minority school students. Work will begin with the PDE’s Center for Data Quality, PDE leadership and stakeholders to identify which data should be collected and when it should begin. Ideally, if PDE could collect data related to the following data metrics, we would be able to conduct a more robust analysis of the differences between Pennsylvania’s wealthiest/poorest and highest/lowest minority schools: <ul style="list-style-type: none"> ○ Teacher and principal turnover data: <ul style="list-style-type: none"> ➢ Collect reasons why teachers and principals leave the profession or move onto another school ➢ Disaggregate turnover data to distinguish between which teachers and school leaders who leave the profession or move onto another school, are effective⁴¹ ➢ Teacher and principal absenteeism ➢ Number of applicants per teaching and principal vacancy, especially to identify teachers for English language learners and special education ▪ Data related to the number or percent of teachers and principals who have specific, measurable professional improvement plans based on their evaluation results ▪ Develop or adopt/adapt an existing school climate survey to begin collecting data related to a school’s learning environment ▪ Having data maintained in two different data systems (Pennsylvania’s longitudinal data system (PIMS) and

⁴¹ However, 22 Pa. Code, Chapter 19, §V(b) restricts the reporting of educator effectiveness data for classroom teachers and principals/school leaders to aggregate results. This regulation is pursuant to Section 1123(i) of the Public School Code 11-1123(i). Because there is a long-standing department policy that restricts data collection to those metrics required by the U.S. Department of Education or state regulation, these changes would require action by the Pennsylvania Legislature and the State Board of Education.

Table 17. Summary of Pennsylvania’s Equity Gaps and Root Causes

Equity Gaps	Root Causes
	<p>Pennsylvania’s teacher management information system (TIMS) does not allow PDE staff to respond quickly to major initiatives such as this state equity plan; new data reports had to be created by computer programmers since existing data reports could not extract the type of data required to easily complete the plan’s comprehensive analysis. There needs to be better interaction between both of these data systems without the reliance on computer programmers; this was also recommended by the human resource personnel administrators during their April 14, 2015 working session.</p> <ul style="list-style-type: none"> ▪ PDE needs more comprehensive information and data to develop trends associated with teachers and leader recruitment, retention, hiring, retention and support to enable better forecasting of future staffing needs in school districts and charter schools (i.e., workforce, shortage and mobility data) ▪ The robustness of and availability of data associated with equitable access to excellent educators will be continually revisited for improvements to made ▪ Create report formats that provide: <ul style="list-style-type: none"> ○ School human resource personnel administrators the names of each traditional/non-traditional certification preparation provider when graduates have their certification pulled by PDE ○ Traditional/non-traditional certification preparation providers summary educator evaluation results for their graduates and whether or not they are able to grow academic achievement in tested subjects (as measured by PVAAS teacher specific reporting)

Section 4. Strategies for Eliminating Equity Gaps, Time Line and Performance Measures

Pennsylvania's poorest and highest minority school buildings struggle to attract and retain effective and excellent teachers and principals who have the knowledge, skills and dispositions needed to raise student achievement for Pennsylvania's poorest and/or minority children. Nine (9) equity gaps and numerous root causes associated with each gap were identified in the previous section. Providing all students access to excellent teachers and leaders is a complicated endeavor for a local control, unionized state as large and diverse as Pennsylvania. School districts struggle with limited pools of qualified candidates to fill teaching, principal and other school staff vacancies. To achieve teacher and leader equity goals requires implementation of comprehensive, multi-faceted strategies that fosters change at the local and state level.

Pennsylvania's theory of action is built around four strategies, starting with strategically improving the management of Pennsylvania's human capital in our schools—especially in the poorest and highest minority schools--to enable them to recruit, hire, retain and support a pool of highly effective, qualified, fully certified teachers, principals and other school staff. Implementation of all strategies will be monitored to identify which are more effective in mitigating Pennsylvania's equity gaps; progress will be reported first to Pennsylvania's equity stakeholders and second to the public; and adjustments will be made if desired results are not achieved.

The remaining three strategies are ongoing professional learning; teacher and principal preparation; and fiscal equity. Table 18 also includes activities associated with data shortcomings that arose during the analysis and preparation of Pennsylvania's equity state plan; performance measures associated with activities are included in a shaded box after each group of activities. Text in Table 18 is color-coordinated to each of the corresponding strategies pictured below in Pennsylvania's theory of action:

Pennsylvania's Theory of Action for Equitable Access to Excellent Educators

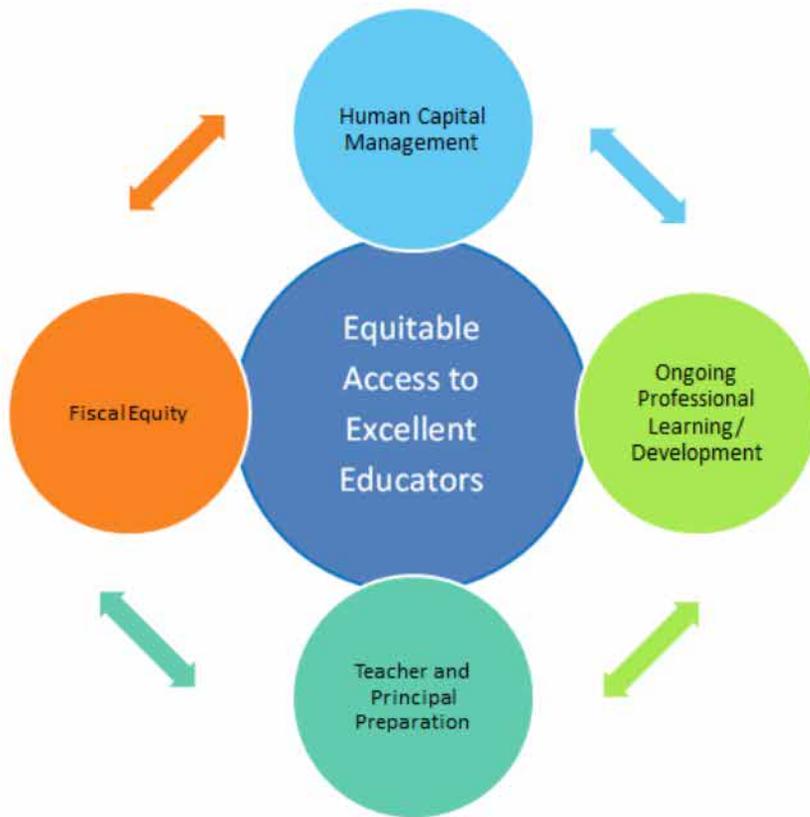


Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
<p>Limited pool of qualified Pennsylvania and out-of-state candidates to fill vacancies (targeting equity gaps 1 to 5)</p>	<p>PDE with the assistance of external providers will:</p> <ol style="list-style-type: none"> 1. make available a robust marketing plan that provides effective and innovative recruitment strategies (such as those developed by American Institute for Research), screening tools and selection processes, processes for projecting vacancies and professional development for managers and others involved in the hiring of school principals for all schools, but especially Pennsylvania's poorest and highest minority schools and charter schools⁴³ 2. adapt and expand the robust marketing plan and screening tools to include teachers, guidance counselors, school nurses and other hard-to-staff positions⁴⁴ 3. disseminate The Chicago Public Education Fund's <i>School Turnaround Leaders: Competencies for Success</i> report to Pennsylvania's poorest and highest minority schools and charter schools; competencies for success will be integrated in professional development sessions and posted to PDE's SAS portal and/or educator effectiveness page 4. create a site on Standard Aligned Systems (SAS) or PDE's equitable access to excellent educators web site 	<p>Summer, 2015 Matthew Stem, Donald McCrone, Linda Benedetto and other PDE staff to be determined</p> <p>Winter, 2015-16 Matthew Stem, Donald McCrone, Linda Benedetto and other PDE staff to be determined; school human resource personnel administrators and members of stakeholder group</p> <p>Spring, 2016 and beyond Matthew Stem, Donald McCrone, Linda Benedetto and other PDE staff to be determined; school human resource personnel administrators and members of</p>

⁴² Equity gaps corresponding to each root cause are included in parentheses.

⁴³This strategy, along with other strategies associated with the "limited pool of qualified Pennsylvania and out-of-state candidates" root cause, will increase the number of qualified principals by reducing the number of type 01 emergency permits.

⁴⁴ This strategy, along with other strategies associated with the "limited pool of qualified Pennsylvania and out-of-state candidates" root cause, will increase the number of qualified teachers, guidance counselors, school nurses and other hard-to-staff positions by reducing the number of type 01 emergency permits.

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<p>that features high quality, proven recruitment, hiring, retention and support strategies and process tools to enable all schools to improve their abilities to strategically manage their human resources</p>	<p>stakeholder group</p> <p>Begin Winter 2015-16 and quarterly thereafter</p> <p>Matthew Stem, Theresa Barnaby, Christina Baumer, Don McCrone, Linda Benedetto, school human resource personnel</p>
	<p>5. coordinate on-going meetings between Pennsylvania’s approved traditional and non-traditional teacher and principal preparation programs and Pennsylvania’s human resource personnel administrators in an effort to better align Pennsylvania’s supply of teachers and principals with local school needs</p>	<p>administrators and members of stakeholder group</p> <p>Matthew Stem, Donald McCrone, Linda Benedetto and other PDE staff to be determined; school district personnel; school human resource personnel administrators and members of stakeholder group</p>
	<p>6. share proven strategies, such as Philly Plus, to enable Pennsylvania’s poorest and highest minority schools to implement, adopt, or adapt “grow your own” programs and/or implement a Governor’s School with a focus on future teachers in an effort to increase the pool of qualified candidates, who are representative of the local schools’ demographics</p>	<p>Late Fall, 2015</p> <p>Theresa Barnaby, Nancy Cheris, Jamal Wakeem, Don McCrone and Linda Benedetto</p>
	<p>7. meet quarterly with Pennsylvania’s poorest and highest minority schools and charter schools in efforts to reduce their reliance on type 01 emergency permits and to increase their HQT percentages</p>	<p>Fall, 2015</p> <p>David Volkman, Matthew Stem, Theresa Barnaby, Beth Olanoff and other PDE staff to be</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<p>8. work with the Pennsylvania legislature to amend the Pa. school code to add two successful years of service in another state for out-of-state principal applicants⁴⁵</p> <p>9. develop and disseminate to district and charter schools human resource personnel administrators and post to PDE's certification website a chart that cross-walks Pennsylvania's certificates to the certificates issued by surrounding states (including, but not limited to, Delaware, New Jersey, Maryland, Ohio, New York, Virginia, etc.) to allow districts to match out-of-state applicants' certification credentials to Pennsylvania's</p> <p>10. cultivate true reciprocity agreements by strengthening state relationships with neighboring states as a way to help ensure that teachers and principals who are prepared in one of the states in the region, but take a teaching or principal position in another of those states, are fully prepared to meet the certification requirements and effectiveness standards of the state in which they teach or serve as a leader</p> <p>11. revise the local school equity plan template to improve the overall quality of the plans developed by school districts and charter schools</p> <ul style="list-style-type: none"> ▪ revised template will be available on PDE's equitable access to excellent educators web page 	<p>determined</p> <p>Late Fall 2015 Matthew Stem, Theresa Barnaby, Nancy Cheris, Linda Benedetto</p> <p>Late Fall 2015 Matthew Stem, Theresa Barnaby</p> <p>Fall, 2015 Don McCrone, Linda Benedetto</p>

⁴⁵ Current legislation applies to instructional certificates, which does not apply to principals.

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<ul style="list-style-type: none"> ▪ local school equity plans will be completed on line so PDE will be able extract and summarize information and data 	
<p>By the end of 2016-17 school year:</p> <ul style="list-style-type: none"> a. each one of Pennsylvania's poorest and highest minority schools will have a qualified, effective school principal b. each one of Pennsylvania's poorest and highest minority charter schools will have a qualified, effective school principal c. Pennsylvania's HQT percentage will reach 99% d. Philadelphia School District's HQT percentage will increase three to five percent e. Pennsylvania's poorest and highest minority charter schools' HQT percentage will increase as a group by three to five percent f. the number of type of 01 emergency permits issued to Pennsylvania's poorest and highest minority schools will decrease by five percent g. each of Pennsylvania's focus and priority schools will be utilizing a new robust marketing plan that provides effective and innovative recruitment strategies (such as those developed by American Institute for Research), screening tools and selection processes, processes for projecting vacancies and professional development for managers and others involved in the hiring of school principals h. at least 10 percent of Pennsylvania's poorest and highest minority schools and at least three percent of Pennsylvania's poorest and highest minority charter schools will be utilizing a new robust marketing plan that provides effective and innovative recruitment strategies (such as those developed by American Institute for Research), screening tools and selection processes, processes for projecting vacancies and professional development for managers and others involved in the hiring of school principals i. school human resource personnel administrators will be able to identify surrounding states that have similar teacher and principal certification requirements as Pennsylvania j. all 499 Pennsylvania school districts and 173 charter schools will have prepared at least one local equity plan and either revised or created a new equity plan based, as appropriate 		
<p>Preliminary results indicate students in Pennsylvania's poorest schools are not making as much academic progress in</p>	<p>PDE with the assistance of external providers will:</p> <ol style="list-style-type: none"> 1. facilitate the delivery of high quality, on-going science professional development opportunities as part of Pennsylvania's 2015 SAS Institute for teachers in Pennsylvania's poorest and 	<p>Planning Begins Summer, 2015 Matthew Stem, Rita Perez, Don McCrone and others Winter, 2015</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
<p>PSSA’s science assessment and in the Keystone exams (Algebra I, biology and literature) as they are in PSSA’s mathematics and English/language arts/reading subjects (targeting equity gaps 1 to 4)</p>	<p>highest minority schools</p> <ol style="list-style-type: none"> 2. develop high-quality on-line learning modules devoted to science content connected to PSSA’s science content 3. emphasize the need for all districts and charter schools, but especially Pennsylvania’s poorest and highest minority schools, to continue to conduct on-going, sustained professional development in mathematics and English/language arts/reading so teachers in these subjects can remain at their current levels or continue to grow their students; academic progress 4. require each of Pennsylvania’s focus and priority schools to utilize their local federal resources to conduct high quality professional development in the tested subjects of mathematics, English/language arts/reading and science. 	<p>David Volkman, Matthew Stem and external providers to be determined</p> <p>Fall, 2015 Pedro Rivera, David Volkman, Matthew Stem, Rita Perez, Susan McCrone, Don McCrone</p>
<p>By the end of 2016-17 school year:</p> <ol style="list-style-type: none"> a. at least three SAS Institutes included professional development dedicated to the sciences, including biology b. each focus and priority school can document and articulate how their federal resources were used to conduct high quality professional development for teachers in state tested subjects of mathematics, English/language arts/reading and science c. each focus and priority school teacher who teaches science content associated with Pennsylvania’s state assessment will complete the on-line learning modules developed to support and enhance teacher science content knowledge d. all districts and charter schools, especially Pennsylvania’s poorest and highest minority schools, will receive at least three annual written reminders about the need to offer on-going, sustained professional development in mathematics and English/language arts/reading so teachers in these subjects can remain at their current levels or continue to grow their students; academic progress 		
<p>Lack of high-quality, effective professional development</p>	<p>PDE with assistance of external providers will develop high quality, effective learning opportunities for:</p> <ul style="list-style-type: none"> ▪ principals to learn effective 	<p>Fall/Winter, 2015 David Volkman, Matthew Stem, Don McCrone, Linda</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
<p>opportunities for teachers, principals, school board members and other school staff (targets equity gaps 1 to 7)</p>	<p>strategies for celebrating strengths and success of their teachers, other staff and their students</p> <ul style="list-style-type: none"> ▪ school district personnel to learn good collective bargaining techniques and strategies ▪ effective marketing and communications strategies that promote positive aspects associated with local school communities, including the effective use of social media ▪ principals, teachers and other school staff related to cultural sensitivities and reducing bias ▪ principals, teachers and other school staff related to what effective, research-based teaching strategies aimed at better student engagement look like when they are implemented correctly ▪ ways to ensure that local mentor and induction programs meet the needs of teachers and other school staff ▪ effective ways to engage the community and parents in student learning ▪ effective strategies for supporting and retaining teachers who are teaching in Pennsylvania’s poorest and highest minority schools ▪ ways for principals to effectively coach and mentor teachers and other school staff who are in need of improving their performance ▪ effective strategies for nurturing a school environment that is conducive for all staff to feel safe and secure and for all students to feel safe so they can achieve 	<p>Benedetto and other PDE staff to be determined; external providers to be determined; professional development topics will be prioritized and developed based on the priority ranking over three to five years</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<ul style="list-style-type: none"> greater academic success <ul style="list-style-type: none"> ▪ effective school budgeting (preparing budgets, managing budgets, monitoring expenditures that are disaggregated by student population (English language learners, special education, gifted, etc.) to enable school leaders to be able to address critical school needs 	
<p>By the end of 2016-17 school year:</p> <ul style="list-style-type: none"> a. PDE and/or external contractors will have developed at least six high quality professional development opportunities for principals based on the prioritized ranking of topics b. principals in each focus and priority school will complete successfully six professional development opportunities developed by PDE c. principals in each focus and priority school will be surveyed to document changes they have implemented based on the six professional development opportunities they completed d. at least 25% of principals in Pennsylvania's poorest and highest minority schools and charter schools will report they are utilizing social media to recruit, retain, support, celebrate student and staff achievements e. at least 25% of principals in Pennsylvania's poorest and highest minority schools and charter schools will explain how their school budgets are fiscally equitable for English language learners, special education, poor and minority students 		
<p>Teacher and principal preparation programs fail to graduate high quality and well-prepared new teachers and principals to fill school vacancies or to perform effectively in Pennsylvania's poorest and highest minority</p>	<p>PDE with the assistance of external providers will:</p> <ul style="list-style-type: none"> 1. coordinate on-going meetings between Pennsylvania's approved traditional and non-traditional teacher and principal preparation programs and Pennsylvania's human resource personnel administrators in an effort to better align Pennsylvania's supply of teachers and principals with local school needs 2. investigate avenues and implement new procedures to improve the quality of field and student teaching 	<p>Begin Winter 2015-16 and quarterly thereafter Matthew Stem, Theresa Barnaby, Christina Baumer, Don McCrone, Linda Benedetto, school human resource personnel administrators and members of stakeholder group</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
schools (targeting equity gaps 1 to 5 and 7)	<p>experiences for Pennsylvania's future teachers</p> <p>3. expand program approval and major review teams to include school district representatives to ensure their perspective is considered in the preparation program approval process</p> <p>4. develop a schedule that prioritizes the review of each of Pennsylvania's certification program guidelines</p> <p>5. regularly survey a sample of school districts in an effort to identify ways to improve/strengthen/update skills, knowledge and competencies included in Pennsylvania's certification program guidelines as per the schedule developed in item 4 above</p>	<p>Fall, 2015 Theresa Barnaby, Christina Baumer</p> <p>Winter 2015-16 Matthew Stem, Theresa Barnaby, Christina Baumer</p> <p>Fall, 2016 Matthew Stem, Theresa Barnaby, Christina Baumer, Don McCrone, Linda Benedetto</p>
<p>By the end of 2016-17 school year:</p> <ul style="list-style-type: none"> a. at least eight meetings were held between Pennsylvania's approved traditional and non-traditional teacher and principal preparation programs and Pennsylvania's human resource personnel administrators b. at least one-half of Pennsylvania's approved traditional and non-traditional teacher and principal preparation programs will seriously recruit students for vacancies identified by local schools c. each program review and major review team utilized will have included at least two school district representatives per program d. PDE will revise at least two of its certification program guidelines based on local district survey results 		
Fiscal equity (targeting equity gaps 1 to 6 and 8)	PDE with the assistance of Governor Tom Wolf, Secretary of Education Pedro Rivera, the Pennsylvania Legislature and the committee responsible for recommending a new funding formula for Pennsylvania schools:	Spring, 2015 and annually thereafter Governor Tom Wolf, Pedro Rivera, Pennsylvania Legislature and

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<ol style="list-style-type: none"> 1. State funding will increase beginning with the 2015-16 school year 2. Begin to make per student funding more equitable in Pennsylvania's poorest and highest minority schools 	committee responsible for recommending a new funding formula to fund Pennsylvania schools
<p>By the end of 2016-17 school year:</p> <ol style="list-style-type: none"> a. Pennsylvania school districts will receive additional state subsidy authorized through the Commonwealth's budgeting process* b. the gap between per student spending in Pennsylvania's poorest and highest minority schools will shrink by at least 1.5%* c. all focus and priority schools will be able to document that their schools budgets d. at least 25% of principals in Pennsylvania's poorest and highest minority schools and charter schools will be able to document how their school budgets are fiscally equitable for English language learners, special education, poor and minority students <p>* Contingent upon budget approval.</p>		
<p>Incomplete, inadequate or data that cannot be readily accessed (targeting equity gap 9)</p>	<ol style="list-style-type: none"> 1. When the Equitable Access Support Network's "Equity Plan Readiness/Planning Tool" was completed, it became evident that a number of data metrics essential for conducting analyses to identify equity gaps were not collected as part of PDE's longitudinal data system. Therefore, an important long-term strategy will be the expansion of relevant data that creates a more complete picture regarding equitable access to excellent educators for Pennsylvania's poorest and highest minority school students. Work will begin with the PDE's Center for Data Quality, PDE leadership and stakeholders to identify which data should be collected and when it should begin. Ideally, if PDE could collect data related to the following 	<p>Beginning Fall, 2015 and on-going David Volkman, Matthew Stem, Theresa Barnaby, Don McCrone, Linda Benedetto, David Ream, Deb Rodrigues, Sharon Clark and other PDE staff as determined; school human resource personnel administrators and members of equity stakeholder group</p>

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<p>data metrics, we would be able to conduct a more robust analysis of the differences between Pennsylvania’s wealthiest/poorest and highest/lowest minority schools:</p> <ul style="list-style-type: none"> ▪ Teacher and principal turnover data: <ul style="list-style-type: none"> ○ Collect reasons why teachers and principals leave the profession or move onto another school ○ Disaggregate turnover data to distinguish between which teachers and school leaders who leave the profession or move onto another school, are effective⁴⁶ ○ Teacher and principal absenteeism ○ Number of applicants per teaching and principal vacancy, especially to identify teachers for English language learners and special education ▪ Data related to the number or percent of teachers and principals who have specific, measurable professional improvement plans based on their evaluation results <p>2. Develop or adopt/adapt an existing school climate survey to begin collecting data related to a school’s learning environment</p>	

⁴⁶ However, 22 Pa. Code, Chapter 19, §V(b) restricts the reporting of educator effectiveness data for classroom teachers and principals/school leaders to aggregate results. This regulation is pursuant to Section 1123(i) of the Public School Code 11-1123(i). Because there is a long-standing department policy that restricts data collection to those metrics required by the U.S. Department of Education or state regulation, these changes would require action by the Pennsylvania Legislature and the State Board of Education.

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<p>3. Having data maintained in two different data systems (Pennsylvania’s longitudinal data system (PIMS) and Pennsylvania’s teacher management information system (TIMS) does not allow PDE staff to respond quickly to major initiatives such as this state equity plan; new data reports had to be created by computer programmers since existing data reports could not extract the type of data required to easily complete the plan’s comprehensive analysis. There needs to be better interaction between both of these data systems without the reliance on computer programmers; this was also recommended by the human resource personnel administrators during their April 14, 2015 working session.</p> <p>4. PDE needs more comprehensive information and data to develop trends associated with teachers and leader recruitment, retention, hiring, retention and support to enable better forecasting of future staffing needs in school districts and charter schools (i.e., workforce, shortage and mobility data)</p> <p>5. The robustness of and availability of data associated with equitable access to excellent educators will be continually revisited for improvements to made</p> <p>6. Create report formats that provide:</p> <ul style="list-style-type: none"> ▪ School human resource personnel administrators the names of each traditional/non-traditional certification 	

Table 18. Activities that will be Implemented to Mitigate Equity Gaps by Focusing on Root Causes⁴²

Root Causes	Activities	Time Line/Responsible Personnel
	<p>preparation provider when graduates have their certification pulled by PDE</p> <ul style="list-style-type: none"> ▪ Traditional/non-traditional certification preparation providers summary educator evaluation results for their graduates and whether or not they are able to grow academic achievement in tested subjects (as measured by PVAAS teacher specific reporting) 	
<p>By the end of 2016-17 school year:</p> <ul style="list-style-type: none"> a. New data metrics will be integrated into PIMS to provide more comprehensive data concerning teacher and principal turnover, reasons why teachers and principals leave the professional or move onto another school, absenteeism of teachers and principals, etc. b. Information related to school climate and learning environment will be available for the first time c. New report formats will be available for school human resource personnel administrators and traditional/non-traditional certification preparation providers to generate in TIMS d. PDE will have more information available to better forecast future staffing needs in schools e. The ability to link data between TIMS and PIMS will be simplified by the addition of a data mart f. Statutory and regulatory changes allow PDE to link teacher and principal evaluation results to teacher and principal turnover and to provide feedback to traditional/non-traditional certification preparation providers regarding the effectiveness of graduates and their ability to grow academic achievement of students in state tested subjects 		

Appendix H lists the names, titles, and offices of the individuals who are listed in Table 18.

Section 5. Ongoing Monitoring and Measuring Progress

The comprehensiveness of the activities and the time line associated with them demonstrates Pennsylvania's commitment to ensuring the long-term success of ensuring that Pennsylvania's poor and minority students are not taught at higher rates than other children by inexperienced, unqualified, or out-of-field teachers as required by section 1111(b)(8)(C) of the Elementary and Secondary Education Act of 1965 (ESEA).

Title I, Part A and Title II, Part A federal funds and administrative funds will be used to provide technical assistance especially in Pennsylvania's focus and priority schools and poorest and highest minority schools. Specific activities will allow PDE to provide additional assistance to districts and charter schools that have the largest equity gaps associated with inexperienced, unqualified, or out-of-field teachers. The resource account that was created during the development of Pennsylvania's equitable access state plan will continue to be monitored by two PDE staff as part of a formal feedback loop. Federal program monitors and the federal regional coordinators assigned to specific regions of the state, will monitor districts in several ways. First, they will confirm that each LEA has developed a local equity plan based on local data. Second, federal program monitors will determine whether or not LEAs are implementing strategies and activities that are contained in their local equity plans. Third, LEAs that do not have a local equity plan or are not implementing it in a way that is consistent with its plan will be cited and required to develop, submit and implement a corrective action plan. Currently, priority schools are monitored every year, focus schools are monitored every other year, while all other schools are on a four-year monitoring cycle. Changes to the monitoring schedule are likely in light of the new Uniform Grants Guidance (UGG), which requires states to take into consideration risk factors, such as waste, fraud and abuse, new staff/staff turnover at local education agencies, etc., but those decisions have not yet been made.

At the end of each school year PDE staff will revisit each of the data metrics included in Pennsylvania's equitable access state plan to determine whether progress is being made in each gap and root cause identified in Section 4. The data contained in this state plan serves as the beginning point against which all future analyses will be compared. Whenever new data metrics become available, they will be used as a benchmark for comparing future data analyses. If performance measures that are incorporated into Table 18 in Section 4 are not met, different strategies and activities will be discussed with stakeholders and school human resource personnel administrators. When strategies and/or activities are revised, Pennsylvania's equitable access to excellent educators will be updated and submitted to the United States Department of Education.

Section 6. Publicly Reporting Progress on Pennsylvania's Equitable Access to Excellent Educators

Pennsylvania will utilize the following channels of distribution to publicly report state progress in mitigating equity gaps between the state's poorest and highest minority schools:

1. A new web page dedicated to Pennsylvania's Equitable Access to Excellent Educators state plan will be created as soon as the plan is approved by the United States Department of Education;
2. Information will be shared via social media, including the PDE's Twitter and Facebook accounts;
3. PDE's press and communications office will publish press releases for distribution of progress data to Philadelphia, Pittsburgh, York, Harrisburg, Allentown, Reading, Scranton, Erie, Johnstown and rural areas of the state;
4. An executive summary will be prepared and distributed to each stakeholder member, who will be asked to post the summary on their web page, included synopses in newsletters and/or journals to inform the local school community and parents; Pennsylvania's approved preparation programs will also receive a copy of the executive summary;
5. The executive directors of appropriate Pennsylvania education organizations and associations will also receive an executive summary along with a request that the summary be distributed to its membership;
6. As new public venues become available, they will be investigated for their appropriateness to post information related to Pennsylvania's progress in mitigating its equity gaps and root causes; and
7. Pennsylvania's equity resource account will be retained and publicized for the public to provide feedback (RA-EDEQUITY@pa.gov).

	A	B	C	D	E	F	G
1							Appendix A
2	Pennsylvania's Equitable Access to Excellent Teachers and Principals Stakeholders						
3	Attend				Organization Represented	Email Addresses	Type of Representation
4	X	Ms.	Bonita	Allen	Parent/SPAC Consultant	(b)(6)	Parent
5		Ms.	Joseph F.	Bard	Executive Director, PARSS	Email: jfbard@parss.org	Pennsylvania Association of Rural and Small Schools
6		Dr.	Christina	Baumer	PDE	cbaumer@pa.gov	Higher Ed
7		Ms.	Rhonda	Brunner	CAIU	rbrunner@caiu.org	IU/Assistant Executive Director
8		Mr.	Robert	Bucci	Catholic Schools Office, Diocese of Erie	rbucci@eriercd.org	Director of Government Programs
9		Dr.	Joe	Clapper	Assistant Executive Director, PAESSP	clapper@paessp.org	Elementary and Secondary Principals Association
10	X	Dr.	Jack	Clark	Allentown School District CFO	clarkjr@allentownsd.org	Non-public Schools
11		Dr.	Carla L.	Claycomb	Director for Education Services, PSEA	cclaycomb@psea.org	Union Representative
12		Ms.	Margorie	Evans	Parkland SD	evansm@parklandsd.org	Title I Administrator (Suburban)
13		Ms.	Debbie	Frank	Aliquippa School District	dfrank@aliquippa.k12.pa.us	Title I Math Teacher
14		Ms.	Deborah	Dunstone	Pennsylvania PTA	(b)(6)	Parent Association
15		Mr.	Keshawn	Golson	School District of Philadelphia	kgolson@philasd.org	SD of Philadelphia
16		Dr.	Helen	Gross	Council Rock SD District	hgross@crsd.org	Vocational Education
17		Dr.	Paul M.	Healey	Executive Director, PAESSP	healey@paessp.org	Elementary and Secondary Principals Association
18		Dr.	Randy	Ireson	Glen Mills Schools Executive Director	rireson@glenmillsschools.org	Title I Delinquent
19		Mr.	Tracey	Karlie	Meyersdale School District	trkarlie@masd.net	Superintendent/Title I Administrator (Rural)
20	X	Dr.	John	Kneble	PA Association of School Personnel Administrators (PASPA)	consultant@paspa.org	Human Resource Personnel
21		Ms.	Pat	Kriley	Midwestern Intermediate Unit #4	Pat.kriley@miu4.org	Title I Administrator (Consortium)
22		Ms.	Tamiya	Larkin	Pittsburgh Public Schools	(b)(6)	Title I Administrator (Urban)
23		Mr.	Dwight	Laufman	Pittsburgh-Mt. Oliver IU #		Pupil Personnel/Nonpublic Administrator
24		Dr.	Denise G.	Meister	Penn State Harrisburg	dgm122@psu.edu	Higher Ed Institution
25		Mr.	Bernie	Miller	PSEA	BMiller@psea.org	Union Representative
26		Ms.	Cathy	Morrison	PHRC	kamorrison@pa.gov	Civil Rights Organization
27		Dr.	Constance	Nichols	Grove City College	cnnichols@gcc.edu	Higher Ed Institution
28		Mr.	Michael	Patron	Mastery CS	michael.patron@masterycharter.org	Charter School
29		Mr.	Dave	Patti	PA Business Council	dpatti@pabusinesscouncil.org	Business Organization
30		Ms.	Kim	Pattley	YMCA	kpattley@lbfymca.org	Community-based Organization
31		Ms.	Colleen	Reese	Bald Eagle Area School District	colleen.reese@beasd.net	Title I Teacher/Reading Specialist
32		Mr.	James	Sheffer	Charter School Choice	(b)(6)	Charter Schools
33		Ms.	Kim	Walck	Allentown SD	walckk@allentownsd.org	Title I Administrator (Urban)
34		Ms.	Mary Jo	Walsh	Fell Charter Elementary School	mjwalsh@fellcharter.com	Charter Rep/Building Principal

	A	B	C	D	E	F	G
2	Pennsylvania's Equitable Access to Excellent Teachers and Principals Stakeholders						
3	Attend				Organization Represented	Email Addresses	Type of Representation
35		Ms.	Holly	Zarefoss		(b)(6)	Student
36							
37	X	Ms.	Theresa	Barnaby	Pennsylvania Department of Education		
38	X	Ms.	Linda	Benedetto	Pennsylvania Department of Education		
39	X	Mr.	Donald	McCrone	Pennsylvania Department of Education		
40	X	Ms.	Jenny	Zarfoss	Pennsylvania Department of Education		
41	X	Ms.	Cindy	Rhoades	Pennsylvania Department of Education		

Engagement of Pennsylvania Stakeholders

Item Number	Nature of Communication	Audience	Date
1	Invitation to Join Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group	Representatives of PA's Institutions of Higher Education that Prepare Teachers and Principals	January 7, 2015
2	Invitation to Join Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group	Pennsylvania Education Associations and Organizations	February 17- March 5, 2015; May 2015
3	Telephone Call to Request Assistance in Pulling a Representative Group of School Personnel Administrators Together for a Face-to-Face Meeting	John Kneble, Consultant for Pennsylvania Association of School Personnel Administrators	March 16, 2015
4	Announcement Regarding April Webinar	Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group	March 25, 2015
5	Invitation to Participate in a Working Session of School Personnel Administrators	School District Human Resource Directors, School Personnel Administrators	April 1 and April 8, 2015
6	Webinar to Kickoff Stakeholder Engagement	Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group	April 7, 2015
7	Face-to-Face Meeting to Identify Equity Gaps, Root Causes, Strategies for Mitigating Equity Gaps, and Metrics for Determining Progress Being Made	School Personnel Administrators	April 14, 2015
8	Announcement About Pennsylvania's Equitable Access to Excellent Educators State Plan, Recorded Webinar, and Creation of Resource Account for Stakeholder Feedback (RA-EDEQUITY@pa.gov)	Chief School Administrators: All School Districts, Charter Schools, Intermediate Units, and Area Vocational Technical Schools/Career and Technical Centers	April 20, 2015
10	Distribution of Webinar's PowerPoint Slides and URL for Recording from Webinar	Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group	April 30, 2015
9	Overview of Pennsylvania's Equitable Access to Excellent Educators State Plan Presented during a Large Group Session Conducted at Pennsylvania Federal Program Coordinators' Conference;	700 educators in attendance, including school superintendents, principals, federal program coordinators, curriculum and instruction staff, etc.	May 7, 2015

Item Number	Nature of Communication	Audience	Date
	included distribution of resource account: RA-EDEQUITY@pa.gov		
10	Distribution of School Climate, Recruitment, Hiring, Retention, and Supporting Equity Gaps, Root Causes, Strategies Identified for Mitigating Equity Gaps, and Common Metrics to Determine How to Measure State's Progress in Mitigating Equity Gaps	School District Human Resource Directors, School Personnel Administrators	May 13, 2015
11	Announce the Creation of Equitable Access to Excellent Educators Website	Pennsylvania's Equitable Access to Excellent Educators Stakeholders Group; School District Human Resource Directors, School Personnel Administrators; Pennsylvania educational organizations/associations; Chief School Administrators: All School Districts, Charter Schools, Intermediate Units, and Area Vocational Technical Schools/Career and Technical Centers	June 15, 2015

Attend	School	Last Name	First Name	Position	Phone	E-Mail
X	Abington SD	Alfonso	Susanne	Director of Human Resources	215-881-2509	susannealfonso@abington.k12.pa.us
	Altoona Area School District				814-946-8325	mmcminn@asdsdcat.com
	Blue Mountain School District				570-366-0515	rlurzillo@bmsd.org
	Bradford Area School District				814-362-3841	sjohnson@bradfordareaschools.org
X	Capital Area I.U.	Kinsinger	Theresa	Director of Human Resources	717-732-8400	tkinsinger@caiu.org
	Carbon-Lehigh I.U. #21				610-769-1222	hellerm@cliu.org
X	Chambersburg Area SD	Rockwood	Sylvia	Human Resource Director	717-261-3303	sylvia.rockwood@casdonline.org
	Connellsville Area School District				724-628-3300 x301	kmarko@casdfalcons.org
X	Council Rock SD	Trioli	M. Christine	Director of Human Resources	215-944-1022	ctrioli@crsd.org
	Governor Mifflin School District	Gibson	Diane		610-775-1461 x1104	
	Great Valley School District	Koslo-Stahl, Ed. D.	Robin D.		610-889-2100, x2116	dgibson@gmsd.k12.pa.us
	Lancaster SD					rkoslostahl@gvsd.org
	Lincoln IU#12				717-624-6443	lmgreth@iu12.org
	Manheim Township School District				717-560-3108	prokaydo@mtwp.net
	Mechanicsburg School District				717-691-4500	dstouffer@mbgsd.org
	Milton Hershey School				717-520-2301	singletonj@mhs-pa.org
	Moon Area School District				412-264-9440 x1153	baddy@moonarea.net
X	New Hope-Solebury SD	Rohn	Suzan	HR Director	215-862-2552	srohn@nhsd.org
	North Allegheny School District				412-369-5416	jwelter@northallegheny.org
	Northern Tioga School District				814-258-5642	diana.barnes@ntiogasd.org
X	PASPA	Knebl	John	PASPA Consultant	610-454-0550	consultant@paspa.org
X	PaTTAN	Kastner	Pam			
X	PDE	Benedetto	Linda			
X	PDE	McCrone	Don			
X	PDE	Perez	Rita			
X	PDE	Stem	Matt			
X	PDE	Zarefoss	Jenny			
X	Philadelphia SD	Jerome	Stephanie			sjerome@philasd.org
X	Philadelphia SD	Lotz	Mel	Senior Search Associate	215-400-5596	mlotz@philasd.org
X	Pleasant Valley SD	Burrus	John	Director Human Resources	570-402-1000x1209	burrus.john@pvbears.org
X	Reading SD	Gokay	Karen	Chief HR Officer	610-371-5684	gokayk@readingsd.org
	School District of Springfield Township				215-233-6000 x1011	emily_kehr@sdst.org
	Southeast Delco School District				610-522-4300 x5307	thaupter@sedelco.org
X	Spring-Ford Area SD	Leiss	Elizabeth	Director of Human Resources	610-705-6218	eleis@spring-ford.net
X	West Chester Area SD	Fredrickson	Virgina	Personnel Specialist	484-266-1012	vfedericksen@wcasd.net
X	West Chester Area SD	Wisher	Danita	Staffing/Emp Relations SPC	484-266-1008	dwisher@wcasd.k12.pa.us
	West Shore School District				717-938-9577 x246	stabachini@wssd.k12.pa.us

Attend	School	Street	City	Zip
X	Abington SD	970 Highland Avenue	Abington	19001
	Altoona Area School District	1415 Sixth Avenue	Altoona	16602
	Blue Mountain School District	685 Red Dale Road	Orwigsburg	17961
	Bradford Area School District	150 Lorana Ave.	Bradford	16701
X	Capital Area I.U.	635 N. 12th Street	Lemoyne	17043
	Carbon-Lehigh I.U. #21	4210 Independence Drive	Schnecksville	18973-1287
X	Chambersburg Area SD	435 Stanley Avenue	Chambersburg	17201
	Connellsville Area School District	P. O. Box 861, 732 Rockridge Rd	Connellsville	15425
X	Council Rock SD	30 N. Chancellor Street	Newtown	18940
	Governor Mifflin School District	10 S. Waverly Street	Shillington	19607
	Great Valley School District	47 Church Road	Malvern	19355
	Lancaster SD		Lancaster	
	Lincoln IU#12	P.O. Box 70	New Oxford	17350
	Manheim Township School District	P.O. Box 5134	Lancaster	17606-5134
	Mechanicsburg School District	100 E. Elmwood Avenue	Mechanicsburg	17019
	Milton Hershey School	PO Box 830	Hershey	17033
	Moon Area School District	8353 University Blvd.	Moon Twp.	15108
X	New Hope-Solebury SD	180 W. Bridge Street	New Hope	18938
	North Allegheny School District	200 Hillvue Lane	Pittsburgh	15237
	Northern Tioga School District	110 Ellison Road	Elkland	16920
X	PASPA	3878 Somerset Drive	Collegeville	19426
X	PaTTAN			
X	PDE			
X	Philadelphia SD	440 North Broad Street Suite 222 (Portal D)	Philadelphia	
X	Philadelphia SD	440 N Broad St Ste 222 (Portal D)	Philadelphia	19130
X	Pleasant Valley SD	2233 Toute 115, Suite 100	Broadheadsville	18322
X	Reading SD	800 Washington Street	Reading	19601
	School District of Springfield Township	1901 E. Paper Mill Road	Oreland	19075
	Southeast Delco School District	1560 Delmar Drive	Folcroft	19032
X	Spring-Ford Area SD	857 S. Lewis Road	Royersford	19468
X	West Chester Area SD	829 Paoli Pike	West Chester	19380
X	West Chester Area SD	829 Paoli Pike	West Chester	19380
	West Shore School District	P.O. Box 803	New Cumberland	17070-0803

AGENDA

Pennsylvania Association of School Personnel Administrators Working Group

April 14, 2015, 10 am – 4:00 pm
PaTTAN Harrisburg (Susquehanna Room)

Purpose: The Pennsylvania Department of Education (PDE) is convening a working group to assist in the identification of equity gaps in the areas associated with school climate and strategic management of human resources; likely causes of those gaps; strategies that will benefit and can be implemented by districts/schools to remediate equity gaps and causes; and common metrics PDE could implement to measure its state progress in eliminating existing gaps. Equity gaps, root causes, strategies, and metrics will be organized around school climate and strategic management of human resources for inclusion into Pennsylvania's draft State Plan for Equitable Access to Excellent Educators for All Children.

Timeframe	Agenda Topic
10:00 am – 10:30 am	Welcome, Introductions, and Overview of Requirements for State Plan Don McCrone and Linda Benedetto
10:30 am – 11:15 pm	<u>Activity #1 – School Climate</u> <ul style="list-style-type: none"> • What gaps exist related to school climate? • What are likely causes of these gaps? • What strategies could be implemented to remediate the gaps and causes? • What are common metrics that could be piloted or implemented to determine if strategies are valid measures for eliminating gaps and causes?
11:15 am – 12:15 pm	Small Groups Report Out
12:15 pm – 12:45 pm	Lunch – collection of electronic copies of local equity plans and school climate surveys
12:45 pm – 1:30 pm	<u>Activity #2 – Strategic Management of Human Capital: Recruitment and Hiring</u> <ul style="list-style-type: none"> • What gaps exist related to recruitment? • What are likely causes of these gaps? • What strategies could be implemented to remediate the gaps and causes? • What are common metrics that could be piloted or implemented to determine if strategies are valid measures for eliminating gaps and causes? <hr/> <ul style="list-style-type: none"> • What gaps exist related to hiring practices? • What are likely causes of these gaps? • What strategies could be implemented to remediate the gaps and causes? • What are common metrics that could be piloted or implemented to determine if strategies are valid measures for eliminating gaps and causes?
1:30 pm – 2:00 pm	Small Groups Report Out
2:00 pm – 2:15 pm	Break
2:15 pm – 3:00 pm	<u>Activity #3 – Strategic Management of Human Capital: Retaining and</u>

Timeframe	Agenda Topic
	<p><u>Supporting</u></p> <ul style="list-style-type: none"> • What gaps exist related to retaining teachers and principals? • What are likely causes of these gaps? • What strategies could be implemented to remediate the gaps and causes? • What are common metrics that could be piloted or implemented to determine if strategies are valid measures for eliminating gaps and causes? <hr/> <ul style="list-style-type: none"> • What gaps exist related to supporting teachers and principals? • What are likely causes of these gaps? • What strategies could be implemented to remediate the gaps and causes? • What are common metrics that could be piloted or implemented to determine if strategies are valid measures for eliminating gaps and causes?
3:00 pm – 3:30 pm	Small Groups Report Out
3:30 pm – 3:45 pm	<p><u>Activity #4 -- Homework Assignment</u></p> <ul style="list-style-type: none"> • Review handout entitled “Principal Hiring Scorecard” • Provide feedback via Ra-Edequity@pa.gov on the usefulness of the Principal Hiring Scorecard <ul style="list-style-type: none"> ○ Is the survey comprehensive? If not, identify areas that could be stronger. ○ Would this benefit districts if we obtained permission to add to Pa.'s Standards Aligned System as a resource? ○ Does your district use something similar? If so, include it as an attachment to your feedback. ○ Other comments
3:45 pm – 4:00 pm	<p><u>Activity #5 -- Debrief, Next Steps, Adjourn and Thank You!</u></p> <p>Debrief - Pam Kastner</p> <p>Next Steps: Don McCrone and Linda J. Benedetto</p> <ul style="list-style-type: none"> • Distribute to working group school climate and strategic management of human capital maps (as a Word document) for feedback; • Call for volunteers to assist in the review of, revision of, or development of a redesigned local equity plan; tools related to school climate and/or strategic management of human resources

**Ensuring Equitable Access to Excellent Educators
in Pennsylvania**

Pennsylvania Department of Education

April 2015

Prepared for..

Dr. David Volkman

Mr. Matthew Stem

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Introduction

This report examined the extent equitable access to excellent educators was ensured in Pennsylvania. Teacher and principal related variables were examined using student poverty level groups and student minority level groups. Quartiles were used to establish the poverty and minority groups. The data used were at the Pennsylvania or state level. The Pennsylvania Department of Education (PDE) staff collected data about Local Educational Agencies (LEA) via the Pennsylvania Information Management System (PIMS). Teacher related data were collected in Pennsylvania via the Teacher Information Management System (TIMS). The Highly Qualified Teacher (HQT) data were compiled using both PIMS and TIMS. The data used for this report were from the data collection systems noted.

A variety of variables were collected via PIMS, and the data were used to support a variety of items in Pennsylvania including, but not limited to, federal reports, state required analyses, state required reports (for parents, students, the public, government agencies and other groups) and responding to data requests. An effort was made to collect the data on the minimal number of PIMS variables as part of minimizing the effort for the LEA staff.

The variables used in the effort to examine access to excellent educators included the following: (1) Percentage of Teachers with More Than Three Years in Education, in any LEA; (2) Percentage of Teachers with More Than Three Years in Education, in the present LEA of employment; (3) Teacher Education Level; (4) Average Salary for First Year Teachers; (5) Average Salary for Teachers with More Than One Year of Service; and (6) Teacher Turnover Percentage. In addition, the effort to examine access to excellent educators included the following: (1) the Percentage of School Sections Taught by HQT (Highly Qualified Teachers); (2) the Percentage of School Sections Taught by Teachers Using Emergency Permits (not certificated for the subject); and (3) Average Salary of Principals with More Than One Year of Service, (schools with more than one principal noted in the PIMS data were averaged to derive a school mean salary).

Pennsylvania had about 1,734,000 students enrolled for the 2013-2014 school year. Of those students, about 1,467,008 were in school districts other than Philadelphia School District (SD), in Philadelphia SD about 129,000 students were enrolled in charter schools. Because Philadelphia SD is much larger than any of the other school districts, and because charter schools operate under a different set of legislative statues and rules, three samples were selected for the analyses. The samples were the following: (1) all school districts, (2) school districts minus Philadelphia SD, and (3) charter schools. The three samples allowed the analyses to examine the data in greater detail, and it was an effort to make the easier to understand.

Data Quality

LEA staff members provided data to the Pennsylvania Department of Education for a variety of variables over the school year. It was noted in this report a minimal amount of data were missing for the variables employed for the analyses. In Pennsylvania, LEA staff members were not sanctioned by the PDE for missing data. At the same time, LEA staff members were motivated to report accurate and complete data. LEA staff members are responsible to their employer concerning their job performance. Selected data were used to compile reports and published on the PDE websites. Inaccurate data may cause the LEA to appear not to be of the quality they would like. In general, the LEA staff member assigned to provide LEA data for PIMS and TIMS were high quality employees. They worked to provide accurate data.

PDE employees are assigned to work with the LEA staff to assist with reporting complete and accurate data. A help desk is staffed to assist with data collect issues. PDE staff review the data provided. Prior year and current year comparisons are available for PDE staff and LEA staff members to use as a quality check. The school district superintendents and charter school chief operating officers sign an Accuracy Certification Statement (ACS) for data uploads provided to the PIMS. A PDE employee was assigned the task of providing the data used for this report. The administration in the PDE Center for Data Quality and Information Technology was highly supportive by providing the staff and data needed for the report.

Access to Excellent Educators Analyses

The rather large number of students in Pennsylvania was noted. In addition, Pennsylvania has almost 2,800 school district schools. As a result, the n-count was large. Statistical significance may not be the best indicator of statistical relationships when analyzing large samples. For that reason effect size was calculated and used to estimate the meaningful differences between minority quartiles and poverty quartiles. The interpretation of effect size used in this report considered Cohen's thresholds for effect size. The following values were used: zero to .10 negligible; .11 to .39 small; .40 to .69 medium; .70 to .99 large; and over 1.00 very large.

For some of the variable employed for the analyses, the data were found to have limited ranges for the samples. An example of a limited range would be the percentage of sections taught by teachers with emergency permits. This was not viewed as a negative, because it indicated the very limited use of emergency permits by the school districts. School district administrators were encouraged to employ teachers with certification for the subjects the teachers were assigned to teach. An extremely high percentage of the students were found to have been taught by a teacher with certification in the subject the teacher was teaching.

For the variables listed, as part of the access to excellent educations analyses, descriptive statistics were provided. The descriptive statistics included means, standard deviations, minimum, maximum and n-counts. The means were of considerable value when reviewed in relation to the effect size values. The mean values by quartile provided some insight into the educational services for students in Pennsylvania. The effect size values provided insight into the magnitude of the differences between the quartile means.

It was noted the distribution of student poverty across schools was not a normal distribution. This was identified in the results provided for each variable. In general, some urban area schools and some rural area schools were more likely to have higher poverty percentages. In general, the suburban schools were more often found to have higher wealth levels.

The distribution of race was not a normal distribution in Pennsylvania. Higher percentages of minorities were more often located in urban areas. It was noted minorities are found in suburban and rural schools. However, in general, the suburban and rural percentages were lower than in urban schools.

Summary of All Findings

Emergency Permit Sections and School Percentages of Minorities:

1. For the sample of “school districts minus Philadelphia SD,” only .14 percent of the sections were taught by teachers with emergency permits. The percentage of sections taught by teachers with emergency permits is extremely low. Effect size was calculated for the minority quartiles to compare the four groups mean percentage of emergency permit sections. The differences between the quartile mean percentages were small and varied little. This indicated the meaningful differences were small negligible.
2. The sample of all “school districts” percentage of sections with emergency permits was used to compare minority quartile groups. Only .15 percent of the sample schools had sections taught by teachers with an emergency permit. The effect size calculations provided an indication that the mean percentages of emergency permit sections varied little. The differences were noted as negligible or small. Overall, the school district schools had few to no sections taught by teachers using an emergency permit.
3. The charter school sample was different from the school district sample with respect to the percentage of sections taught by a teacher with an emergency permit. Although the charter school sample percentages were low, the percentages were higher than those for the school districts. The charter school sample mean was .95 percent of the sections taught by teachers with an emergency permit.

Emergency Permit Section and School Wealth:

1. For the sample of “school districts minus Philadelphia SD,” only .139 percent of the sections were taught by teachers with emergency permits. The percentage of sections taught by teachers with emergency permits was extremely low. Effect size was calculated for the wealth quartile groups to compare the four groups mean percentage of emergency permit sections. The differences between the quartile mean percentages were small and varied little. This indicated the meaningful differences were small or negligible.
2. The sample of all “school districts” percentage of sections with emergency permits was used to compare wealth quartile groups. Only .15 percent of the sample schools had sections taught by teachers with an emergency permit. The effect size calculations provided an indication that the mean percentages of emergency permit sections varied little. The differences were noted as negligible or small. Overall, the school district schools had few to no sections taught by teachers using an emergency permit.
3. The charter school sample was different from the school district sample with respect to the percentage of sections taught by a teacher with an emergency permit. Although the charter school sample percentages were low, the percentages were higher than those

for the school districts. The charter school sample mean was .989 percent of the sections taught by teachers with an emergency permit.

Teacher Turnover Percentages and Percentage of Minorities:

1. For the school districts minus Philadelphia SD sample, the teacher turnover percentages were rather low and varied little. The mean for the sample was 5.60 percent. Effect size calculations found the differences were not meaningful at the negligible or small level.
2. The sample of all school districts had a mean turnover rate of 6.21 percent. The addition of Philadelphia SD increased the turnover percentage for the highest minority quartile schools. Only the effect size value for the highest minority schools and upper middle minority quartile was found to have a meaningful difference at the medium level. All other effect size differences were at the small or negligible levels.
3. Turnover percentages for the charter schools were considerably higher with a mean turnover rate of 18.05 percent. Also, the effect size results indicated the charter school quartiles were different at the large or very large level in three of six cases.
4. School districts had rather low turnover rates and the minority quartiles varied little. Charter schools had higher turnover rates and some meaningful differences between minority quartiles.

Teacher Turnover Percentages and School Wealth:

1. For the school districts minus Philadelphia SD sample, the teacher turnover percentages were rather low and varied little. The mean for the sample was 5.58 percent. Effect size calculations found the differences not meaningful at the negligible or small level. The highest wealth quartile had the lowest turnover percentage.
2. The sample of all school districts had a mean turnover rate of 6.20 percent. The addition of Philadelphia SD increased the turnover percentage for the highest poverty schools. Only the effect size value for the highest poverty schools and highest wealth quartile was found to have a meaningful difference at the medium level. All other effect size differences were at the small or negligible levels.
3. Turnover percentages for the charter schools were considerable higher with a mean turnover rate of 18.77 percent. Also, the effect size results indicated the charter school wealth quartiles were different at the medium to very large levels in four of six cases.
4. School districts had rather low turnover rates and the wealth quartiles varied little. Charter schools had higher turnover rates and some meaningful differences between wealth quartiles.

Teacher Years of Employment in Education and Percentages of Minorities:

1. For the school districts minus Philadelphia SD sample, the percentage of teachers, with more than three years of employment in any LEA or in the present LEA, varied little among the minority quartiles. The mean for the in any LEA was 90.76 percent while the mean for the present LEA was 88.50 percent. Effect size calculations found the differences not meaningful at the negligible level.
2. The sample of all school districts had findings similar to the school districts minus Philadelphia SD sample. The addition of Philadelphia SD increased the mean for the percentages of teachers with more than three years of employment to 91.06 percent for in any LEA and to 88.97 percent for in the present LEA. The effect size differences were at the small or negligible levels for the percentages by minority quartiles.
3. The percentage, of teachers with more than three years in education for the charter schools, was considerably lower at 60.22 percent for in any LEA and 44.33 percent for in the present LEA. Also, the effect size results indicated the charter school minority quartiles were different at the medium to very large level in nine of 12 cases.
4. School districts had similar percentages across minority quartiles for the percentages of teachers with more than three years in education. Meaningful differences were not found between minority quartiles. Charter schools had a lower percentage of experienced teachers and more of differences between minority quartiles were meaningful.

Teacher Years of Employment in Education and School Wealth:

1. For the school districts minus Philadelphia SD sample, the percentage of teachers, with more than three years of employment in any LEA or in the present LEA, varied little among the wealth quartiles. The mean for the experience in any LEA was 90.76 percent while the mean for experience in the present LEA was 88.49 percent. Effect size calculations found the differences not meaningful at the small or negligible levels.
2. The sample of all school districts had findings similar to the school districts minus Philadelphia SD sample. The addition of Philadelphia SD increased the mean for the percentages of teachers with more than three years of employment in any LEA to 91.06 percent (it was 90.76), and to 88.97 percent (it was 88.49) for in the present LEA. The effect size differences were at the small or negligible levels for the percentages by wealth quartiles.
3. The percentage of teachers with more than three years in education for the charter schools were considerable lower at 59.90 percent for in any LEA and 44.15 percent for in the present LEA. Also, the effect size results indicated the charter school wealth quartiles were different at the medium to very large level in seven of 12 cases.

4. School districts had similar percentages across wealth quartiles for the percentages of teachers with more than three years in education. For school districts meaningful differences were not found between wealth quartiles. Charter schools had considerably lower percentages of experienced teachers, and most of differences (seven of 12 and nine of 12) between wealth quartiles were meaningful.

Teacher Salaries and Percentages of Minorities:

1. For the school districts minus Philadelphia SD sample, the teacher salaries varied from higher in the two higher minority quartiles to lower in the two lower minority quartiles. Effect size calculations found the meaningful differences at the medium to very large level for seven of 12 cases.
2. The sample of all school districts had findings similar to the school districts minus Philadelphia SD sample; schools with higher percentages of minorities had higher salaries. The addition of Philadelphia SD increased the mean for the first year teachers to \$42,937 and teachers with more than one year of service to \$63,951. The effect size differences were at the medium to very large level for eight of 12 cases.
3. Teacher salaries in the charter schools were considerably lower than the school districts. The pattern of higher teacher salaries in higher minority percentage schools was continued in the charter schools. Also, the effect size results indicated the charter school minority quartiles had meaningful differences at the medium to very large level in 10 of 12 cases.
4. School districts had higher teacher salaries in schools with higher percentages of minority students. Charter schools had lower paid teachers than school districts. Most of differences between minority quartiles were meaningful for charter schools.

Teacher Salaries and School Wealth:

1. For the school districts minus Philadelphia SD sample, the teacher salaries varied from higher in the highest wealth quartile to lower in the other three wealth quartiles. The differences in the teacher salary means were greater for the teachers with more than one year of service versus first year teacher salaries. Effect size calculations found meaningful teacher salary differences for teachers with more than one year of experience at the medium to very large level for four of six cases. Effect size differences were not meaningful for first year teachers.
2. The sample of all school districts had high wealth schools with highest teacher salaries, while teacher salaries in the high poverty quartile had the next to the highest salaries. The addition of Philadelphia SD to the sample increased the mean for the high poverty quartile first year teachers to \$43,624 and teachers with more than one year of service

to \$64,308. Effect size differences were not meaningful for first year teachers. The effect size differences were at the medium to very large level for four of six cases for teachers with more than one year of service.

3. Teacher salaries in the charter schools were considerably lower than the school districts. Higher teacher salaries for first year teachers and teachers with experience were found in the lower two wealth quartiles. Also, the effect size results indicated the charter school wealth quartiles had meaningful differences at the medium to very large level in nine of 12 cases.
4. School districts teacher salaries were higher in high wealth and high poverty quartiles. Charter schools had lower paid teachers than school districts. Most of differences between wealth quartiles were meaningful for charter schools.

Percentage of HQT Sections and Percentages of Minorities:

1. For the school districts minus Philadelphia SD sample, the percentage of HQT sections varied little between minority quartiles, and the quartile means had high percentages. Effect size calculations found no meaningful differences between the minority quartiles.
2. The sample of all school districts had the lowest percentages HQT sections in the high minority quartile. The other three quartile mean percentages of HQT sections were similar. The effect size differences among quartiles were at the medium to large level for three of six cases.
3. The percentage of HQT sections, in charter schools, was lower than the school districts percentage. The two quartiles with higher minority percentages were found to have the lower HQT sections percentages. Also, the effect size results indicated the charter school minority quartiles had meaningful differences at the medium to large level in four of six cases.
4. School district percentages of HQT sections were higher in lower minority quartile schools and lower in higher minority quartiles. Charter schools had lower percentages of HQT sections when compared to school districts. Most of differences between minority quartiles were meaningful for charter schools.

Percentage of HQT Sections and School Wealth:

1. For the school districts minus Philadelphia SD sample, the percentage of HQT sections varied little between wealth quartiles, and all of the quartile means had high percentages. Effect size calculations found no meaningful differences between the wealth quartiles.
2. The sample of all school districts had the lowest percentages HQT sections in the high poverty quartile. The other three quartile mean percentages of HQT sections were

similar. The effect size differences among quartiles were at the medium to large level for three of six cases.

3. The percentage of HQT sections, in charter schools, was lower than the school districts percentage. The lower middle wealth quartile had the lower percentage of HQT sections. Also, the effect size results indicated the charter school wealth quartiles had meaningful differences at the medium level for only two of six cases.
4. The school district percentage of HQT sections was higher for the higher wealth quartiles. A few of the effect size differences were meaningful between the wealth quartiles. Charter schools had lower percentages of HQT sections when compared to school districts. Most of differences between minority quartiles were meaningful for charter schools.

Teacher Education Level and Percentages of Minorities:

1. For the school districts minus Philadelphia SD sample, the teacher education level had limited variation between minority quartiles. Effect size calculations found meaningful differences between the minority quartiles for three of six cases.
2. The sample of all school districts had the highest teacher education level in the two middle level minority quartiles. The higher minority quartile and the lower minority quartile lower education levels. The effect size differences among quartiles were at the medium to large level for five of six cases.
3. The teacher education level, in charter schools, was lower than the school districts teacher education level. Education level varied little between minority quartiles. Also, the effect size results indicated the charter school minority quartiles did not have meaningful differences.
4. The school district teacher education level was higher than the charter school teacher education level. Some meaningful differences were found between the school district minority quartiles.

Teacher Education Level and School Wealth:

1. For the school districts minus Philadelphia SD sample, the teacher education level varied between wealth quartiles with the highest wealth quartile having the highest education level. Effect size calculations found meaningful differences between the wealth quartiles for four of six cases.
2. The sample of all school districts had the lowest teacher education level in the highest poverty quartile. The effect size differences between quartiles were at the medium to very large level four of six cases.
3. The teacher education level, in charter schools, was lower than the school districts' teacher education level. Education level varied little between wealth quartiles. Also,

the effect size results indicated the charter school wealth quartiles were not meaningful.

4. The school district teacher education level was higher than the charter school teacher education level. Some meaningful differences were found between the school district wealth quartiles.

Principal Mean Salary and Percentages of Minorities:

1. For the school districts minus Philadelphia SD sample, principal mean salaries varied between minority quartiles with the upper middle minority quartile having the highest mean salary. The lowest minority quartile had the lowest principal mean salary. Effect size calculations found meaningful differences between the minority quartiles for five of six cases.
2. The sample of all school districts had the highest principal mean salaries in highest minority and upper middle minority quartiles. The effect size differences between quartiles were at the medium to very large level for five of six cases.
3. The principal mean salaries, in charter schools, were lower than the school districts principal mean salaries. The highest minority quartile had the higher principal mean salaries. Also, the effect size results indicated the charter school minority quartiles had meaningful differences in three of six cases.
4. Charter school principal mean salaries were lower than school district mean principal salaries. Overall, higher minority percentage quartiles had higher principal salaries than lower minority quartiles.

Principal Mean Salary and School Wealth:

1. For the school districts minus Philadelphia SD sample, the mean principal salary was higher in higher wealth quartile. Effect size calculations found meaningful differences between the wealth quartiles for four of six cases.
2. The sample of all school districts had the higher principal mean salaries in the highest wealth and highest poverty quartiles. The effect size differences between quartiles were at the medium to large level four of six cases.
3. The principal mean salaries, in charter schools, were lower than in the school districts. The highest mean principal salary was found in the lower middle wealth quartile. Also, the effect size results indicated the charter school wealth quartiles were meaningful different for two of six cases.
4. The school district principal mean salaries were higher than the charter school principal mean salaries. Some meaningful differences were found between the school district wealth quartiles. Higher mean principal salaries were more often found in higher wealth quartile and in the lower wealth quartile.

Findings for Percentage of Emergency Permit Sections

School data from the 2013-2014 school year were used for the analysis of the school percentage of emergency permit sections data. The results for the sample of “school districts minus Philadelphia SD” were placed into Table 1 and Table 2. For this sample, .14 percent of the sections were taught by teachers with emergency permits. Although 2573 schools were in this sample, the percentages of sections taught by teachers with emergency permits were extremely low. The lower minority quartile had the highest mean percentage of sections taught by teachers with emergency permits at .24 percent. The lower middle minority level and highest minority quartiles had similar percentages with .12 and .15 percent. The upper middle minority quartile has the lowest percentage at .056 for the sections taught by teachers with an emergency permit. Table 1 contains the descriptive statistics for this variable.

Effect size was calculated for the minority groups, comparing the four groups mean emergency permit sections. Table 2 presents the data for the school percentage of sections taught by teachers with emergency permits. It was noted the differences between the quartile mean values were small and varied little. Also, the effect size values were low. Effect size revealed the meaningful differences were small or negligible. Note, the percentages for this variable were low and the differences between means were small. Few students in Pennsylvania were taught by teachers with an emergency permit.

Table 1

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, School District minus Philadelphia SD Sample

Minority Percentage Groups	Descriptive				
	School Percentage Emergency Permit Sections				
	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lowest Minority	646	.241%	1.418%	0.00%	16.35%
2 = Lower Middle Minority	642	.121%	.817%	0.00%	8.93%
3 = Upper Middle Minority	643	.056%	.358%	0.00%	4.35%
4 = Highest Minority	642	.151%	1.022%	0.00%	16.56%
Total	2573	.142%	.984%	0.00%	16.56%

Minority Percentage (0.00 thru 5.40=1) (5.41 thru 11.80=2) (11.81 thru 26.50=3) (26.51 thru 100.0=4).

Table 2

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Effect Size, School District minus Philadelphia SD Sample

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.12%	0.0112	0.11	Small
1 minus 3	0.19%	0.0089	0.21	Small
1 minus 4	0.09%	0.0122	0.07	Negligible
2 minus 3	0.06%	0.0059	0.11	Small
2 minus 4	-0.03%	0.0092	-0.03	Negligible
3 minus 4	-0.10%	0.0069	-0.14	Small

The analyses for the percentage of sections taught by teachers with emergency permits was continued using minority quartiles. The sample employed was of all “school districts” rather than the sample without Philadelphia SD. The percentage of sections taught by teachers with emergency permits increased slightly from .14 to .15 percent, but it was a rather small change for the all school districts sample. The lowest minority quartile and the highest minority quartile percentages were similar at .23 and .21 percent. The lower middle quartile and the upper middle quartile were somewhat similar at .101 and .069 percent. The Table 3 quartile mean emergency permit sections percentages were extremely low.

The effect size calculations provided an indication that the mean percentages varied little. Table 4 provided the differences between the emergency permit sections percentage means. The minority groups varied little. Effect size calculations were found to be low for the differences between the minority group percentages. The differences were noted as negligible or small. Overall, the school district schools had few to no sections taught by teachers using an emergency permit.

Table 3

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, All School Districts Sample

Descriptive					
School Percentage Emergency Permit Sections					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lowest Minority	709	.231%	1.380%	0.00%	16.35%
2 = Lower Middle Minority	688	.101%	.742%	0.00%	8.93%
3 = Upper Middle Minority	692	.069%	.397%	0.00%	4.35%
4 = Highest Minority	695	.212%	1.267%	0.00%	16.56%
Total	2784	.154%	1.032%	0.00%	16.56%

Minority Percentage (0.00 thru 5.80=1) (5.81 thru 13.50=2) (13.51 thru 34.20=3) (34.21 thru 100.0=4).

The analyses of the percentage of sections taught by teachers with emergency permits were continued using minority quartiles. The last sample employed was of all of the “charter schools” rather than the school district samples. Overall, the percentage of sections taught by teachers with emergency permits increased to .957 percent, but it was a rather small change when compared to the school district samples. The lowest minority quartile had the highest percentage at 1.803 percent. The lower middle quartile and the highest minority quartiles were somewhat similar at .880 and .849 percent. In Table 5, the charter schools quartile mean percentages were low, but higher than the school district percentages.

Table 4

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Effect Size, All School Districts Sample

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.13%	0.0107	0.12	Small
1 minus 3	0.16%	0.0089	0.18	Small
1 minus 4	0.02%	0.0132	0.01	Negligible
2 minus 3	0.03%	0.0057	0.06	Negligible
2 minus 4	-0.11%	0.0101	-0.11	Small
3 minus 4	-0.14%	0.0083	-0.17	Small

Table 5

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, Charter Schools Sample

Minority Percentage Groups	Descriptive				
	School Percentage Emergency Permit Sections				
	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lowest Minority	37	1.803%	6.699%	0.00%	36.57%
2 = Lower Middle Minority	37	0.849%	2.648%	0.00%	12.24%
3 = Upper Middle Minority	37	0.295%	1.226%	0.00%	6.62%
4 = Highest Minority	37	0.880%	2.509%	0.00%	14.04%
Total	148	0.957%	3.862%	0.00%	36.57%

Minority Percentage (0.00 thru 32.25=1) (32.26 thru 80.05=2) (80.06 thru 98.925=3) (98.926 thru 100.0=4).

The effect size calculations provided an indication the mean percentages varied little. Table 6 provided the differences between the percentage means. The percentage of emergency permit sections by minority group quartiles varied little. Effect size calculations were found to be low for the differences between the minority group percentages. The differences were noted as negligible or small. Overall, the charter school sample schools had few to no sections taught by

teachers using an emergency permit, but the charter schools had a few more sections taught by teachers using emergency permits than the school district sample schools.

Table 6

Percentage of Sections Taught by Teachers with Emergency Permits for Schools
Effect Size, Charter School Sample

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.95%	0.0467	0.20	Small
1 minus 3	1.51%	0.0396	0.38	Small
1 minus 4	0.92%	0.0460	0.20	Small
2 minus 3	0.55%	0.0194	0.29	Small
2 minus 4	-0.03%	0.0258	-0.01	Negligible
3 minus 4	-0.58%	0.0187	-0.31	Small

The percentage of school sections taught by teachers with an emergency permit was examined using the school poverty quartiles. Quartiles were developed using the school poverty percentages. Again, three samples were considered for the analyses: school districts minus Philadelphia SD, all school districts, and charter schools. As noted, the range of percentages was rather limited for the school sections taught by teachers with emergency permits.

For the school districts minus Philadelphia SD sample, the mean percentage of sections taught by teachers with an emergency permit was .139 percent. The mean percentages for the poverty quartile groups were low and varied little. The highest percentage was .226 for the lower middle wealth quartile, and the lowest percentage was .066 for the upper middle wealth quartile. The descriptive statistics were placed into Table 7 for this sample.

Effect size calculations, found in Table 8, were low for the differences between the poverty quartile means. The differences were noted as negligible or small. Overall, the school districts minus Philadelphia SD sample schools had few to no sections taught by teachers using an emergency permit.

Table 7

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive					
School Percentage Emergency Permit Sections					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	641	.077%	.573%	.000%	8.93%
2 = Upper Middle Wealth	643	.066%	.527%	.000%	7.55%
3 = Lower Middle Wealth	641	.226%	1.284%	.000%	14.55%
4 = High Poverty	641	.188%	1.222%	.000%	16.56%
Total	2566	.139%	.970%	.000%	16.56%

Poverty Percentage (0.00 thru 23.5875=1) (23.5876 thru 38.220=2) (38.221 thru 52.8625=3) (52.8626 thru 100.0=4).

Table 8

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.01%	0.0055	0.02	Negligible
1 minus 3	-0.15%	0.0093	-0.16	Small
1 minus 4	-0.11%	0.0090	-0.12	Small
2 minus 3	-0.16%	0.0090	-0.18	Small
2 minus 4	-0.12%	0.0087	-0.14	Small
3 minus 4	0.04%	0.0125	0.03	Negligible

For the all school districts sample, the mean percentage of sections taught by teachers with an emergency permit was .151 percent. The mean values for the poverty groups were low and varied little. The highest percentage was .225 for high poverty quartile, and the lowest percentage was .071 for the high wealth quartile. The descriptive statistics were placed into Table 9 for this sample.

Table 9

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, All School Districts Sample

Descriptive					
School Percentage Emergency Permit Sections					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	695	.071%	.551%	0.00%	8.93%
2 = Upper Middle Wealth	695	.109%	.760%	0.00%	10.99%
3 = Lower Middle Wealth	695	.199%	1.283%	0.00%	16.35%
4 = High Poverty	694	.225%	1.273%	0.00%	16.56%
Total	2779	.151%	1.020%	0.00%	16.56%

Poverty Percentage (0.000 thru 24.780=1) (24.781 thru 40.260=2) (40.261 thru 58.350=3) (58.351 thru 100.0=4).

Effect size calculations, found in Table 10, were low for the differences between the poverty quartile means. The differences were noted as negligible or small. Overall, the all school districts sample schools had few to no sections taught by teachers using an emergency permit.

Table 10

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Effect Size, All School Districts Sample

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.04%	0.0066	-0.06	Negligible
1 minus 3	-0.13%	0.0092	-0.14	Small
1 minus 4	-0.15%	0.0091	-0.17	Small
2 minus 3	-0.09%	0.0102	-0.09	Negligible
2 minus 4	-0.12%	0.0102	-0.11	Small
3 minus 4	-0.03%	0.0128	-0.02	Negligible

The analyses of the percentage of sections taught by teachers with emergency permits were continued using poverty quartiles. The last sample employed was of all of the “charter schools.” Overall, the percentage of sections taught by teachers with emergency permits increased to .989 percent, but it was a rather small change when compared to the school district samples. The upper middle wealth quartile had the highest percentage at 1.652 percent. The high poverty quartile and the high wealth quartiles were somewhat similar at .660 and .744 percent. In Table 11, the charter schools quartile mean percentages were low, but higher than the school district percentages.

Table 11

Percentage of Sections Taught by Teachers with Emergency Permits for Schools

Descriptive Statistics, Charter School Sample

Descriptive					
School Percentage Emergency Permit Sections					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	41	.744%	3.393%	.00%	18.25%
2 = Upper Middle Wealth	42	1.652%	5.900%	.00%	36.57%
3 = Lower Middle Wealth	41	.885%	3.216%	.00%	15.00%
4 = High Poverty	41	.660%	1.567%	.00%	6.62%
Total	165	.989%	3.846%	.00%	36.57%

Poverty Percentage (0.00 thru 52.370=1) (52.371 thru 71.620=2) (71.621 thru 84.160=3) (84.161 thru 100.0=4).

Effect size calculations were found to be low for the differences between the poverty groups. The differences were noted as negligible or small. Overall, the charter school sample schools had few to no sections taught by teachers using an emergency permit, but the charter schools had a few more sections taught by teachers using emergency permits than the school district sample schools. It was noted the maximum percentages for charter schools included a few schools with higher percentages up to 36.57 percent for the upper middle wealth quartile.

The findings for the percentage of sections taught by teachers with an emergency permit indicated few and small differences between the minority level means and wealth/poverty level means. This could be a result of the few emergency permits in use at this time. Also, school districts may have had financial penalties levied for using teachers not properly certified to

teach. Hence, the school district administrators are motivated to hire only teachers with proper certification for their assigned instructional sections.

Table 12

Percentage of Sections Taught by Teachers with Emergency Permits for Schools
Effect Size, Charter School Sample

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.91%	0.0466	-0.19	Small
1 minus 3	-0.14%	0.0330	-0.04	Negligible
1 minus 4	0.08%	0.0248	0.03	Small
2 minus 3	0.77%	0.0457	0.17	Small
2 minus 4	0.99%	0.0376	0.26	Small
3 minus 4	0.22%	0.0239	0.09	Negligible

Findings for Teacher Turnover Percentages

School data from the 2013-2014 school years were used for the analysis of the teacher turnover percentage data. “Turnover” included all teachers departing from employment in the school. Thus, turnover included retirements, death, resignations and other reasons. The results for the sample of “school districts minus Philadelphia SD” were placed into Table 13 and Table 14. For this sample, the mean turnover rate was 5.6 percent of the teachers. Since the definition of turnover included all teachers departing from employment, the percentages used for the analyses were higher than just teachers changing employers. The lower minority quartile, highest minority quartile and lower middle minority quartile had similar percentages of teacher turnover. The upper middle minority quartile has the lowest percentage 5.26 of teacher turnover. Table 13 contains the descriptive statistics for this variable. Little variation in the mean values was found for this variable.

Table 13

Teacher Turnover Percentages by School Minority Groups

Descriptive Statistics, School District Minus Philadelphia SD Sample

		Descriptive			
		Teacher Turnover Percentage			
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	645	5.68	6.04	0.00	83.30
2 = Upper Middle Minority	650	5.26	4.36	0.00	31.40
Lower Middle Minority	651	5.64	5.05	0.00	31.20
4 = Lowest Minority	634	5.81	5.46	0.00	45.50
Total	2580	5.60	5.26	0.00	83.30

Minority Percentage (100.00 thru 26.50=1) (26.49 thru 11.80=2) (11.79 thru 5.40=3) (5.39 thru 0.00=4)

Effect size was calculated for the minority group quartiles comparing the turnover percentages of four minority groups. Table 14 presented the effect size data for the turnover percentages. It was noted the differences between the quartile mean values were small and varied little. Also, the effect size values were low. This indicated the meaningful differences were in one case small and negligible for the others. It is possible; teachers in Pennsylvania did not have many opportunities to change employment from one school district to another school district. Because of collective bargaining, salary schedules in place were often based on years of service and education level, school districts may have elected to hire new teachers for open teaching

positions. Hiring first year teachers saves the school district money, but decreases the opportunity for teachers to change school districts.

Table 14

Teacher Turnover Percentages by School Minority Groups
Effect Size, School District Minus Philadelphia SD Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.43	5.20	0.08	Negligible
1 minus 3	0.04	5.54	0.01	Negligible
1 minus 4	-0.13	5.75	-0.02	Negligible
2 minus 3	-0.38	4.71	-0.08	Negligible
2 minus 4	-0.56	4.90	-0.11	Small
3 minus 4	-0.17	5.25	-0.03	Negligible

Table 15

Teacher Turnover Percentages by School Minority Groups
Descriptive Statistics, All School Districts Sample

Descriptive					
Teacher Turnover Percentage					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	697	8.10	7.78	0.00	83.30
2 = Upper Middle Minority	699	5.24	4.39	0.00	24.80
Lower Middle Minority	713	5.60	4.94	0.00	31.40
4 = Lowest Minority	682	5.91	5.54	0.00	45.50
Total	2791	6.21	5.90	0.00	83.30

Minority Percentage (100.00 thru 34.35=1) (34.34 thru 13.50=2) (13.49 thru 5.70=3) (5.69 thru 0.00=4)

The results for the sample of “all school districts” were placed into Table 15 and Table 16. For this sample, the mean turnover rate was 6.21 percent of the teachers. The highest minority quartile had the higher percentage at 8.10 percent of teacher turnover. The other three minority quartiles had similar turnover percentages. Table 15 contains the descriptive statistics for this variable.

Effect size was calculated for the minority groups comparing the percentages of the four groups. Table 16 presented the data for the turnover percentages. It was noted the differences between quartiles varied the most between the highest minority quartile and all three other minority quartiles. The effect size values were small or negligible in five cases and in one case medium level for the comparisons. The highest minority quartile versus the upper middle minority quartile had the medium level difference. The inclusion of Philadelphia SD into the sample appears to have made some difference in the findings. It could be Philadelphia SD contributes to the turnover rate percentages at a higher level.

Table 16

Teacher Turnover Percentages by School Minority Groups

Effect Size, All School Districts Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	2.86	6.08	0.47	Medium
1 minus 3	2.50	6.34	0.39	Small
1 minus 4	2.18	6.67	0.33	Small
2 minus 3	-0.36	4.67	-0.08	Negligible
2 minus 4	-0.68	4.96	-0.14	Small
3 minus 4	-0.32	5.23	-0.06	Negligible

The analyses of the turnover percentages were continued using minority quartiles. The last sample employed was of all of the “charter schools.” Overall, the turnover percentage increased to 18.05 percent, indicating rather large difference in the mean value when compared to the school district sample with 6.21 percent turnover. The highest minority quartile had the highest percentage at 23.79 percent. The lowest minority quartile had the lowest mean at 9.08 percent. In Table 17, the charter schools minority quartile mean percentages were high and higher than the school district percentages. Charter schools have different legislative statutes and rules. The differences between school districts and charter schools were emphasized by this finding. The reasons for the differences could be explored with additional study. It may be challenging to identify all of the reasons for turnover in charter schools. Most of the charter schools in Pennsylvania were in urban settings.

Table 17

Teacher Turnover Percentages by School Minority Groups

Descriptive Statistics, Charter Schools Sample

Descriptive					
Teacher Turnover Percentage					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	38	23.79	14.34	0.00	52.80
2 = Upper Middle Minority	39	21.23	15.75	0.00	66.70
Lower Middle Minority	39	18.04	15.02	0.00	67.00
4 = Lowest Minority	38	9.08	10.69	0.00	53.60
Total	154	18.05	15.02	0.00	67.00

Minority Percentage (0.00 thru 98.775=1) (98.774 thru 85.55=2) (85.549 thru 32.75=3) (32.749 thru 0.00=4)

Placed in Table 18, the effect size calculations were found to vary from small to very large for the minority group turnover percentages. Overall, the charter school sample schools had higher turnover percentages than the school district schools. Some of the differences between the groups were rather large and between the highest minority group and lowest minority group very large.

Table 18

Teacher Turnover Percentages by School Minority Groups

Effect Size, Charter School Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	2.56	15.05	0.17	Small
1 minus 3	5.75	14.69	0.39	Small
1 minus 4	14.71	12.51	1.18	Very Large
2 minus 3	3.19	15.39	0.21	Small
2 minus 4	12.15	13.25	0.92	Large
3 minus 4	8.96	12.88	0.70	Large

Overall, the findings for the turnover percentage revealed few and small differences between the minority level means for the school district schools. For the charter schools the turnover percentages were higher. For the charter schools the differences between the minority groups ranged from small to very large. Possibly, the more important finding is the difference between school districts and charter school sample turnover means.

The turnover percentage was examined using the school wealth/poverty level. Quartiles were developed using the school poverty percentages. Again, three samples were considered for the analyses: school districts minus Philadelphia SD, all school districts, and charter schools.

For the school districts minus Philadelphia SD sample, the mean turnover percentage was 5.58 percent. The mean turnover percentages for the poverty quartile groups were similar and varied little. The highest percentage was 5.97 for the upper middle wealth quartile, and the lowest percentage was 4.83 for the higher wealth quartile. The descriptive statistics were placed into Table 19 for this sample.

Table 19

Teacher Turnover Percentages by School Wealth/Poverty Groups
Descriptive Statistics, School Districts Minus Philadelphia SD Sample

		Descriptive			
		Teacher Turnover Percentage			
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	641	4.83	3.87	0.00	21.70
2 = Upper Middle Wealth	651	5.97	5.20	0.00	45.50
3 = Lower Middle Wealth	650	5.51	5.13	0.00	34.20
4 = High Poverty	650	5.99	6.44	0.00	83.30
Total	2592	5.58	5.26	0.00	83.30

Poverty Percentage (0.0 thru 23.17=1) (23.18 thru 37.99=2) (38.0 thru 52.65=3) (52.66 thru 100.0=4)

Effect size calculations, placed in Table 20, were low for the differences between the poverty quartile means. The differences were noted as negligible or small. Overall, the school districts minus Philadelphia SD sample schools had rather low turnover percentages. The differences between the poverty groups reflected the small differences.

Table 20

Teacher Turnover Percentages by School Wealth/Poverty Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-1.14	4.54	-0.25	Small
1 minus 3	-0.67	4.50	-0.15	Small
1 minus 4	-1.16	5.17	-0.22	Small
2 minus 3	0.47	5.16	0.09	Negligible
2 minus 4	-0.02	5.82	0.00	Negligible
3 minus 4	-0.48	5.78	-0.08	Negligible

The results for the sample of “all school districts” were placed into Table 21 and Table 22. For this sample, the mean turnover rate was 6.20 percent of the teachers. Again, since the definition of turnover was all teachers departing from employment, the percentages used for the analyses were higher than only teachers changing employers. The highest poverty quartile had the higher percentage at 8.00 percent of teacher turnover. The other three minority quartiles had rather similar turnover percentages.

Table 21

Teacher Turnover Percentages by School Wealth/Poverty Groups

Descriptive Statistics, All School Districts Sample

Wealth/Poverty Level Groups	N	Descriptive			
		Teacher Turnover Percentage			
		Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	695	4.91	3.91	0.00	21.70
2 = Upper Middle Wealth	704	6.00	5.32	0.00	45.50
3 = Lower Middle Wealth	704	5.86	5.52	0.00	31.20
4 = High Poverty	702	8.00	7.80	0.00	83.30
Total	2805	6.20	5.92	0.00	83.30

Poverty Percentage (0.0 thru 24.26=1) (24.27 thru 40.14=2) (40.15 thru 58.05=3) (58.06 thru 100.0=4)

Effect size calculations, found in Table 22, were low for five of the six differences between the poverty quartile means. The differences were noted for five of the calculations as being either negligible or small. Only the difference between the higher wealth and the higher poverty groups was found to be at a medium level. Overall, the all school districts sample schools had rather low turnover percentages. The mean differences between the poverty groups reflected the small differences.

Table 22

Teacher Turnover Percentages by School Wealth/Poverty Groups

Effect Size, All School Districts Sample

Wealth/Poverty Level Groups	Effect Size Calculation			Practically Meaningful Difference
	Mean Difference	Std. Deviation	Effect Size	
1 minus 2	-1.09	4.62	-0.24	Small
1 minus 3	-0.94	4.72	-0.20	Small
1 minus 4	-3.09	5.87	-0.53	Medium
2 minus 3	0.15	5.42	0.03	Negligible
2 minus 4	-2.00	6.56	-0.30	Small
3 minus 4	-2.14	6.66	-0.32	Small

Teacher turnover percentages were placed into Table 23 for the charter school sample. The mean for the sample was 18.77 percent. This is a higher percentage than was found for either of the school district samples. The higher wealth group turnover percentage was 10.84 percent while the lower middle wealth group was 25.30 percent. Charter schools had larger differences between the wealth group turnover means. Also, the charter school sample had a few rather large maximum turnover percentages.

The effect size information was placed into Table 24 with a variety of differences identified. Medium to very large differences were found for higher wealth group versus the other three groups. The upper middle versus the lower middle wealth group mean was different at the medium level. The remaining two comparisons were found to be at the small level.

For the turnover percentages, the school districts were rather similar when the minority quartile groups were considered and when the poverty quartile groups were considered. The charter school sample had mean values different from the school districts and at times charter schools differed between minority and poverty groups. This was additional evidence the

charter schools were different from school districts. Teachers may have been electing to depart from charter school employment, or terminated from charter school employment at a higher rate.

Table 23

Teacher Turnover Percentages by School Wealth/Poverty Groups
Descriptive Statistics, Charter School Sample

Descriptive					
Teacher Turnover Percentage					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	43	10.84	11.07	0.00	52.80
2 = Upper Middle Wealth	44	17.13	15.76	0.00	67.00
3 = Lower Middle Wealth	48	25.30	12.90	0.00	51.60
4 = High Poverty	38	21.40	17.09	0.00	66.70
Total	173	18.77	15.17	0.00	67.00

Poverty Percentage (0.0 thru 51.75=1) (51.76 thru 71.62=2) (71.63 thru 85.375=3) (85.376 thru 100.0=4)

Table 24

Teacher Turnover Percentages by School Wealth/Poverty Groups
Effect Size, Charter School Sample

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-6.29	13.44	-0.47	Medium
1 minus 3	-14.46	12.03	-1.20	Very Large
1 minus 4	-10.56	13.89	-0.76	Large
2 minus 3	-8.17	14.27	-0.57	Medium
2 minus 4	-4.27	16.38	-0.26	Small
3 minus 4	3.90	14.75	0.26	Small

Findings for Teacher Years of Employment in Education

School data from the 2013-2014 school years were used for the analysis of the teacher years in education data. Teacher years in education data were based on the percentage of teachers with more than three years of educational employment for (1) educational employment in any LEA and (2) educational employment in the LEA of present employment. The same poverty parameters were used for teacher service in the present LEA and in any LEA. The results for the sample of “school districts minus Philadelphia SD” were placed into Table 25 and Table 26. For this sample, the mean percentage of teachers, with more than three years of service, employed in any LEA was 90.76 percent, and the mean percentage of teachers employed in the present LEA was 88.50 percent. The decrease from 90.76 to 88.50 was predictable based on the criteria employed for the calculation. The lower minority quartile to higher minority quartiles had similar percentages for both the teachers employed in any LEA and teachers in the present LEA.

The effect size calculations were placed into Table 26 for the teacher years in education. For both the teacher years in education in any LEA and teacher years in education in the present LEA, the effect size results indicated the means were similar and the differences were negligible. The data and effect size calculations indicated the minority groups did not have meaningful differences for teachers with more than three years of educational service. This was for the school districts minus Philadelphia SD sample.

Table 25

Teacher Years in Education by School Minority Groups

Descriptive Statistics, School District Minus Philadelphia SD Sample

Minority Percentage Groups	Descriptive				
	Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA				
	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	806	90.67	7.518	60	100
2 = Lower Middle Minority	516	90.99	6.718	52	100
3 = Upper Middle Minority	624	90.83	7.350	49	100
4 = Higher Minority	623	90.61	8.132	56	100
Total	2569	90.76	7.477	49	100

Table 25 Continued

Minority Percentage Groups	Descriptive				
	Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years				
	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	806	88.38	8.136	57	100
2 = Lower Middle Minority	516	88.58	7.434	50	100
3 = Upper Middle Minority	624	88.14	8.274	47	100
4 = Higher Minority	623	88.95	9.223	52	100
Total	2569	88.50	8.315	47	100

Minority Enrollment Percentage (0.00 thru 6.001=1) (6.002 thru 12.001=2) (12.002 thru 27.001=3) (27.002 thru 100.0=4).

Table 26

Teacher Years in Education by School Minority Groups

Effect Size, School District Minus Philadelphia SD Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.32	7.21	-0.04	Negligible
1 minus 3	-0.17	7.44	-0.02	Negligible
1 minus 4	0.05	7.79	0.01	Negligible
2 minus 3	0.15	7.06	0.02	Negligible
2 minus 4	0.37	7.49	0.05	Negligible
3 minus 4	0.22	7.74	0.03	Negligible

Table 26 Continued

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Minority Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	-0.20	7.86	-0.02	Negligible
1 minus 3	0.24	8.20	0.03	Negligible
1 minus 4	-0.57	8.61	-0.07	Negligible
2 minus 3	0.44	7.89	0.06	Negligible
2 minus 4	-0.38	8.41	-0.04	Negligible
3 minus 4	-0.81	8.75	-0.09	Negligible

The results for the sample of “all school districts” were placed into Table 27 and Table 28. For this sample, the percentage of teachers with more than three years of service was examined by the years in any LEA and by years in the present LEA. The mean percentage for teachers with more than three years of service in any LEA was 91.06 and the mean percentage for teachers with more than three years of service in the present LEA was 88.97 percent. The highest minority quartile had the highest percentage of teachers with more than three years of service for both service in any LEA and service in the present LEA. The mean values indicated teachers with more than three years of service were slightly more often found in schools with a higher percentage of minorities for the all school districts sample. It should be noted the mean values varied by small amounts for the minority groups.

The effect size calculations were placed into Table 28 for the teacher years in education. For both the teacher years in education in any LEA and teacher years in education in the present LEA, the effect size results indicated the means were similar and the differences were negligible or small. This was for the all school districts sample.

In general, the all school districts sample and school districts minus Philadelphia SD sample had similar findings. The minority quartile groups differed by small amounts for the percentage of teachers with more than three years of teaching experience. If the teacher had the teaching experience in the LEA or in any LEA did not make much difference.

Table 27

Teacher Years in Education by School Minority Groups

Descriptive Statistics, All School Districts Sample

		Descriptive			
		Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA			
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
	1 = Lower Minority	806	90.67	7.518	60
2 = Lower Middle Minority	638	90.91	6.801	52	100
3 = Upper Middle Minority	659	90.80	7.415	49	100
4 = Higher Minority	679	91.91	7.943	43	100
Total	2782	91.06	7.456	43	100

Table 27 Continued

		Descriptive			
		Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years			
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
	1 = Lower Minority	806	88.38	8.136	57
2 = Lower Middle Minority	638	88.41	7.641	50	100
3 = Upper Middle Minority	659	88.30	8.254	47	100
4 = Higher Minority	679	90.86	8.968	43	100
Total	2782	88.97	8.331	43	100

Minority Enrollment Percentage (0.00 thru 6.001=1) (6.002 thru 14.001=2) (14.002 thru 35.001=3) (35.002 thru 100.0=4).

Table 28

Teacher Years in Education by School Minority Groups

Effect Size, All School Districts Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Minority Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	-0.24	7.20	-0.03	Negligible
1 minus 3	-0.13	7.47	-0.02	Negligible
1 minus 4	-1.25	7.71	-0.16	Small
2 minus 3	0.11	7.11	0.02	Negligible
2 minus 4	-1.01	7.39	-0.14	Small
3 minus 4	-1.11	7.68	-0.15	Small

Table 28 Continue

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Minority Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	-0.03	7.92	0.00	Negligible
1 minus 3	0.09	8.19	0.01	Negligible
1 minus 4	-2.48	8.52	-0.29	Small
2 minus 3	0.12	7.95	0.02	Negligible
2 minus 4	-2.44	8.32	-0.29	Small
3 minus 4	-2.56	8.62	-0.30	Small

The percentage of teachers with more than three years of service in any LEA and in the present LEA was placed into Table 29 for the charter school sample. The mean for the sample was 60.22 percent for the service in any LEA and 44.33 for service in the present LEA. The percentages were considerably lower than and different from the all school districts sample and

the school districts minus Philadelphia SD sample. Charter schools were found to have teachers with less experience than school districts. Part of the reason for the school district versus charter schools mean percentages may have been due to charter schools being much more recent in their origins (1997-1998 was the first charter school year). Lower salaries may have contributed to teachers departing from charter school employment.

Table 29

Teacher Years in Education by School Minority Groups

Descriptive Statistics, Charter Schools Sample

		Descriptive			
		Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA			
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	41	73.23	18.962	30	100
2 = Lower Middle Minority	43	60.05	21.587	14	96
3 = Upper Middle Minority	34	51.09	20.245	2	90
4 = Higher Minority	49	55.83	18.031	13	95
Total	167	60.22	21.086	2	100

		Descriptive			
		Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years			
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	36	62.24	22.894	20	100
2 = Lower Middle Minority	35	46.24	23.049	2	90
3 = Upper Middle Minority	25	37.01	19.299	5	80
4 = Higher Minority	43	32.02	17.353	4	70
Total	139	44.33	23.703	2	100

Minority Enrollment Percentage (0.00 thru 36.01=1) (36.02 thru 94.01=2) (94.02 thru 99.90=3) (99.901 thru 100.0=4).

The effect size information was placed into Table 30 with a variety of charter school sample mean differences identified. Medium to very large differences were found for lower minority

group versus the other three groups. The upper middle versus the lower middle minority group mean was different at the medium level. The remaining two comparisons were found to be at the small effect size level for the teachers with experience in any LEA.

Table 30

Teacher Years in Education by School Minority Groups
Effect Size, Charter Schools Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	13.18	20.31	0.65	Medium
1 minus 3	22.14	19.54	1.13	Very Large
1 minus 4	17.41	18.45	0.94	Large
2 minus 3	8.96	20.99	0.43	Medium
2 minus 4	4.22	19.69	0.21	Small
3 minus 4	-4.74	18.94	-0.25	Small

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	16.00	22.97	0.70	Large
1 minus 3	25.23	21.42	1.18	Very Large
1 minus 4	30.23	19.88	1.52	Very Large
2 minus 3	9.23	21.49	0.43	Medium
2 minus 4	14.23	19.91	0.71	Large
3 minus 4	5.00	18.07	0.28	Small

Minority Enrollment Percentage (0.00 thru 36.01=1) (36.02 thru 94.01=2) (94.02 thru 99.90=3) (99.901 thru 100.00=4).

For the percentage of teachers with more than three years of experience, the school districts were rather similar when the minority groups were considered. The charter school sample had

mean percentages different from the school districts and at times differed between minority groups.

School data from the 2013-2014 school years were used for the analysis of the teacher years in education data and poverty percentages. Teacher years in education data were based on the percentage of teachers with more than three years of educational employment for (1) educational employment in any LEA and (2) educational employment in the LEA of present employment. The results for the sample of “school districts minus Philadelphia SD” were placed into Table 31 and Table 32. For this sample, the mean percentage of teachers, with more than three years of service, employed in any LEA was 90.76 percent, and the mean percentage of teachers employed in the present LEA was 88.49 percent. All of the poverty quartiles had rather similar percentages for both the teachers employed in any LEA and teachers in the present LEA.

Table 31

Teacher Years in Education by School Wealth/Poverty Groups
Descriptive Statistics, School Districts Minus Philadelphia SD Sample

		Descriptive			
		Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA			
Wealth/Poverty Level Group	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	643	91.41	6.80	49	100
2 = Upper Middle	651	90.90	6.91	62	100
3 = Lower Middle	650	90.52	7.69	60	100
4 = Higher Poverty	649	90.21	8.52	56	100
Total	2593	90.76	7.52	49	100

Table 31 Continued

Wealth/Poverty Level Group	N	Descriptive			
		Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years			
		Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	643	88.31	7.83	47	100
2 = Upper Middle	651	88.54	7.64	57	100
3 = Lower Middle	650	88.50	8.39	60	100
4 = Higher Poverty	649	88.62	9.48	52	100
Total	2593	88.49	8.36	47	100

Poverty Percentage (0.0 thru 23.17=1) (23.18 thru 37.99=2) (38.00 thru 52.65=3) (52.66 thru 100.0=4)

The effect size calculations were placed into Table 32 for the teacher years in education. For both the teacher years in education in any LEA and teacher years in education in the present LEA, the effect size results indicated the means were similar and the differences were negligible or small. The data and effect size calculations indicated the poverty groups did not have meaningful differences for teachers with more than three years of educational service. This was for the school districts minus Philadelphia SD sample.

Table 32

Teacher Years in Education by School Wealth/Poverty Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.51	6.85	0.07	Negligible
1 minus 3	0.89	7.24	0.12	Small
1 minus 4	1.20	7.66	0.16	Small
2 minus 3	0.38	7.30	0.05	Negligible
2 minus 4	0.70	7.71	0.09	Negligible
3 minus 4	0.32	8.10	0.04	Negligible

Table 32 Continued

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.23	7.74	-0.03	Negligible
1 minus 3	-0.19	8.11	-0.02	Negligible
1 minus 4	-0.30	8.66	-0.04	Negligible
2 minus 3	0.04	8.01	0.00	Negligible
2 minus 4	-0.08	8.56	-0.01	Negligible
3 minus 4	-0.11	8.93	-0.01	Negligible

The results for the sample of “all school districts” were placed into Table 33 and Table 34. For this sample, the percentage of teachers with more than three years of service was examined by the years in any LEA and by years in the present LEA. The mean percentage for teachers with more than three years of service in any LEA was 91.06 and the mean percentage for teachers with more than three years of service in the present LEA was 88.96 percent. The mean percentage of 91.49, for the higher wealth group, was the highest for teachers with more than three years of service in any LEA. The poverty groups mean values were similar. The higher poverty quartile (for the service in the LEA) had the highest percentage at 90.23 of the teachers with more than three years of service. The mean values varied little for the all school districts sample.

The effect size calculations were placed into Table 34 for the teacher years in education. For both the teacher years in education in any LEA and teacher years in education in the present LEA, the effect size results indicated the means were similar and the differences were negligible or small. The data and effect size calculations indicated the poverty quartile groups did not have meaningful differences for teachers with more than three years of educational service. This was for the all school districts sample.

Table 33

Teacher Years in Education by School Wealth/Poverty Groups

Descriptive Statistics, All School Districts Sample

Descriptive					
		Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA			
Wealth/Poverty Level Group	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	697	91.49	6.67	49	100
2 = Upper Middle	704	90.83	7.07	62	100
3 = Lower Middle	704	90.65	7.74	60	100
4 = Higher Poverty	701	91.27	8.37	43	100
Total	2806	91.06	7.49	43	100

Descriptive					
		Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years			
Wealth/Poverty Level Group	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	697	88.47	7.66	47	100
2 = Upper Middle	704	88.46	7.82	57	100
3 = Lower Middle	704	88.70	8.56	60	100
4 = Higher Poverty	701	90.23	9.24	43	100
Total	2806	88.96	8.38	43	100

Poverty Percentage (0.0 thru 24.26=1) (24.27 thru 40.14=2) (40.15 thru 58.05=3) (58.06 thru 100.0=4)

In general, the all school districts and school districts minus Philadelphia SD had similar findings. The minority quartile groups differed by small amounts for the percentage of teachers with more than three years of teaching experience. If the teacher had the teaching experience in the LEA or in any LEA did not make much difference.

Table 34

Teacher Years in Education by School Wealth/Poverty Groups

Effect Size, All School Districts Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Poverty Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	0.66	6.87	0.10	Negligible
1 minus 3	0.84	7.21	0.12	Small
1 minus 4	0.22	7.52	0.03	Negligible
2 minus 3	0.18	7.41	0.02	Negligible
2 minus 4	-0.43	7.72	-0.06	Negligible
3 minus 4	-0.62	8.05	-0.08	Negligible

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Poverty Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	0.01	7.74	0.00	Negligible
1 minus 3	-0.24	8.12	-0.03	Negligible
1 minus 4	-1.76	8.46	-0.21	Small
2 minus 3	-0.25	8.19	-0.03	Negligible
2 minus 4	-1.77	8.53	-0.21	Small
3 minus 4	-1.52	8.90	-0.17	Small

The charter school sample descriptive statistics were presented in Table 35 for the poverty groups. Again, the charter school sample was found to be different from the school districts minus Philadelphia SD sample and the all school districts sample. The percentage of teachers with more than three years of experience was lower for the charter school sample. The mean

percentage for more than three years in any LEA was 59.90 and the mean percentage for more than three years in the present LEA was 44.15 as noted. The charter school poverty group means did vary more than the group means for the other two samples. The higher wealth group had a higher percentage of teachers with more than three years of service.

Table 35

Teacher Years in Education by School Wealth/Poverty Groups

Descriptive Statistics, Charter School Sample

Descriptive					
Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA					
Wealth/Poverty Level Group	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	41	67.80	20.18	29	100
2 = Upper Middle	42	62.85	22.15	13	100
3 = Lower Middle	43	56.17	18.94	11	95
4 = Higher Poverty	43	53.21	20.93	2	96
Total	169	59.90	21.17	2	100

Descriptive					
Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years					
Wealth/Poverty Level Group	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	34	56.63	22.66	7	94
2 = Upper Middle	38	46.79	24.65	4	100
3 = Lower Middle	37	34.48	20.06	4	80
4 = Higher Poverty	31	38.77	21.82	2	92
Total	140	44.15	23.71	2	100

Poverty Percentage (0.0 thru 51.75=1) (51.76 thru 71.62=2) (71.63 thru 84.375=3) (84.376 thru 100.0=4)

Effect size calculations were provided in Table 36 for the charter school sample. In general, the higher wealth group varied more from the other groups. The effect size calculations ranged from very large to small depending on the groups compared.

Table 36

Teacher Years in Education by School Wealth/Poverty Groups

Effect Size, Charter School Sample

Years in Education - School Data - Percentage of Teachers Greater Than Three Years - Any LEA

Effect Size Calculation				
Poverty Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	4.96	21.17	0.23	Small
1 minus 3	11.63	19.55	0.60	Medium
1 minus 4	14.59	20.56	0.71	Large
2 minus 3	6.68	20.53	0.33	Small
2 minus 4	9.63	21.53	0.45	Medium
3 minus 4	2.96	19.94	0.15	Small

Years in This LEA- School Data - Percentage of Teachers Greater Than Three Years

Effect Size Calculation				
Poverty Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	9.83	23.71	0.41	Medium
1 minus 3	22.14	21.31	1.04	Very Large
1 minus 4	17.86	22.26	0.80	Large
2 minus 3	12.31	22.39	0.55	Medium
2 minus 4	8.02	23.38	0.34	Small
3 minus 4	-4.29	20.87	-0.21	Small

Findings for Teacher Salary

School data from the 2013-2014 school years were used for the analysis of the teacher salary data. Teacher salary data were analyzed using the first year teacher salaries and using the teachers with more than one year of service salaries. It was observed the distribution of minorities in Pennsylvania was not a normal distribution. A trend was noted for rural schools to have a lower percentage of minorities and lower salaries. A few of the schools were found to have zero values for the data. The zero values were treated as missing data.

The results for the sample of “school districts minus Philadelphia SD” were placed into Table 37 and Table 38. For this sample, first year teachers had an average salary of \$42,577 with the higher minority group having the highest average salary at \$44,945. It was observed some of the maximum salary values were rather high. It is possible a few schools had employed first year teachers with higher education levels and multiple years of service. When the first year teachers were placed on the LEA salary schedule, the result was the high salary. A few of the minimum salary values were low. This could be a product on not being employed for all of the school year. The lower minority quartile had the lower salaries.

Table 37

Teacher Salary by School Minority Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive First Year Teacher Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	397	\$ 44,945.85	7495.045	\$ 16,348.00	\$ 72,677.00
2 = Upper Middle Minority	396	\$ 43,983.96	9179.187	\$ 6,500.00	\$ 85,622.00
3 = Lower Middle Minority	401	\$ 42,015.20	8141.258	\$ 3,500.00	\$ 70,221.00
4 = Lowest Minority	391	\$ 39,325.58	7470.331	\$ 4,800.00	\$ 63,058.00
Total	1585	\$ 42,577.63	8373.967	\$ 3,500.00	\$ 85,622.00

Minority Enrollment Percentage (100.00 thru 27.0=1) (26.99 thru 12.6=2) (12.59 thru 5.90=3) (5.89 thru 0.00=4)

The salary values for the teachers with more than one year of experience were, as expected, higher than the first year teachers. The mean for teachers with more than one year of service was \$63,328. The upper middle minority group had the highest salaries at \$67,835.

Table 37 Continued

Descriptive					
Teachers with More Than One Year Service Average Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	645	\$ 66,487.99	10305.573	\$ 40,287.00	\$ 95,024.00
2 = Upper Middle Minority	649	\$ 67,835.12	10134.783	\$ 43,476.00	\$ 99,546.00
3 = Lower Middle Minority	651	\$ 62,156.07	9686.948	\$ 38,458.00	\$ 97,706.00
4 = Lowest Minority	634	\$ 56,705.98	6694.630	\$ 27,615.00	\$ 81,719.00
Total	2579	\$ 63,328.79	10283.767	\$ 27,615.00	\$ 99,546.00

Minority Enrollment Percentage (0.00 thru 26.40=1) (26.39 thru 11.80=2) (11.79 thru 5.40=3) (5.39 thru 0.00=4)

Table 38

Teacher Salary by School Minority Groups

Effect Size, School Districts Minus Philadelphia SD Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 961.89	8336.05	0.12	Small
1 minus 3	\$ 2,930.65	7819.77	0.37	Small
1 minus 4	\$ 5,620.27	7482.78	0.75	Large
2 minus 3	\$ 1,968.76	8656.97	0.23	Small
2 minus 4	\$ 4,658.38	8330.19	0.56	Medium
3 minus 4	\$ 2,689.62	7810.03	0.34	Small

Table 38 Continued

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ (1,347.13)	10219.91	-0.13	Small
1 minus 3	\$ 4,331.91	9994.83	0.43	Medium
1 minus 4	\$ 9,782.01	8515.63	1.15	Very Large
2 minus 3	\$ 5,679.05	9910.52	0.57	Medium
2 minus 4	\$ 11,129.14	8434.82	1.32	Very Large
3 minus 4	\$ 5,450.10	8210.58	0.66	Medium

Effect size was calculated for the minority groups comparing the four quartiles. Table 38 provided the effect size data for teacher salaries. Some of the group salary means were found to vary by large dollar amounts. Also, the effect size values varied from small to very large. The lowest minority and highest minority groups varied by large or vary large meaningful differences for first year teachers and teachers with more than one year of experience.

The results for the all school districts sample were placed into Table 39 for the teacher salaries of first year teachers and teacher salaries of teachers with more than one year of service. The highest minority group had the highest teacher salaries for the first year teachers (\$46,090) and for the teachers with more than one year of service (\$67,796). Schools with higher percentages of minorities are more often found in urban areas, and urban areas often have higher salaries.

Table 39

Teacher Salary by School Minority Groups

Descriptive Statistics, All School Districts Sample

Descriptive					
First Year Teacher Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	420	\$ 46,090.25	7265.769	\$ 19,866.00	\$ 73,487.00
2 = Upper Middle Minority	421	\$ 43,918.27	9157.496	\$ 6,500.00	\$ 85,622.00
3 = Lower Middle Minority	420	\$ 42,278.20	8191.617	\$ 3,500.00	\$ 80,000.00
4 = Lowest Minority	412	\$ 39,391.71	7547.778	\$ 4,800.00	\$ 63,058.00
Total	1673	\$ 42,937.07	8429.737	\$ 3,500.00	\$ 85,622.00

Minority Enrollment Percentage (100.0 thru 31.60=1) (31.59 thru 13.60=2) (13.59 thru 6.20=3) (6.19 thru 0.00=4)

Table 39 Continued

Descriptive					
Teachers with More Than One Year Service Average Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	698	\$ 67,796.36	9187.486	\$ 40,287.00	\$ 95,024.00
2 = Upper Middle Minority	697	\$ 67,726.47	10319.417	\$ 43,476.00	\$ 99,546.00
3 = Lower Middle Minority	713	\$ 63,321.24	9883.074	\$ 38,458.00	\$ 97,706.00
4 = Lowest Minority	682	\$ 56,818.83	6704.653	\$ 27,615.00	\$ 81,719.00
Total	2790	\$ 63,951.86	10167.815	\$ 27,615.00	\$ 99,546.00

Minority Enrollment Percentage (100.0 thru 34.20=1) (34.19 thru 13.45=2) (13.44 thru 5.70=3) (5.69 thru 0.00=4)

Effect size information was placed into Table 40 for the teacher salaries by minority groups. The highest minority group was found to differ from the lowest minority group by a large or very large effect size value. Again, rural schools often have lower percentages of minorities and lower salaries. The effect size differences were considerable for the lowest minority group and the other groups.

Table 40

Teacher Salary by School Minority Groups

Effect Size, All School Districts Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Minority Percentage Groups	Mean	Std.	Effect	Practically
	Difference	Deviation	Size	Meaningful Difference
1 minus 2	\$ 2,171.98	8212.76	0.26	Small
1 minus 3	\$ 3,812.05	7728.69	0.49	Medium
1 minus 4	\$ 6,698.54	7405.42	0.90	Large
2 minus 3	\$ 1,640.08	8675.13	0.19	Small
2 minus 4	\$ 4,526.57	8361.33	0.54	Medium
3 minus 4	\$ 2,886.49	7872.79	0.37	Small

Table 40 Continued

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Minority Percentage Groups	Mean	Std.	Effect	Practically
	Difference	Deviation	Size	Meaningful Difference
1 minus 2	\$ 69.89	9753.05	0.01	Small
1 minus 3	\$ 4,475.12	9538.98	0.47	Medium
1 minus 4	\$ 10,977.53	7960.46	1.38	Very Large
2 minus 3	\$ 4,405.23	10098.77	0.44	Medium
2 minus 4	\$ 10,907.64	8531.69	1.28	Very Large
3 minus 4	\$ 6,502.41	8329.18	0.78	Large

The charter school sample teacher salary data were placed into Table 41 and Table 42. The mean salary data for charter schools reflected lower salaries than those found in the school districts. For example, the first year teacher mean for charter schools was \$37,560 and for all school districts was \$42,937 indicating a considerable difference. The mean salary for teachers with more than one year of service was \$44,931 in the charter school sample and was \$63,951 for the all school districts sample. The differences in salaries between charter schools and

school districts could motivate teachers to depart from charter school employment or seek employment in school districts. Hence, the turnover percentage could have been influenced.

Table 41

Teacher Salary by School Minority Groups
Descriptive Statistics, Charter Schools Sample

Descriptive First Year Teacher Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	33	\$ 42,528.55	3582.453	\$ 34,887.00	\$ 50,986.00
2 = Upper Middle Minority	33	\$ 39,891.00	4882.345	\$ 28,214.00	\$ 48,803.00
3 = Lower Middle Minority	33	\$ 36,771.12	5969.205	\$ 21,500.00	\$ 44,333.00
4 = Lowest Minority	32	\$ 30,849.91	11351.256	\$ 3,875.00	\$ 48,052.00
Total	131	\$ 37,560.98	8210.395	\$ 3,875.00	\$ 50,986.00

Minority Enrollment Percentage (100.0 thru 99.20=1) (99.19 thru 88.50=2) (88.49 thru 36.00=3) (35.99 thru 0.00=4)

Table 41 Continued

Descriptive Teachers with More Than One Year Service Average Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	39	\$ 49,045.64	9881.578	\$ 10,159.00	\$ 59,900.00
2 = Upper Middle Minority	38	\$ 44,247.45	11430.354	\$ 5,440.00	\$ 61,535.00
3 = Lower Middle Minority	38	\$ 45,182.47	7559.021	\$ 26,616.00	\$ 59,409.00
4 = Lowest Minority	38	\$ 41,141.42	8610.789	\$ 12,568.00	\$ 59,006.00
Total	153	\$ 44,931.31	9810.163	\$ 5,440.00	\$ 61,535.00

Minority Enrollment Percentage (100.0 thru 98.70=1) (98.69 thru 85.30=2) (85.29 thru 32.50=3) (32.49 thru 0.00=4)

For both the first year charter school teachers and more than one year of service charter school teachers the higher minority group had higher salaries. The lower minority groups had lower salaries.

Effect size information was placed into Table 42 for the teacher salary data. The mean values for the charter school first year teachers varied from medium to very large differences. For the teachers with more than one year of service, the differences were not as large as those for the

first year teacher minority groups. The more than one year of service teachers did have two small level differences with the remainder at the medium level.

Table 42

Teacher Salary by School Minority Groups

Effect Size, Charter School Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 2,637.55	4232.40	0.62	Medium
1 minus 3	\$ 5,757.42	4775.83	1.21	Very Large
1 minus 4	\$ 11,678.64	7407.09	1.58	Very Large
2 minus 3	\$ 3,119.88	5425.77	0.58	Medium
2 minus 4	\$ 9,041.09	8067.04	1.12	Very Large
3 minus 4	\$ 5,921.21	8618.83	0.69	Medium

Table 42 Continued

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Minority Percentage Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 4,798.19	10645.91	0.45	Medium
1 minus 3	\$ 3,863.17	8735.38	0.44	Medium
1 minus 4	\$ 7,904.22	9254.44	0.85	Large
2 minus 3	\$ (935.03)	9494.69	-0.10	Small
2 minus 4	\$ 3,106.03	10020.57	0.31	Small
3 minus 4	\$ 4,041.05	8084.91	0.50	Medium

School data from the 2013-2014 school years were used for the analysis of the teacher salary data and poverty groups. Teacher salary data were examined using the first year teacher salaries and using the teachers with more than one year of service salaries. A few of the

schools were found to have zero values for the data. The zero values were treated as missing data.

The results for the sample of “school districts minus Philadelphia SD” were placed into Table 43 and Table 44. For this sample, first year teachers had an average salary of \$42,567 with the higher wealth/poverty group having the highest average salary at \$44,418. It was observed some of the maximum salary values were rather high. It is possible a few schools had employed first year teachers with higher education levels and multiple years of service. When the first year teachers were placed on the LEA salary schedule, the result was the high salary. A few of the minimum salary values were low. This could be a product on not being employed for all of the school year. The higher poverty quartile had the lower salaries.

For the teachers with more than one year of experience, the mean was \$63,360 and the higher wealth group had the higher salary of \$70,125. The teachers with more than one year of experience had larger differences between the salary means for the four poverty groups. Also, the higher wealth group had greater differences when compared to the other three poverty quartile groups.

Table 43

Teacher Salary by School Wealth/Poverty Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive First Year Teacher Average Annual Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	397	\$ 44,418.97	8884.385	\$ 6,500.00	\$ 72,144.00
2 = Upper Middle Wealth	398	\$ 42,620.16	9217.475	\$ 3,500.00	\$ 85,622.00
3 = Lower Middle Wealth	396	\$ 41,430.80	7474.635	\$ 16,873.00	\$ 65,946.00
4 = High Poverty	396	\$ 41,796.43	7468.322	\$ 18,672.00	\$ 72,677.00
Total	1587	\$ 42,567.82	8373.241	\$ 3,500.00	\$ 85,622.00

Poverty Percentage (0.00 thru 22.82=1) (22.821 thru 37.36=2) (37.361 thru 52.34=3) (52.341 thru 100.0=4).

Table 43 Continued

Descriptive					
Teachers with More Than One Year Service Average Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	649	\$ 70,125.81	10235.302	\$ 47,232.00	\$ 99,546.00
2 = Upper Middle Wealth	648	\$ 62,977.28	9218.953	\$ 43,496.00	\$ 95,024.00
3 = Lower Middle Wealth	648	\$ 59,344.30	8168.569	\$ 36,574.00	\$ 92,590.00
4 = High Poverty	648	\$ 60,983.03	9976.143	\$ 27,615.00	\$ 92,833.00
Total	2593	\$ 63,360.22	10288.110	\$ 27,615.00	\$ 99,546.00

Poverty Percentage (0.00 thru 23.24=1) (23.241 thru 38.11=2) (38.111 thru 52.685=3) (52.685 thru 100.0=4).

Table 44 presents the effect size information for the first year teacher salary by poverty groups and for the teachers with more than one year of service. The effect size results for first year teachers indicated the poverty group means were similar with the differences found to be small or negligible.

Table 44

Teacher Salary by School Wealth Groups

Effect Size, School Districts Minus Philadelphia SD Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 1,798.82	9051.14	0.20	Small
1 minus 3	\$ 2,988.17	8180.40	0.37	Small
1 minus 4	\$ 2,622.54	8177.25	0.32	Small
2 minus 3	\$ 1,189.36	8348.25	0.14	Small
2 minus 4	\$ 823.72	8345.10	0.10	Negligible
3 minus 4	\$ (365.63)	7471.48	-0.05	Negligible

Table 44 Continued

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 7,148.53	9727.52	0.73	Large
1 minus 3	\$ 10,781.51	9202.73	1.17	Very Large
1 minus 4	\$ 9,142.78	10105.82	0.90	Large
2 minus 3	\$ 3,632.98	8693.76	0.42	Medium
2 minus 4	\$ 1,994.25	9597.55	0.21	Small
3 minus 4	\$ (1,638.73)	9072.36	-0.18	Small

The effect size results were different for the teachers with more than one year of service compared to the first year teachers. The higher wealth group varied from the other three wealth groups at the large to very large levels. The higher wealth quartile had a higher mean salary than the others.

Table 45

Teacher Salary by School Wealth/Poverty Groups

Descriptive Statistics, All School Districts Sample

Descriptive First Year Teacher Average Annual Salary.					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	419	\$ 44,333.04	8801.527	\$ 6,500.00	\$ 72,144.00
2 = Upper Middle Wealth	420	\$ 42,652.06	9019.496	\$ 3,500.00	\$ 85,622.00
3 = Lower Middle Wealth	419	\$ 41,117.05	7705.850	\$ 16,873.00	\$ 65,946.00
4 = High Poverty	419	\$ 43,624.70	7771.819	\$ 18,672.00	\$ 73,487.00
Total	1677	\$ 42,931.55	8425.320	\$ 3,500.00	\$ 85,622.00

Poverty Percentage (0.00 thru 23.745=1) (23.746 thru 38.74=2) (38.741 thru 56.33=3) (56.331 thru 100.0=4).

Table 45 Continued

Descriptive					
Teachers with More Than One Year Service Average Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	701	\$ 69,732.09	10137.340	\$ 47,232.00	\$ 99,546.00
2 = Upper Middle Wealth	703	\$ 62,591.32	9231.651	\$ 36,574.00	\$ 95,024.00
3 = Lower Middle Wealth	701	\$ 59,299.79	8808.356	\$ 27,615.00	\$ 92,590.00
4 = High Poverty	701	\$ 64,308.59	9559.669	\$ 36,772.00	\$ 92,833.00
Total	2806	\$ 63,981.96	10168.366	\$ 27,615.00	\$ 99,546.00

Poverty Percentage (0.00 thru 24.3675=1) (24.3676 thru 40.15=2) (40.151 thru 58.095=3) (58.096 thru 100.0=4).

The all school districts sample was used to develop the descriptive statistics for the first year teachers and for the teachers with more than one year of service. Table 45 provides a mean of \$42,931 for the first year teachers. Of the four groups, the higher wealth group had the higher salary at \$44,333 and the lower middle wealth group had the lowest salary at \$41,117. Overall, the group means were not extremely different.

The teachers with more than one year of service had a higher mean salary at \$63,981 than the first year teachers. In addition, the wealth groups varied more than the first year teachers. The higher wealth group had the highest salary at \$69,732 while the lower middle wealth group had the lowest mean at \$59,299.

Effect size results were placed into Table 46. The first year teacher results indicated the wealth groups varied at negligible or small differences. This was a pattern similar to what was found for the all school districts minus Philadelphia SD sample.

The teachers with more than one year of experience mean salaries varied by larger amounts, and the effect size calculations indicated the higher wealth group differed from the other three poverty groups at the medium to vary large levels. Interestingly the upper middle and the lower middle wealth groups varied at the small level.

Table 46

Teacher Salary by School Minority Groups

Effect Size, All School Districts Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 1,680.98	8910.64	0.19	Small
1 minus 3	\$ 3,215.99	8253.69	0.39	Small
1 minus 4	\$ 708.34	8286.67	0.09	Negligible
2 minus 3	\$ 1,535.01	8363.46	0.18	Small
2 minus 4	\$ (972.64)	8396.40	-0.12	Small
3 minus 4	\$ (2,507.65)	7738.83	-0.32	Small

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 7,140.77	9683.85	0.74	Large
1 minus 3	\$ 10,432.30	9472.85	1.10	Very Large
1 minus 4	\$ 5,423.50	9848.50	0.55	Medium
2 minus 3	\$ 3,291.53	9020.31	0.36	Small
2 minus 4	\$ (1,717.27)	9395.43	-0.18	Small
3 minus 4	\$ (5,008.80)	9184.01	-0.55	Medium

The charter school sample was considered with respect to the first year teacher salaries and the teachers with more than one year of service. The charter school salaries were found to be lower than the salaries for the school district samples. The mean for the charter school teachers with more than one year of service at \$45,221 was considerably different from the mean for the all school district sample at \$63,981. Charter school salary poverty groups vary from each other with more meaningful differences. The lower middle wealth quartile had the higher salary for first year teachers (\$40,800), and the lower middle wealth group had the higher salary for the teachers with more than one year of service (\$48,271).

Table 47

Teacher Salary by School Wealth/Poverty Groups

Descriptive Statistics, Charter School Sample

Descriptive					
First Year Teacher Average Annual Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	35	\$ 31,230.14	10980.374	\$ 3,875.00	\$ 48,052.00
2 = Upper Middle Wealth	36	\$ 38,300.97	6168.100	\$ 21,533.00	\$ 47,133.00
3 = Lower Middle Wealth	35	\$ 40,800.09	5031.998	\$ 28,214.00	\$ 48,803.00
4 = High Poverty	35	\$ 40,519.60	4094.563	\$ 32,333.00	\$ 50,986.00
Total	141	\$ 37,716.87	7997.551	\$ 3,875.00	\$ 50,986.00

Poverty Percentage (0.00 thru 53.13=1) (53.131 thru 71.62=2) (71.621 thru 85.15=3) (85.151 thru 100.0=4).

Descriptive					
Teachers with More Than One Year Service Average Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = High Wealth	43	\$ 40,934.30	9803.096	\$ 12,568.00	\$ 59,006.00
2 = Upper Middle Wealth	43	\$ 44,742.56	9183.154	\$ 10,159.00	\$ 61,535.00
3 = Lower Middle Wealth	43	\$ 48,271.51	8475.158	\$ 30,904.00	\$ 64,338.00
4 = High Poverty	43	\$ 46,936.84	10887.505	\$ 5,440.00	\$ 60,178.00
Total	172	\$ 45,221.30	9941.412	\$ 5,440.00	\$ 64,338.00

Poverty Percentage (0.00 thru 52.21=1) (52.211 thru 71.805=2) (71.8051 thru 84.4175=3) (84.41751 thru 100.0=4).

Effect size results were placed into Table 48 for the charter school sample. Most the means were found to range from medium to very large in their differences. The high wealth group was more often found the have greater meaningful differences (medium to very large) when compared to the other wealth groups.

Table 48

Teacher Salary by School Minority Groups

Effect Size, Charter School Sample

First Year Teacher Average Annual Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ (7,070.83)	8540.35	-0.83	Large
1 minus 3	\$ (9,569.94)	8006.19	-1.20	Very Large
1 minus 4	\$ (9,289.46)	7537.47	-1.23	Very Large
2 minus 3	\$ (2,499.11)	5608.05	-0.45	Medium
2 minus 4	\$ (2,218.63)	5145.93	-0.43	Medium
3 minus 4	\$ 280.49	4563.28	0.06	Negligible

Teachers with More Than One Year Service Average Salary

Effect Size Calculation				
Wealth/Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ (3,808.26)	9493.12	-0.40	Medium
1 minus 3	\$ (7,337.21)	9139.13	-0.80	Large
1 minus 4	\$ (6,002.53)	10345.30	-0.58	Medium
2 minus 3	\$ (3,528.95)	8829.16	-0.40	Medium
2 minus 4	\$ (2,194.28)	10035.33	-0.22	Small
3 minus 4	\$ 1,334.67	9681.33	0.14	Small

Findings for Percentage of HQT (Highly Qualified Teacher) Sections

School data from 2013-2014 were used to examine the percentage of HQT sections by school minority groups. The percentage of sections in the school with HQT were calculated and placed into Table 49 for the school districts minus Philadelphia SD sample. The percentages for this sample were found to be high and similar across the minority quartile groups. The mean was 99.3 percent, and the minority group means varied little from the total mean.

Table 49

Percentage of HQT Sections by School Minority Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive School Percentage of Sections Taught by HQT					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	642	99.320	3.590	31.20	100.00
2 = Lower Middle	638	99.511	2.188	75.60	100.00
3 = Upper Middle	642	99.720	1.166	84.80	100.00
4 = Higher Minority	641	98.705	4.568	35.70	100.00
Total	2563	99.314	3.180	31.20	100.00

Minority Enrollment Percentages (0.00 thru 5.400=1) (5.401 thru 11.800=2) (11.801 thru 26.500=3) (26.501 thru 100.0=4)

Table 50

Percentage of HQT by School Minority Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.19	2.89	-0.07	Negligible
1 minus 3	-0.40	2.38	-0.17	Small
1 minus 4	0.62	4.08	0.15	Small
2 minus 3	-0.21	1.68	-0.13	Small
2 minus 4	0.81	3.38	0.24	Small
3 minus 4	1.02	2.87	0.35	Small

Effect size calculations were placed into Table 50 for the school districts minus Philadelphia SD sample. The differences between the means were found to be low. The meaningful differences ranged from negligible to small. Most students were taught by a HQT teacher.

The next sample considered was all of the school districts. The overall mean for this sample was 98.7 percent HQT and lower than the mean of 99.3 for the school districts minus Philadelphia SD sample. The means for the minority groups varied more for this sample than the all school districts minus Philadelphia SD sample. The group most different was the higher minority group with 96.2 percent HQT. Data were placed into Table 51 for the sample.

Table 51

Percentage of HQT Sections by School Minority Groups
Descriptive Statistics, All School Districts Sample

Descriptive School Percentage of Sections Taught by HQT					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	691	99.328	3.518	31.20	100.00
2 = Lower Middle	698	99.570	2.011	75.60	100.00
3 = Upper Middle	691	99.680	1.376	84.80	100.00
4 = Higher Minority	694	96.286	8.039	34.00	100.00
Total	2774	98.716	4.765	31.20	100.00

Minority Enrollment Percentages (0.00 thru 5.700=1) (5.701 thru 13.500=2) (13.501 thru 34.350=3) (34.351 thru 100.0=4).

Table 52

Percentage of HQT by School Minority Groups
Effect Size, All School Districts Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.24	2.76	-0.09	Negligible
1 minus 3	-0.35	2.45	-0.14	Small
1 minus 4	3.04	5.78	0.53	Medium
2 minus 3	-0.11	1.70	-0.06	Negligible
2 minus 4	3.28	5.02	0.65	Medium
3 minus 4	3.39	4.72	0.72	Large

The effect size calculations were provided in Table 52 for the all school districts sample. The mean HQT percentage for the higher minority group had more meaningful differences from the other minority groups. They ranged from medium to large.

The percentage of HQT sections was next examined using the charter school sample. The total HQT mean percentage of 93.1 was considerably lower than the mean of 98.7 percent for the school district samples. In addition, the minority group means varied with a range of 89.0 for the higher minority group to 96.3 for the lower minority and lower middle minority groups. Charter school students were taught at a lower rate of HQT than the school district students.

Table 53
Percentage of HQT Sections by School Minority Groups
Descriptive Statistics, Charter Schools Sample

Descriptive School Percentage of Sections Taught by HQT					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	37	96.354	6.790	73.90	100.00
2 = Lower Middle	38	96.355	6.348	71.90	100.00
3 = Upper Middle	35	90.746	10.255	57.00	100.00
4 = Higher Minority	37	89.095	13.907	48.30	100.00
Total	147	93.192	10.227	48.30	100.00

Minority Enrollment Percentages (0.00 thru 32.750=1) (32.751 thru 85.550=2) (85.551 thru 98.775=3) (98.776 thru 100.0=4).

Table 54
Percentage of HQT by School Minority Groups
Effect Size, Charter Schools Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.00	6.57	0.00	Negligible
1 minus 3	5.61	8.47	0.66	Medium
1 minus 4	7.26	10.35	0.70	Large
2 minus 3	5.61	8.22	0.68	Medium
2 minus 4	7.26	10.08	0.72	Large
3 minus 4	1.65	12.13	0.14	Small

Effect size data were placed into Table 54 for the charter school sample. The differences between the minority group means ranged from negligible to large. The lower minority and lower middle minority groups were found to differ most from the upper middle and higher minority groups. Charter schools appear to be different from the school districts with respect to the HQT percentage of school sections.

School data from 2013-2014 were used to examine the percentage of HQT sections by school poverty quartiles. The percentage of sections in the school with HQT was calculated and placed into Table 55 for the school districts minus Philadelphia SD sample. The percentages for this sample were found to be high and similar across the poverty level groups. The poverty groups varied little from the mean of 99.3 for the sample. Most students were taught by HQT.

Table 55

Percentage of HQT Sections by School Wealth/Poverty Groups
Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive School Percentage of Sections Taught by HQT					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	621	99.725	1.291	84.40	100.00
2 = Upper Middle Wealth	650	99.639	1.649	76.60	100.00
3 = Lower Middle Wealth	647	99.182	3.743	31.20	100.00
4 = Higher Poverty	645	98.722	4.603	35.70	100.00
Total	2563	99.314	3.180	31.20	100.00

Poverty Percentage (0.00 thru 23.130=1) (23.131 thru 37.970=2) (37.971 thru 52.620=3) (52.621 thru 100.0=4).

The effect size calculations indicated the poverty groups meaningful differences ranged from negligible to small. The mean poverty group percentages of HQT were similar. Students were most often in sections with HQT providing the instruction for the school districts minus Philadelphia SD sample.

Table 56

Percentage of HQT by School Wealth/Poverty Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.09	1.47	0.06	Negligible
1 minus 3	0.54	2.54	0.21	Small
1 minus 4	1.00	2.98	0.34	Small
2 minus 3	0.46	2.69	0.17	Small
2 minus 4	0.92	3.12	0.29	Small
3 minus 4	0.46	4.17	0.11	Small

The next sample considered was all school districts when examining the percentage of HQT sections by poverty groups. The mean for the all school districts was 98.7 percent with HQT. The higher wealth, upper middle wealth, and lower middle wealth group means were similar while the high poverty mean was different from the other three means. The addition of Philadelphia SD to the sample appeared to have made some difference in the mean percentage for the high poverty group. The data were placed into Table 57 for this sample.

Table 57

Percentage of HQT Sections by School Wealth/Poverty Groups

Descriptive Statistics, All School Districts Sample

Descriptive School Percentage of Sections Taught by HQT					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	675	99.719	1.287	84.40	100.00
2 = Upper Middle Wealth	702	99.563	1.919	76.60	100.00
3 = Lower Middle Wealth	700	99.180	3.711	31.20	100.00
4 = Higher Poverty	699	96.412	8.009	34.00	100.00
Total	2776	98.711	4.770	31.20	100.00

Poverty Percentage (0.00 thru 24.230=1) (24.231 thru 40.110=2) (40.111 thru 58.00=3) (58.001 thru 100.0=4).

The effect size calculations in Table 58 provided indications of the meaningful differences between the means. The high poverty group was found to have either medium or large differences with the other poverty groups. As noted the addition of Philadelphia SD to the sample changed the results.

Table 58
Percentage of HQT by School Wealth/Poverty Groups
Effect Size, All School Districts Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.16	1.61	0.10	Negligible
1 minus 3	0.54	2.52	0.21	Small
1 minus 4	3.31	4.71	0.70	Large
2 minus 3	0.38	2.81	0.14	Small
2 minus 4	3.15	4.96	0.64	Medium
3 minus 4	2.77	5.86	0.47	Medium

The charter school sample was examined with respect to the percentages of HQT sections for poverty groups. Charter schools HQT mean percentages were different from the school district HQT mean percentages. The poverty quartile groups had HQT percentages with considerable variation. The higher wealth group had the highest percentage (95.3) of HQT sections, while the lower middle wealth group had the lowest (88.6) HQT percentages.

Table 60 provides the effect size data for the charter school sample. The effect size comparison of the poverty quartile means had four values that were negligible or small. The lower middle wealth group had two differences at the medium level. The lower middle versus the higher wealth and versus the upper middle poverty groups were at the medium level.

Charter schools had a lower percentage of students in HQT sections when compared to the school districts. Charter schools were different from the school districts in the mean quartile group percentages.

Table 59

Percentage of HQT Sections by School Wealth/Poverty Groups

Descriptive Statistics, Charter School Sample

Descriptive School Percentage of Sections Taught by HQT					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	40	95.335	9.591	48.30	100.00
2 = Upper Middle Wealth	43	94.744	7.523	73.90	100.00
3 = Lower Middle Wealth	42	88.690	12.983	50.00	100.00
4 = Higher Poverty	40	92.750	10.048	62.80	100.00
Total	165	92.863	10.459	48.30	100.00

Poverty Percentage (0.00 thru 51.750=1) (51.751 thru 71.620=2) (71.621 thru 84.375=3) (84.376 thru 100.0=4).

Table 60

Percentage of HQT by School Wealth/Poverty Groups

Effect Size, Charter School Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.59	8.52	0.07	Negligible
1 minus 3	6.64	11.33	0.59	Medium
1 minus 4	2.59	9.82	0.26	Small
2 minus 3	6.05	10.22	0.59	Medium
2 minus 4	1.99	8.74	0.23	Small
3 minus 4	-4.06	11.55	-0.35	Small

Findings for Teacher Education Level

Teacher education level data were available from the PIMS data for 2013-2014 school year. The education level was coded with bachelor's degree as four (4); master's degree as five (5); and doctoral degree as six (6). An average education level was calculated for each school. Pennsylvania teachers should, at a minimum, have a bachelor's degree. Hence, four to six was the possible range for the school education level. Again, the distribution of minorities was not a normal distribution across Pennsylvania schools.

Table 61 provides the descriptive statistics for the school districts minus Philadelphia SD sample. The mean education level for this sample was 4.57 indicating the education level was near to the midpoint between a bachelor's degree and a master's degree. The minority group means varied from a lower education level of 4.50 for the lower minority percentage group to a high of 4.64 for the upper middle minority percentage group.

Table 61

Teacher Education by School Minority Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive					
Average Education					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	803	4.50	0.161	4.06	5.00
2 = Lower Middle	514	4.59	0.175	4.16	4.98
3 = Upper Middle	623	4.64	0.178	4.14	5.00
4 = Higher Minority	623	4.57	0.203	4.06	5.00
Total	2563	4.57	0.187	4.06	5.00

Minority Enrollment Percentage (0.00 thru 6.00=Lower) (6.01 thru 12.00=Lower Middle) (12.01 thru 27.00=Upper Middle) (27.01 thru 100.0=Higher).

The effect size calculations were provided in Table 62 for the school districts minus Philadelphia SD sample. The lower minority percentage group was found to be different from the other three minority percentage groups at the medium to large level. The lower minority percentage

group had lower education levels. The other minority percentage groups had small differences among their mean education levels.

Table 62

Teacher Education by School Minority Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.10	0.17	-0.59	Medium
1 minus 3	-0.14	0.17	-0.86	Large
1 minus 4	-0.08	0.18	-0.43	Medium
2 minus 3	-0.05	0.18	-0.26	Small
2 minus 4	0.02	0.19	0.11	Small
3 minus 4	0.07	0.19	0.36	Small

The all school districts sample descriptive statistics were included in Table 63 by minority quartile groups. A change in the mean value for the higher minority percentage group was observed. The school districts minus Philadelphia SD sample higher minority mean was 4.57, while the all school districts sample higher minority mean was 4.39 for the average education level. With the addition of Philadelphia SD to the sample, the education level for the higher minority group was decreased. The other group education level mean values were not changed or changed little.

Effect size results were included in Table 64 for the all school districts sample. The higher minority group had the lowest average education level and varied from the other three groups by medium or large meaningful difference values. Only the lower middle and upper middle minority groups had a small difference value. The higher minority percentage group varied from the upper middle and lower middle groups by a medium or large effect size.

The trend was for the lower minority and higher minority groups to have the lower education levels. It is difficult to determine if collective bargaining in Pennsylvania could have influenced the results on education level. It is a common practice to include education level as part of salary schedules for school districts.

Table 63

Teacher Education by School Minority Groups
Descriptive Statistics, All School Districts Sample

Descriptive					
Average Education					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	700	4.49	0.161	4.06	5.00
2 = Lower Middle	693	4.59	0.176	4.15	4.98
3 = Upper Middle	691	4.63	0.185	4.00	5.00
4 = Higher Minority	692	4.39	0.310	3.95	5.00
Total	2776	4.53	0.235	3.95	5.00

Minority Enrollment Percentage (0.00 thru 5.80001=Lower) (5.80002 thru 13.60001=Lower Middle) (13.60002 thru 34.60001=Upper Middle) (34.60002 thru 100.0=Higher)

Table 64

Teacher Education by School Minority Groups
Effect Size, All School Districts Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.10	0.17	-0.60	Medium
1 minus 3	-0.14	0.17	-0.81	Large
1 minus 4	0.10	0.24	0.42	Medium
2 minus 3	-0.04	0.18	-0.22	Small
2 minus 4	0.20	0.24	0.82	Large
3 minus 4	0.24	0.25	0.97	Large

The charter school sample descriptive statistics were placed into Table 65 for the school mean teacher education levels. Charter schools were found to have lower education levels when compared to the school district school education levels. The minority level percentage groups varied little on the average education level.

Table 65

Teacher Education by School Minority Groups

Descriptive Statistics, Charter School Sample

Descriptive					
Average Education					
Minority Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Lower Minority	42	4.40	0.225	3.97	4.84
2 = Lower Middle	43	4.39	0.185	3.94	4.79
3 = Upper Middle	46	4.35	0.168	4.00	4.72
4 = Higher Minority	39	4.40	0.136	4.10	4.75
Total	170	4.38	0.181	3.94	4.84

Minority Enrollment Percentage (0.00 thru 35.875=Lower) (35.876 thru 94.250=Lower Middle) (94.251 thru 99.60=Upper Middle) (99.601 thru 100.00=Higher).

For the charter school sample, the effect size calculations found small or negligible differences between the minority groups on school average teacher education level. Possibly, the teachers in charter schools are not a frequently paid on a salary schedule rewarding education level.

Table 66

Teacher Education by School Minority Groups

Effect Size, Charter School Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.01	0.20	0.06	Negligible
1 minus 3	0.06	0.19	0.28	Small
1 minus 4	0.00	0.18	-0.01	negligible
2 minus 3	0.04	0.18	0.25	Small
2 minus 4	-0.01	0.16	-0.09	Negligible
3 minus 4	-0.06	0.15	-0.38	Small

Teacher education level data were available from the PIMS data for 2013-2014 school year. The education level was coded with bachelor's degree as four (4); master's degree as five (5); and doctoral degree as six (6). An average education level was calculated for each school. Pennsylvania teachers should at a minimum have a bachelor's degree. Hence, four to six was the possible range for the school education level

Table 67 provided the descriptive statistics for the school districts minus Philadelphia SD sample. The mean education level for this sample was 4.57 indicating the education level was near to the midpoint between a bachelor's degree and a master's degree. The poverty quartile means varied from the lowest education level of 4.50 for the higher poverty group to a high of 4.68 for the higher wealth group. The average school education level increased as the school wealth level increased.

Table 67
Teacher Education by School Wealth/Poverty Groups
Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Poverty Level Groups	N	Descriptive			
		Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	643	4.68	.166	4.21	5.00
2 = Upper Middle Wealth	644	4.58	.171	4.06	5.00
3 = Lower Middle Wealth	643	4.53	.172	4.11	5.00
4 = Higher Poverty	643	4.50	.189	4.06	5.00
Total	2573	4.57	.187	4.06	5.00

Percentage of Enrollment from Low Income Families (0.00 thru .236060=1) (.236061 thru .382460=2) (.382461 thru .528820=3) (.528821 thru 1.000=4).

The effect size calculations were presented in Table 68 for the school districts minus Philadelphia SD sample. The higher wealth group varied from the other three groups at the medium, large and very large levels. The other meaningful difference was between the higher poverty group and the upper middle wealth group at the medium level. Overall, higher teacher education levels were found in higher wealth groups.

Table 68

Teacher Education by School Wealth/Poverty Groups
 Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.10	0.17	0.60	Medium
1 minus 3	0.15	0.17	0.90	Large
1 minus 4	0.18	0.18	1.00	Very Large
2 minus 3	0.05	0.17	0.30	Small
2 minus 4	0.08	0.18	0.43	Medium
3 minus 4	0.03	0.18	0.15	Small

The all school districts sample descriptive statistics were found in Table 69 for the teacher education levels and school wealth. With the addition of Philadelphia SD to the sample, the higher poverty group educational level decreased to 4.36 from 4.50 for the school districts minus Philadelphia SD sample. The count of poverty schools increased with the addition of Philadelphia SD to the sample. The higher wealth group had the highest mean education level.

Table 69

Teacher Education by School Wealth/Poverty Groups
 Descriptive Statistics, All School Districts Sample

Poverty Level Groups	N	Descriptive			
		Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	696	4.67	.165	4.21	5.00
2 = Upper Middle Wealth	697	4.56	.180	4.00	5.00
3 = Lower Middle Wealth	697	4.51	.189	4.00	5.00
4 = Higher Poverty	696	4.36	.273	3.95	5.00
Total	2786	4.53	.235	3.95	5.00

Percentage of Enrollment from Low Income Families (0.00 thru .2496025=1) (.2496026 thru .402630=2) (.402631 thru .583680=3) (.583681 thru 1.00=4).

The findings for the effect size calculations were similar for the all school districts and the school districts minus Philadelphia SD samples. The higher wealth group had more meaningful differences when compared to the other three wealth groups. In addition, the upper middle wealth group and the higher poverty group had a large difference.

Table 70

Teacher Education by School Wealth/Poverty Groups

Effect Size, All School Districts Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	0.11	0.17	0.62	Medium
1 minus 3	0.16	0.18	0.90	Large
1 minus 4	0.31	0.22	1.44	Very Large
2 minus 3	0.05	0.18	0.28	Small
2 minus 4	0.21	0.23	0.92	Large
3 minus 4	0.16	0.23	0.67	Medium

Charter school sample descriptive data were placed into Table 71 for the teacher education level and school wealth quartiles. In general, the school education levels were lower for charter schools than for school districts. The wealth group school education level means varied little.

Table 71

Teacher Education by School Wealth/Poverty Groups

Descriptive Statistics, Charter School Sample

Poverty Level Groups	N	Descriptive			
		Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	43	4.38	.206	4.00	4.84
2 = Upper Middle Wealth	43	4.41	.200	3.94	4.79
3 = Lower Middle Wealth	43	4.37	.128	4.08	4.67
4 = Higher Poverty	43	4.38	.181	4.00	4.75
Total	172	4.38	.181	3.94	4.84

Percentage of Enrollment from Low Income Families (0.0 thru .52207=1) (.522071 thru .7180=2) (.7181 thru .844150=3) (.844151 thru 1.0=4).

The effect size calculations were presented in Table 72 for the charter school sample. The mean education levels varied little across the poverty groups. All of the differences were found to be either negligible or small. For charter schools, the education levels varied little for poverty groups.

Table 72

Teacher Education by School Wealth/Poverty Groups

Effect Size, Charter Schools Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	-0.03	0.20	-0.13	Small
1 minus 3	0.02	0.17	0.10	Negligible
1 minus 4	0.01	0.19	0.03	Negligible
2 minus 3	0.04	0.16	0.25	Small
2 minus 4	0.03	0.19	0.16	Small
3 minus 4	-0.01	0.15	-0.07	Negligible

Findings for School Mean Principal Salary Levels

Principal salaries were examined using descriptive statistics and effect size. The salary data were from 2013-2014 school year. A few zero values were identified in the data. The zero values were treated as missing data. A trend of rural schools having a lower percentage of minorities was observed. Only principals with more than one year of service were included in the data. If a school reported having more than one principal the average salary was used.

For the school districts minus Philadelphia SD sample, the minority quartile group principal salary means did have considerable variation. The upper middle minority group had the highest average salary at \$108,815 and the lowest minority group at \$89,669 had the lowest average salary. Possibly, the lower minority percentages were in rural schools with lower salaries as noted in Table 73.

Table 73

Principal Salary by School Minority Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

Descriptive					
Principals with More Than One Year Service Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	606	\$ 105,199.45	17000.19	\$ 68,010.00	\$ 162,035.00
2 = Upper Middle Minority	604	\$ 108,815.82	20492.26	\$ 14,500.00	\$ 161,870.00
3 = Lower Middle Minority	612	\$ 96,551.32	16775.85	\$ 35,485.00	\$ 160,819.00
4 = Lowest Minority	594	\$ 89,669.61	13104.13	\$ 48,476.00	\$ 137,475.00
Total	2416	\$ 100,094.69	18603.66	\$ 14,500.00	\$ 162,035.00

Minority Enrollment Percentage (100.0 thru 25.80=1) (25.79 thru 11.70=2) (11.69 thru 5.40=3) (5.39 thru 0.00=4).

Table 74 provided the effect size data for the school principal salaries by percentage of minority groups. Only the highest minority and upper middle minority groups had a small meaningful difference. The other effect size differences were meaningful at the medium or very large levels. In general, the lower minority percentage schools had lower principal salaries and the higher minority percentage schools had higher principal salaries.

Table 74

Principal Salary by School Minority Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Minority Level	Mean	Std.	Effect	Practically
Groups	Difference	Deviation	Size	Meaningful Difference
1 minus 2	\$ (3,616.38)	18,743.34	-0.19	Small
1 minus 3	\$ 8,648.13	16,887.46	0.51	Medium
1 minus 4	\$ 15,529.84	15,071.64	1.03	Very Large
2 minus 3	\$ 12,264.51	18,621.83	0.66	Medium
2 minus 4	\$ 19,146.22	16,829.03	1.14	Very Large
3 minus 4	\$ 6,881.71	14,967.39	0.46	Medium

Table 75

Principal Salary by School Minority Groups

Descriptive Statistics, All School Districts Sample

Descriptive					
Principals with More Than One Year Service Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	656	\$ 113,667.09	19849.00	\$ 66,011.00	\$ 162,035.00
2 = Upper Middle Minority	655	\$ 108,406.25	20550.76	\$ 14,500.00	\$ 161,870.00
3 = Lower Middle Minority	670	\$ 98,754.55	17696.14	\$ 35,485.00	\$ 160,819.00
4 = Lowest Minority	641	\$ 89,833.66	13034.53	\$ 48,476.00	\$ 137,475.00
Total	2622	\$ 102,715.72	20198.09	\$ 14,500.00	\$ 162,035.00

Minority Enrollment Percentage (100.0 thru 33.80=1) (33.79 thru 13.35=2) (13.349 thru 5.70=3) (5.69 thru 0.00=4)

Results for the all school districts sample were placed in Table 75. Principal salaries and school groups based on minority percentages were considered. The highest mean school principal salary was found in the highest minority group. The lowest mean school principal salary was found in the lowest minority group. It appeared the inclusion of Philadelphia SD in the sample,

increased the school mean salary for the highest minority group. It was noted the overall mean for the sample increased with Philadelphia SD included in the sample.

The effect size differences were meaningful at the medium to very large level for five of the comparisons, only the highest minority to upper middle minority level was small. In Table 76, the range of effect size values were provided. Principals in high minority schools were paid at higher levels than principals in low minority schools. Some the differences could be the result of rural principal salaries versus urban principal salaries.

Table 76
Principal Salary by School Minority Groups
Effect Size, All School Districts Sample

Minority Level Groups	Effect Size Calculation			Practically Meaningful Difference
	Mean Difference	Std. Deviation	Effect Size	
1 minus 2	\$ 5,260.84	20,199.61	0.26	Small
1 minus 3	\$ 14,912.53	18,761.20	0.79	Large
1 minus 4	\$ 23,833.43	16,481.17	1.45	Very Large
2 minus 3	\$ 9,651.70	19,107.29	0.51	Medium
2 minus 4	\$ 18,572.59	16,833.24	1.10	Very Large
3 minus 4	\$ 8,920.90	15,416.89	0.58	Medium

The sample of charter schools was used to review principal salaries. It was observed the charter school principal salaries were lower than the school district principal salaries. Found in Table 77, a trend of the highest minority school group having the higher mean principal salary was observed, as was the case for school districts. The other three minority groups had principal mean salaries that were somewhat similar to each other. The lowest mean principal salaries were found in the lowest minority group.

Effect size results indicated the greater differences were between the highest minority quartile group and the other three quartiles at the medium level. The other effect size comparisons were found to be at the negligible or small level. Charter schools had different from school districts principal salaries and lower principal salaries. Charter school teacher salaries were found to be lower than school district teacher salaries. A similar finding was noted for principal salaries and teacher salaries. Effect size calculations were noted in Table 78.

Table 77

Principal Salary by School Minority Groups
Descriptive Statistics, Charter Schools Sample

Descriptive Principals with More Than One Year Service Average Annual Salary					
Minority Percentage Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Highest Minority	28	\$ 104,027.25	21373.05	\$ 63,345.00	\$ 145,000.00
2 = Upper Middle Minority	26	\$ 89,919.52	24542.84	\$ 15,000.00	\$ 126,500.00
3 = Lower Middle Minority	27	\$ 94,891.22	19029.91	\$ 63,915.67	\$ 135,820.00
4 = Lowest Minority	26	\$ 87,786.11	30399.38	\$ 5,000.00	\$ 190,730.67
Total	107	\$ 94,347.40	24604.77	\$ 5,000.00	\$ 190,730.67

Minority Enrollment Percentage (100.0 thru 99.20=1) (99.199 thru 85.80=2) (85.79 thru 36.80=3) (36.79 thru 0.00=4)

Table 78

Principal Salary by School Minority Groups
Effect Size, Charter Schools Sample

Effect Size Calculation				
Minority Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 14,107.73	22,899.25	0.62	Medium
1 minus 3	\$ 9,136.03	20,222.78	0.45	Medium
1 minus 4	\$ 16,241.14	25,719.06	0.63	Medium
2 minus 3	\$ (4,971.70)	21,734.37	-0.23	Small
2 minus 4	\$ 2,133.41	27,471.11	0.08	Negligible
3 minus 4	\$ 7,105.11	24,607.39	0.29	Small

Principal salaries were examined using descriptive statistics and effect size. The salary data were from 2013-2014 school year. A few zero values were identified in the data. The zero values were treated as missing data. Only principals with more than one year of service were included in the data. If a school reported having more than one principal the average salary was used.

For the school districts minus Philadelphia SD sample, the mean poverty group principal salaries did have considerable variation. The higher wealth group had the highest average salary at \$114,565 and the lower middle wealth group at \$92,055 had the lowest average salary. The descriptive statistics were placed in Table 79.

Table 79

Principal Salary by School Wealth/Poverty Groups

Descriptive Statistics, School Districts Minus Philadelphia SD Sample

		Descriptive			
		Average Principal(s) Annual Salary			
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	598	\$ 114,565.37	19,600.58	\$ 69,278.00	\$ 182,476.00
2 = Upper Middle Wealth	620	\$ 98,745.20	17,043.96	\$ 14,500.00	\$ 161,094.00
3 = Lower Middle Wealth	610	\$ 92,055.10	14,099.54	\$ 47,403.00	\$ 140,108.00
4 = Higher Poverty	594	\$ 95,312.28	15,056.52	\$ 48,800.00	\$ 144,587.00
Total	2422	\$ 100,124.37	18,671.66	\$ 14,500.00	\$ 182,476.00

Poverty Percent (0.0 thru 23.170=1) (23.171 thru 37.990=2) (37.991 thru 52.650=3) (52.651 thru 100.0=4)

The effect size results for the school districts minus Philadelphia SD indicated the higher wealth groups had meaningful differences in principal salaries when compared to the other three wealth groups. The higher poverty group of schools had principal salaries with small effect size differences versus the lower middle and upper middle wealth groups. Table 80 presents the effect size information.

Some of the higher poverty schools are rural schools, since Philadelphia SD was not included in this sample. The rural schools in Pennsylvania tend to have lower teacher and principal salaries. Rural Pennsylvania schools have lower percentages of minority students than found in urban schools.

Table 80

Principal Salary by School Wealth/Poverty Groups

Effect Size, School Districts Minus Philadelphia SD Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 15,820.17	18,299.18	0.86	Large
1 minus 3	\$ 22,510.27	16,822.74	1.34	Very Large
1 minus 4	\$ 19,253.09	17,336.17	1.11	Very Large
2 minus 3	\$ 6,690.10	15,583.72	0.43	Medium
2 minus 4	\$ 3,432.92	16,071.52	0.21	Small
3 minus 4	\$ (3,257.18)	14,571.67	-0.22	Small

Principal salaries were examined using the sample with all school districts. Table 81 provides the principal salaries by poverty groups. With the addition of Philadelphia SD, the higher wealth group again had the highest mean principal salary (it changed little from the school districts minus Philadelphia SD sample), but the next highest wealth group was now the higher poverty group. The mean principal salary for the school districts minus Philadelphia SD was \$100,124 while the all school districts sample mean was \$102,757. This illustrated the impact of including Philadelphia SD.

Table 81

Principal Salary by School Wealth/Poverty Groups

Descriptive Statistics, All School Districts Sample

Wealth/Poverty Level Groups	N	Descriptive			
		Average Principal(s) Annual Salary			
		Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	649	\$ 113,653.43	19732.022	\$ 35,485.00	\$ 182,476.00
2 = Upper Middle Wealth	669	\$ 98,352.59	17061.877	\$ 14,500.00	\$ 161,094.00
3 = Lower Middle Wealth	661	\$ 91,864.05	14808.090	\$ 47,403.00	\$ 144,124.00
4 = Higher Poverty	651	\$ 107,484.22	21633.808	\$ 57,000.00	\$ 149,890.00
Total	2630	\$ 102,757.92	20256.191	\$ 14,500.00	\$ 182,476.00

Poverty Percent (0.00 thru 24.26=1) (24.261 thru 40.140=2) (40.141 thru 58.05=3) (58.051 thru 100.00=4).

The effect size differences for the all school districts sample indicated most of the quartile group principal salary means had meaningful differences at the medium to large value. The higher wealth group differed from the upper middle and lower middle wealth groups at the large level. In addition, the higher poverty group differed from the middle and lower wealth groups at the medium or large level.

Table 82
Principal Salary by School Wealth/Poverty Groups
Effect Size, All School Districts Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ 15,300.85	18,376.69	0.83	Large
1 minus 3	\$ 21,789.38	17,247.50	1.26	Large
1 minus 4	\$ 6,169.21	20,684.38	0.30	Small
2 minus 3	\$ 6,488.53	15,941.76	0.41	Medium
2 minus 4	\$ (9,131.64)	19,316.67	-0.47	Medium
3 minus 4	\$ (15,620.17)	18,194.94	-0.86	Large

The charter school sample was considered, and descriptive statistics were placed into Table 83. The mean principal salary for the sample was \$96,029, while the school district sample mean principal salary was \$102,757. Charter schools were found to have lower principal salaries than the school districts. The poverty group means for the charter school sample varied considerably. The lowest mean principal salary, of \$85,914, was in the higher wealth group. The highest mean principal salary was found in the lower middle wealth group at \$102,794.

Table 84 provides the effect size results for the charter school sample. The only meaningful differences between wealth groups were found for the higher wealth group versus the lower middle and versus the higher poverty groups. The remaining effect size differences were at the negligible or small levels. Charter school poverty groups differed less than the school district groups.

Table 83

Principal Salary by School Wealth/Poverty Groups

Descriptive Statistics, Charter School Sample

Descriptive					
Average Principal(s) Annual Salary					
Wealth/Poverty Level Groups	N	Mean	Std. Deviation	Minimum	Maximum
1 = Higher Wealth	25	\$ 85,914.44	22317.808	\$ 5,000.00	123806
2 = Upper Middle Wealth	32	\$ 95,610.03	30221.800	\$ 15,000.00	190731
3 = Lower Middle Wealth	30	\$ 102,794.47	21267.828	\$ 50,000.00	137334
4 = Higher Poverty	30	\$ 98,141.70	21219.044	\$ 52,500.00	136435
Total	117	\$ 96,029.63	24655.009	\$ 5,000.00	190731

Poverty Percent (0.00 thru 51.75=1) (51.751 thru 71.62=2) (71.621 thru 84.375=3) (84.3751 thru 100.0=4)

Table 84

Principal Salary by School Wealth/Poverty Groups

Effect Size, Charter School Sample

Effect Size Calculation				
Poverty Level Groups	Mean Difference	Std. Deviation	Effect Size	Practically Meaningful Difference
1 minus 2	\$ (9,695.59)	26,755.14	-0.36	Small
1 minus 3	\$ (16,880.03)	21,745.09	-0.78	Large
1 minus 4	\$ (12,227.26)	21,718.48	-0.56	Medium
2 minus 3	\$ (7,184.44)	25,889.23	-0.28	Small
2 minus 4	\$ (2,531.67)	25,865.63	-0.10	Negligible
3 minus 4	\$ 4,652.77	21,243.44	0.22	Small

Conclusions:

This report examined several variables as part of investigating the equitable access to excellent educators in Pennsylvania. As part of the investigation, the percentage of poverty students enrolled in schools (wealth) and the percentage of minorities in schools were used as independent variables. The following variables were used as dependent variables: (1) the school percentage of sections taught by teachers with emergency permits; (2) the percentage of teacher turnover for a school year in schools; (3) the percentage of teachers with more than three years of experience in any LEA; (4) the percentage of teachers with more than three years of experience in the present LEA; (5) the salary for first year teachers in the school; (6) the mean salary for teachers with more than one year of service; (7) the percentage of sections taught by Highly Qualified Teachers (HQT) in schools; (8) the mean teacher education level in schools; and (9) the mean principal salary for principals with more than one year of principal employment. In addition, three samples were selected to examine the variables in greater detail. The three samples were the following; (1) school districts minus Philadelphia SD; (2) all school districts; and (3) charter schools.

The findings were presented in Table 85 for all variables and samples. Some of the variables such as the percentage of sections taught by teachers with emergency permits vary little for the differences between minority groups and between wealth groups.

Table 85

Summary of the Effect Size Differences Between

Minority and Wealth Groups

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
1. The school districts minus Philadelphia SD sample - minority groups	6	0	0
2. The all school districts sample - minority groups	6	0	0
3. The charter school sample - minority groups	6	0	0
4. The school districts minus Philadelphia SD sample - wealth groups	6	0	0
5. The all school districts sample - wealth groups	6	0	0
6. The charter school sample - wealth groups	6	0	0

The percentages of teachers with more than three years of experience in the LEA and in the present LEA findings were similar for the school districts minus Philadelphia SD and the all school districts sample. They had small or negligible differences between the minority groups and the wealth groups. The charter school sample did have greater differences between the minority and wealth groups. Charter schools with a higher percentage of minority students had less experienced teachers. Also, charter school teachers had lower percentages of teachers with experience than did the school districts.

Table 85 Continued

Samples and Variables	Effect Size Summary Count			
	Percentage of Teachers with More Than Three Years of Experience in Any LEA	Small or Negligible	Medium	Large to Very Large
1. The school districts minus Philadelphia SD sample – minority groups		6	0	0
2. The all school districts sample – minority groups		6	0	0
3. The charter school sample – minority groups		2	2	2
4. The school districts minus Philadelphia SD sample – wealth groups		6	0	0
5. The all school districts sample – wealth groups		6	0	0
6. The charter school sample – wealth groups		3	2	1

Table 85 Continued

Samples and Variables	Effect Size Summary Count			
	Percentage of Teachers with More Than Three Years of Experience the Present LEA	Small or Negligible	Medium	Large to Very Large
1. The school districts minus Philadelphia SD sample – minority groups		6	0	0
2. The all school districts sample – minority groups		6	0	0
3. The charter school sample – minority groups		1	1	4
4. The school districts minus Philadelphia SD sample – wealth groups		6	0	0
5. The all school districts sample – wealth groups		6	0	0
6. The charter school sample – wealth groups		2	2	2

The teacher turnover percentages were found to have small differences and not meaningful differences for the school districts minus Philadelphia SD sample with the percentage of minority students and school wealth. The all school districts sample had one medium level difference for the minority group and one medium level difference for the wealth group. All of the other differences were at the small or negligible levels. Adding Philadelphia SD to the sample made a small difference in the findings. With Philadelphia SD in the sample, greater differences between highest minority and highest poverty groups and the other groups were observed. The higher minority group and higher poverty group had higher teacher turnover percentages.

In addition, the charter schools had higher percentages of teacher turnover than the school districts. Also, charter schools have higher percentages of turnover for schools within the highest percentage of minority students group and the upper middle minority group. The two groups for charter schools with high poverty and lower middle wealth had the higher percentages of teacher turnover.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
Teacher Turnover School Percentage			
1. The school districts minus Philadelphia SD sample - minority groups	6	0	0
2. The all school districts sample - minority groups	5	1	0
3. The charter school sample - minority groups	3	0	3
4. The school districts minus Philadelphia SD sample – wealth groups	6	0	0
5. The all school districts sample - wealth groups	5	1	0
6. The charter school sample - wealth groups	2	2	2

The school percentages of sections taught by HQT were found to have small differences for the minority groups and wealth groups in the school districts minus Philadelphia SD sample. While the all school districts sample had some small and negligible differences along with some medium to large differences for the minority and wealth groups. Philadelphia SD made a difference in the findings for the highest minority group and the highest poverty group. The highest poverty group and the highest minority group had lower percentages of sections taught by HQT. The HQT percentages for the two groups were at high percentages.

In addition, the charter schools had lower percentages of sections taught by HQT than school districts. Charter schools had lower percentages of HQT for the schools with the highest percentages of minorities and with the highest percentages of poverty.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
1. The school districts minus Philadelphia SD sample - minority groups	6	0	0
2. The all school districts sample - minority groups	3	2	1
3. The charter school sample - minority groups	2	2	2
4. The school districts minus Philadelphia SD sample – wealth groups	6	0	0
5. The all school districts sample - wealth groups	3	2	1
6. The charter school sample - wealth groups	4	2	0

The school districts minus Philadelphia SD sample had differences between the minority groups and the wealth groups that varied from small to very large for the mean teacher education level. The lower minority percentage group had the lower mean education level. Possibly, this is related to the teacher education level in rural schools. The highest wealth group had the highest mean education level. The other three wealth groups were rather similar in education levels.

For the all school districts sample, teacher education level was lower in the quartile with lower minority percentages and in the quartile with higher minority percentages. For wealth, the groups had the highest mean education level in the higher wealth group and the education levels decreased to the highest poverty group with the lowest mean education level.

Charter school mean teacher education level varied little for the minority groups. All differences were at the small or negligible level. Charter school mean teacher education level varied little for the wealth groups. All wealth differences were at the small or negligible levels.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
1. The school districts minus Philadelphia SD sample - minority groups	3	2	1
2. The all school districts sample - minority groups	1	2	3
3. The charter school sample - minority groups	6	0	0
4. The school districts minus Philadelphia SD sample – wealth groups	2	2	2
5. The all school districts sample - wealth groups	1	2	3
6. The charter school sample - wealth groups	6	0	0

The school districts minus Philadelphia SD sample data on first year teacher salaries revealed a rather interesting finding. The highest minority group had the highest mean first year teacher salaries, and the lowest minority group had the lowest mean teacher salaries. Only two of the differences six possible differences were found to be meaningful. The highest wealth group had the highest mean teacher salaries. The other three wealth groups had similar mean salaries.

The all school districts sample was found to have for first year teachers the highest mean teacher salaries in the highest minority percentage group. For minority groups, the differences ranged from small to medium. For the wealth groups, the highest wealth group had the highest mean salaries, but the highest poverty group had the next highest mean. Wealth groups were found to not have meaningful differences between the group salary means.

Charter schools mean teacher salaries were lower than the first year teacher salaries in the school districts. The highest minority group had the highest mean teacher salaries. The salary means decreased to the lowest mean for the lowest minority group. The highest poverty group had the highest first year teacher salary. The highest wealth group had the lowest mean teacher salary. Some the differences for the minority group means and the wealth group mean were at meaningful levels.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
First Year Teacher Salaries			
1. The school districts minus Philadelphia SD sample - minority groups	4	1	1
2. The all school districts sample - minority groups	3	2	1
3. The charter school sample - minority groups	0	3	3
4. The school districts minus Philadelphia SD sample – wealth groups	6	0	0
5. The all school districts sample - wealth groups	6	0	0
6. The charter school sample - wealth groups	1	2	3

Teacher salaries for teachers with more than one year of service were examined for the school districts minus Philadelphia SD sample. It was interesting to discover the upper middle minority group had the highest mean teacher salary with the highest minority group having the next to the highest experienced teacher mean salary. The means were meaningfully different for five of the six cases. The highest wealth group had the higher mean teacher salary. The differences between the wealth groups were meaningful for four of six cases.

For the all school districts sample, the teachers with more than one year of experience highest mean salaries were found in the highest minority group. The mean salary values decreased to the lowest for the lower minority group. The higher wealth group had the highest mean experienced teacher salary, while the highest poverty group had the next to the highest mean salary. Including Philadelphia SD increased the high poverty group mean salaries.

Experienced teacher salaries were lower in the charter school sample than the mean salaries for the school districts. The highest minority group had the highest mean experienced teacher salaries. The lowest minority group had the lowest mean experienced teacher salaries. The highest poverty group had the highest experienced teacher mean salaries. Meaningful differences were found in four of six cases.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
Mean School Salary for Teachers with More Than One Year of Service			
1. The school districts minus Philadelphia SD sample - minority groups	1	3	2
2. The all school districts sample - minority groups	1	2	3
3. The charter school sample - minority groups	2	3	1
4. The school districts minus Philadelphia SD sample – wealth groups	2	1	3
5. The all school districts sample - wealth groups	2	2	2
6. The charter school sample - wealth groups	2	3	1

Principal salaries were examined for the school districts minus Philadelphia SD sample. The highest mean principal salaries were found in the upper middle minority group followed by the highest minority group. The minority groups had five of six cases with meaningful differences. The highest wealth group had the highest mean teacher salaries. Meaningful differences were found in four of six cases.

The all school districts sample had the highest principal salaries in the highest minority group. The principal mean salaries decreased to the lowest mean principal salaries in the lowest minority group. Most of the differences were at the meaningful level (five of six). The highest wealth group had the highest mean principal salaries. The salaries for the highest poverty group were next to the highest salaries. Adding Philadelphia SD to the sample increased the principal salaries for the higher poverty group.

The charter school sample had lower principal salaries than the school districts. The highest minority group had the highest principal salaries. For the minority groups the mean differences were meaningful in three of six cases. For charter schools the lower middle wealth group had the highest principal salaries followed by the higher poverty group principal salaries. Meaningful differences were found for two of six cases.

Table 85 Continued

Samples and Variables	Effect Size Summary Count		
	Small or Negligible	Medium	Large to Very Large
Mean School Principal Salaries			
1. The school districts minus Philadelphia SD sample - minority groups	1	3	2
2. The all school districts sample - minority groups	1	2	3
3. The charter school sample - minority groups	3	3	0
4. The school districts minus Philadelphia SD sample – wealth groups	2	1	3
5. The all school districts sample - wealth groups	1	2	3
6. The charter school sample - wealth groups	4	1	1

Safe Schools - Statewide Report

School Year: 2013 - 2014

Enrollment	1,797,711	Incidents Involving Local Law Enforcement	12,952
Incidents	48,006	Total Arrests	4,558
Offenders	47,929	Assignments to Alternative Education	2,019

Misconduct Categories

Discipline Infraction	Incidents Associated with the Misconduct	Percent of Total Incidents	Incidents per 100 Students
Aggravated Assault on Student	464	0.97%	0.03
Simple Assault on Student	4,272	8.90%	0.24
Aggravated Assault on Staff	359	0.75%	0.02
Simple Assault on Staff	1,692	3.52%	0.09
Racial/Ethnic Intimidation	300	0.62%	0.02
All Other Forms of Harassment/Intimidati	2,953	6.15%	0.16
Fighting	9,102	18.96%	0.51
Minor Altercation	4,708	9.81%	0.26
Rape	4	0.01%	0.00
Involuntary Sexual Deviate Intercourse	9	0.02%	0.00
Statutory Sexual Assault	1	0.00%	0.00
Sexual Assault	47	0.10%	0.00
Aggravated Indecent Assault	8	0.02%	0.00
Indecent Assault	119	0.25%	0.01
Indecent Exposure	126	0.26%	0.01
Open Lewdness	77	0.16%	0.00
Obscene and other sexual materials and p	345	0.72%	0.02
Sexual Harassment	833	1.74%	0.05
Stalking	8	0.02%	0.00
Kidnapping/Interference with Custody of	1	0.00%	0.00
Unlawful Restraint	1	0.00%	0.00
Threatening School Official/Student	3,466	7.22%	0.19
Reckless Endangering	955	1.99%	0.05
Robbery	104	0.22%	0.01
Theft	2,426	5.05%	0.13
Attempt/Commit Murder/Manslaughter	1	0.00%	0.00
Bullying	2,828	5.89%	0.16
Suicide - Attempted	13	0.03%	0.00
Suicide - Committed	0	0.00%	0.00
Rioting	9	0.02%	0.00
Bomb Threats	88	0.18%	0.00
Terroristic Threats (excl bomb threats)	544	1.13%	0.03
Failure of Disorderly Persons to Dispers	91	0.19%	0.01
Disorderly Conduct	7,159	14.91%	0.40
Possession of Handgun	19	0.04%	0.00
Possession of Rifle/Shotgun	4	0.01%	0.00
Possession of Other Firearm	19	0.04%	0.00
Possession of Knife	1,428	2.97%	0.08

Safe Schools - Statewide Report

School Year: 2013 - 2014

Enrollment	1,797,711	Incidents Involving Local Law Enforcement	12,952
Incidents	48,006	Total Arrests	4,558
Offenders	47,929	Assignments to Alternative Education	2,019

Misconduct Categories

Discipline Infraction	Incidents Associated with the Misconduct	Percent of Total Incidents	Incidents per 100 Students
Possession of Cutting Instrument	388	0.81%	0.02
Possession of Explosive	22	0.05%	0.00
Possession of BB/Pellet Gun	139	0.29%	0.01
Possession of Other Weapon	571	1.19%	0.03
Burglary	85	0.18%	0.00
Arson	60	0.12%	0.00
Vandalism	1,418	2.95%	0.08
Criminal Trespass	276	0.57%	0.02
Possession/Use of a Controlled Substance	2,606	5.43%	0.14
Sale/Distribution of a Controlled Substance	264	0.55%	0.01
Sale/Possession/Use or Under the Influence	710	1.48%	0.04
Possession/Use or Sale of Tobacco	4,100	8.54%	0.23

Safe Schools - Statewide Report

School Year: 2013 - 2014

Weapon Detection

Weapon Detection Method	Incidents Associated with the Weapon Detection Method	Percent of Total Incidents	Incidents per 100 Students
Detected by scanner/security	203	0.42%	0.01
Detected by school staff	875	1.82%	0.05
Detected by fellow student	369	0.77%	0.02
Detected by other adult visitor	10	0.02%	0.00
Other	134	0.28%	0.01

Safe Schools - Statewide Report

School Year: 2013 - 2014

Offender Demographics

Age	Offenders	Percent of Total Offenders
10	2,205	4.60%
11	3,103	6.47%
12	4,542	9.48%
13	5,417	11.30%
14	5,845	12.20%
15	6,159	12.85%
16	6,013	12.55%
17	4,901	10.23%
18	2,389	4.98%
19	387	0.81%
20	70	0.15%
21	9	0.02%
22	6	0.01%
23	1	0.00%
24	0	0.00%
4	7	0.01%
5	339	0.71%
6	768	1.60%
7	1,139	2.38%
8	1,462	3.05%
9	1,998	4.17%
Over 24	216	0.45%
Under 4	5	0.01%
Unknown	947	1.98%
Summary	47,929	

Grade	Offenders	Percent of Total Offenders
Elementary Ungraded	0	0.00%
Grade 1	1,025	2.14%
Grade 10	6,223	12.98%
Grade 11	4,820	10.06%
Grade 12	3,802	7.93%
Grade 2	1,406	2.93%
Grade 3	1,678	3.50%
Grade 4	2,274	4.74%
Grade 5	2,733	5.70%
Grade 6	4,277	8.92%
Grade 7	5,483	11.44%
Grade 8	5,845	12.20%

Safe Schools - Statewide Report

School Year: 2013 - 2014

Offender Demographics

Grade	Offenders	Percent of Total Offenders
Grade 9	6,952	14.50%
K4 Full Day	4	0.01%
K4 Half Day - Afternoon (PM)	0	0.00%
K4 Half Day - Morning (AM)	0	0.00%
K5 Full Day	671	1.40%
K5 Half Day - Afternoon (PM)	15	0.03%
K5 Half Day - Morning (AM)	15	0.03%
PreK Full Day	8	0.02%
PreK Half Day - Afternoon (PM)	2	0.00%
PreK Half Day - Morning (AM)	0	0.00%
Secondary Ungraded	0	0.00%
Unknown	696	1.45%
Summary	47,929	

Gender	Offenders	Percent of Total Offenders
Female	14,461	30.17%
Male	33,250	69.37%
Unknown	218	0.45%
Summary	47,929	

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School Year: 2013 - 2014

Race / Ethnicity / Status Category

Race or Ethnicity	Offenders	Percent of Total Offenders
American Indian / Alaskan Native	85	0.18%
Asian	368	0.77%
Asian / Pacific Islander	0	0.00%
Black / African American (not Hispanic)	0	0.00%
Black or African American	18,261	38.10%
Hispanic	7,303	15.24%
Hispanic (any Race)	0	0.00%
Multi-Racial	1,501	3.13%
Native Hawaiiin or other Pacific Islander(not hispanic)	14	0.03%
White	19,822	41.36%
White / Caucasian (not Hispanic)	0	0.00%
	575	1.20%
Summary	47,929	

Offender Type	Offenders	Percent of Total Offenders
Adult vistor/intruder	7	0.01%
District employee	23	0.05%
Other or unknown	580	1.21%
Parent	22	0.05%
Student	35,188	73.42%
Student from another school	35	0.07%
Student with IEP	12,074	25.19%
Summary	47,929	

Safe Schools - Statewide Report

School Year: 2013 - 2014

Incident Place and Time

Incident Place	Incident Time Frame	Total
At a school-sponsored event or at an event within the school's jurisdiction		425
At an offsite alternative placement facility		224
Off school grounds at an activity		222
Off school grounds at an activity under the jurisdiction of another school		96
Off school grounds while en route to or from school		1,516
On district provided public conveyance providing transportation to a school		211
On district provided public conveyance providing transportation to and from school		1,380
On school property/grounds	After school hours	2,138
	Before School hours	908
	During school hours	41,574
		736

Sanctions

Discipline Response	Total
Detention	4,452
Expulsion - less than one calendar year	627
Expulsion - more than one calendar year	115
Expulsion - one calendar year	384
In school suspension	6,225
None	5,633
Other	4,864
Out of school suspension	29,410
Special education student removed to interim alt ed setting by due process hearing officer	5
Special education student removed to an interim alternative educational setting by school personnel	106

Adjudication

Adjudication	Total
Adjudicated delinquent	499
Citation	2,445
Convicted as Adult	29
Fined	168
Probation	308
Unknown	3,273

Safe Schools - Statewide Report

School Year: 2013 - 2014

Remedial Programs

Discipline Response	Total
Alternative Education	967
Anger Management	43
Drug / Alcohol	141
Guidance Counseling	862
Home Study Instruction	15
Homebound Instruction	0
Other	1,086
Peer Meditation / Conflict Resolution	269
Psychological Counseling Evaluation	66
Student Assistance Referral	467

School Security Staff

School Security Staff	Total
School Police Officer	639
School Resource Officer	222
School Security Officer	983

Parental Involvement

Parental Involvement	Total
Family counseling	476
Law enforcement / legal involvement	4,243
Other	1,725
School conference	14,398
Telephone conference	18,726
Written notification	19,520

Injuries

Injuries	Total
Incidents resulting in physical Injury	1,264
Injuries requiring medical treatment	654

Safe Schools - Statewide Report

School Year: 2013 - 2014

Expulsions by Grade

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
001	0	5	1	0	1	2
002	0	1	1	0	0	10
003	0	3	1	0	1	10
004	0	4	0	0	3	14
005	0	4	1	0	7	14
006	0	15	4	0	12	28
007	0	20	24	0	28	46
008	0	48	53	0	45	47
009	1	90	102	0	76	66
010	6	73	95	0	85	53
011	5	48	83	0	50	34
012	8	54	79	0	37	35
EUG	0	0	0	0	0	0
Kindergarten	0	3	0	0	0	0
Pre-K	0	0	0	0	0	0
SUG	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Total	20	368	444	0	345	359

Expulsions by Race

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
American Indian / Alaskan Native	0	0	2	0	0	2
Asian	0	0	4	0	0	1
Black / African American (not Hispanic)	1	108	69	0	179	95
Hispanic (any race)	0	78	35	0	54	72
Multi-Racial	0	10	15	0	6	19
Native or other Pacific Islander (not Hispanic)	0	0	1	0	0	0
White / Caucasian (not Hispanic)	19	156	309	0	102	163
Unknown	0	16	9	0	4	7
Total	20	368	444	0	345	359

Expulsions by Gender

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
Female	2	107	101	0	104	71
Male	18	261	343	0	241	288
Unknown	0	0	0	0	0	0
Total	20	368	444	0	345	359

Safe Schools - Statewide Report

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Out-of-School Suspension by Grade

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
001	12	3,302	3	0	750	68
002	20	3,991	3	4	1,047	116
003	25	4,470	0	2	1,317	115
004	38	5,490	12	7	1,798	151
005	21	6,636	23	6	2,120	180
006	83	10,235	65	22	3,555	159
007	127	13,925	168	133	4,166	218
008	177	14,978	343	205	4,113	205
009	342	19,410	599	297	4,779	224
010	326	14,640	658	361	3,780	198
011	244	10,596	622	310	2,706	138
012	213	8,623	622	313	1,808	132
EUG	0	0	0	0	0	0
Kindergarten	7	2,200	2	0	490	36
Pre-K	0	10	0	0	8	1
SUG	0	0	0	0	0	0
Unknown	0	0	5	3	107	0
Total	1,635	118,506	3,125	1,663	32,544	1,941

Out-of-School Suspensions by Race

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
American Indian / Alaskan Native	1	145	4	2	44	10
Asian	26	749	31	14	192	13
Black / African American (not Hispanic)	658	60,013	591	142	15,275	534
Hispanic (any race)	278	20,072	364	89	5,110	256
Multi-Racial	130	4,486	73	30	1,159	85
Native or other Pacific Islander (not Hispanic)	12	80	1	2	17	0
White / Caucasian (not Hispanic)	530	32,858	2,043	1,369	10,662	1,034
Unknown	0	103	18	15	85	9
Total	1,635	118,506	3,125	1,663	32,544	1,941

Out-of-School Suspensions by Gender

	ACADEMIC	CONDUCT	DRUG-ALCOHOL	TOBACCO	VIOLENCE	WEAPON
Female	556	36,067	891	300	10,154	428
Male	1,079	82,439	2,234	1,363	22,390	1,513
Unknown	0	0	0	0	0	0
Total	1,635	118,506	3,125	1,663	32,544	1,941

Safe Schools - Statewide Report

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Habitual Truancy

Total Enrollment	Total Habitual Truants	Truancy Rate
1,797,711	142,261	7.91

Habitual Truancy by Gender

	Total	Truancy Rate
Female	79,650	4.43
Male	87,762	4.88
Total	167,412	9.31

Habitual Truancy by Grade

	Total	Truancy Rate
001	12,251	0.68
002	11,005	0.61
003	9,996	0.56
004	10,044	0.56
005	9,975	0.55
006	11,318	0.63
007	13,103	0.73
008	13,866	0.77
009	21,073	1.17
010	17,735	0.99
011	11,895	0.66
012	12,560	0.70
EUG	0	0.00
Kindergarten	12,410	0.69
Pre-K	181	0.01
SUG	0	0.00
Unknown	0	0.00
Total	167,412	9.31

Habitual Truancy by Race

	Total	Truancy Rate
American Indian / Alaskan Native	344	0.02
Asian / Pacific Islander	2,634	0.15
Black / African American (not Hispanic)	69,457	3.86
Hispanic (any race)	29,345	1.63
Multi-Racial	6,686	0.37
Native Hawaiian or other Pacific Islander (not Hispanic)	93	0.01
Unknown		
White / Caucasian (not Hispanic)	58,853	3.27
Total	167,412	9.31

Note: The calculation of the school/LEA overall "Truancy Rate" uses the "Total Habitual Truant" population of only students of compulsory school age (Grades 1 to 11). The enrollment figure used in the calculation Truancy Rate and the individual truancy rates by grade, ethnicity and gender includes all students enrolled in the school/LEA as of the LEA October 1st enrollment report.

Table B1. Current expenditures minus federal revenue other than Impact Aid per pupil in membership, by percentage enrollment of students in various Racial/Ethnic Categories and State: 2011-12 (Note: The original Table B1 listed states alphabetical instead of sorting the far right-hand column from low to high values.)

[No adjustment for students in poverty] 2011-12							
State	Total	Districts with					Districts with greater than 50 percent minority enrollment ²
		Greater than 50 percent White enrollment	Greater than 50 percent Hispanic enrollment	Greater than 50 percent Black enrollment	Greater than 50 percent other racial/ethnic categories enrollment ¹	Reported racial/ethnic data, all other districts	
Idaho	5,685	5,671	5,543	†	9,484	6,556	6,059
Utah	5,446	5,390	†	†	7,651	6,031	6,151
Arizona	6,352	6,589	6,128	†	4,935	6,473	6,180
Oklahoma	6,421	6,386	5,965	5,987	6,968	6,395	6,474
Mississippi	6,545	6,369	†	6,631	†	7,480	6,738
Texas	6,990	7,290	6,955	7,551	†	6,758	6,893
North Carolina	6,960	6,913	†	8,007	†	6,903	7,002
Nevada	7,290	9,023	†	†	†	7,060	7,056
Florida	7,221	7,210	7,293	6,808	†	7,209	7,227
California	7,496	7,681	7,480	15,026	7,695	7,373	7,461
New Mexico	7,611	8,306	7,537	†	8,354	7,305	7,563
Alabama	7,506	7,459	†	7,401	†	8,007	7,576
Colorado	7,721	7,771	7,656	†	†	7,289	7,603
Tennessee	7,037	6,840	†	7,455	†	8,243	7,746
Oregon	8,030	8,010	8,426	†	†	8,127	8,212
Georgia	8,133	7,877	7,545	8,550	†	8,096	8,306
Iowa	8,619	8,650	8,411	†	†	8,311	8,323
South Carolina	7,926	7,623	†	8,633	†	8,081	8,394
Kentucky	7,949	7,946	†	†	†	8,401	8,401
Arkansas	7,860	7,555	8,157	8,812	†	8,119	8,489
Washington	8,557	8,454	8,056	†	11,359	9,020	8,803
Kansas	8,953	8,984	8,567	†	†	8,927	8,863
United States	\$9,210	\$9,406	\$7,754	\$9,985	\$9,598	\$9,519	\$8,986
South Dakota	7,325	7,197	†	†	8,972	10,994	9,012
Missouri	8,038	7,865	†	9,270	†	8,476	9,171
North Dakota	9,988	10,021	†	†	9,410	†	9,410
Nebraska	9,755	9,849	10,092	†	13,551	9,250	9,456
Pennsylvania	11,021	11,393	9,100	9,232	†	10,940	9,562
Indiana	8,541	8,269	8,052	11,099	†	8,983	9,588
Michigan	8,974	8,831	10,770	9,680	10,128	9,522	9,627
Louisiana	9,354	9,009	†	10,583	†	8,630	9,732
Wisconsin	9,993	9,926	†	10,204	17,395	10,338	10,348
Virginia	9,604	8,923	10,940	8,818	†	11,103	10,407
Illinois	10,600	10,674	9,791	11,758	†	10,526	10,510
Hawaii	10,594	†	†	†	10,594	†	10,594
Ohio	9,232	8,925	†	11,029	†	9,831	10,630
Montana	9,266	9,107	†	†	11,102	13,214	11,102
Minnesota	9,404	9,076	†	†	13,904	11,554	11,645
Rhode Island	13,164	13,351	13,484	†	†	10,660	12,656
Delaware	12,130	11,389	†	11,656	†	13,173	12,992
Maryland	12,634	11,927	†	12,567	†	13,342	13,015
Massachusetts	12,910	12,557	12,306	12,780	†	15,112	14,057
Connecticut	15,190	15,347	13,311	20,242	†	14,959	14,900
District of Columbia	15,022	†	†	15,022	†	†	15,022
New Jersey	15,689	15,314	15,892	19,405	14,530	15,432	16,193
Alaska	15,705	14,241	†	†	25,129	13,512	16,992

Table B1. Current expenditures minus federal revenue other than Impact Aid per pupil in membership, by percentage enrollment of students in various Racial/Ethnic Categories and State: 2011-12 (Note: The original Table B1 listed states alphabetical instead of sorting the far right-hand column from low to high values.)

[No adjustment for students in poverty] 2011-12							
State	Total	Districts with					Districts with greater than 50 percent minority enrollment ²
		Greater than 50 percent White enrollment	Greater than 50 percent Hispanic enrollment	Greater than 50 percent Black enrollment	Greater than 50 percent other racial/ethnic categories enrollment ¹	Reported racial/ethnic data, all other districts	
New York	18,097	17,986	19,802	17,673	22,082	18,120	18,198
Wyoming	14,518	14,351	†	†	24,633	†	24,633
Maine	10,890	10,890	†	†	†	†	†
New Hampshire	12,611	12,611	†	†	†	†	†
Vermont	13,342	13,342	†	†	†	†	†
West Virginia	9,827	9,827	†	†	†	†	†

† Not applicable.

¹ Other includes Asian/Pacific Islander, American Indian, and Two or more races.

² Minority includes Black, Hispanic, Asian/Pacific Islander, American Indian, and Two or more races.

NOTE: Current expenditures were used in order to exclude expenditures for capital outlay, which tend to have substantial changes from year to year. The current expenditures are for public elementary and secondary education only, and exclude expenditures for adult education, community services, and other programs that are not allocable to expenditures per student in public schools. Current expenditures have been adjusted by subtracting all federal education revenues other than Impact Aid, since Impact Aid is intended as a substitute for foregone local or state revenue. The federal revenues other than Impact Aid were subtracted from current expenditures to examine the distribution of funds provided through state and local education finance systems. Current expenditures minus federal revenue other than Impact Aid per pupil have not been adjusted for students in poverty (i.e., current expenditures minus federal revenue other than Impact Aid per pupil = (total current expenditures - total federal revenue + total Impact Aid) / total student membership). Black includes African American, Hispanic includes Latino, Asian/Pacific Islander includes Native Hawaiian or Other Pacific Islander, and American Indian includes Alaska Native. Race categories exclude Hispanic origin unless specified. Only school districts in both the "School District Finance Survey (F-33)" and the "Small Area Income and Poverty Estimates" data files, with student membership greater than zero, reporting fiscal data, and with total current expenditures minus total federal revenues plus Impact Aid not less than zero were used in this analysis; 1,359,465 students in the F-33 were excluded from the analysis due to the data for their districts not meeting these criteria. Among these students, 102,315 were from regular local school districts, 2,321 were from local school districts that are components of supervisory unions, 115,021 were from regional education service agencies, 36,052 were from state-operated agencies, 1,078,962 were from charter agencies, and 24,794 were from other education agencies.

SOURCE: U.S. Department of Education, Office of Planning, Evaluation and Policy Development, unpublished tabulations. Data based on U.S. Department of Commerce, Census Bureau, "Small Area Income and Poverty Estimates," 2011; U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "School District Finance Survey (F-33)," fiscal year 2012, Version Preliminary 0d; and U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "Local Education Agency Universe Survey," 2011-12, Version Provisional 1a.

Responsible Personnel, Titles, and Office

Name	Title	Office
Pedro Rivera	Acting Secretary	Secretary's Office
David Volkman	Executive Deputy Secretary	Secretary's Office
Matthew Stem	Deputy Secretary	Office of Elementary and Secondary Education
Theresa Barnaby	Bureau Director	Bureau of School Leadership and Teacher Quality
Rita Perez	Bureau Director	Bureau of Curriculum, Assessment, and Instruction
Linda Benedetto	Higher Education Associate II	Bureau of School Leadership and Teacher Quality
Donald McCrone	Regional Coordinator	Bureau of Curriculum, Assessment, and Instruction, Division of Federal Programs
Jamal Wakeem	Higher Education Associate II	Bureau of School Leadership and Teacher Quality, Division of Professional Education and Teacher Quality (Responsible for Highly Qualified)
Nancy Chervis	Education Administration Supervisor	Bureau of School Leadership and Teacher Quality, Division of Certification Services (Supervises the evaluation of all certification applications and requests for Type 01 Emergency permits)
Other PDE Personnel to be determined		
External Contractors to be determined		