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Hiring the Most Effective Teachers: An Examination of Policy and Practice in Pennsylvania

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Hiring the Most Effective Teachers: An Examination of Policy and Practice in Pennsylvania

by

Barbara Launi Powers

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Doctor of Education

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Barbara Powers, has successfully defended and made the required modifications to the
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form to the Office of Graduate Studies, where it will be placed in the candidate's file and
submit a copy with your final dissertation to be bound as page number two.
ABSTRACT

Hiring the most effective teachers not only has an impact on America’s children, but on America’s economic future as well. For two decades, much research about the failings of America’s schools has been conducted. Since the advent of No Child Left Behind (2002), never has more focus been applied to teaching quality. Hiring the best teachers for our children leverages the single largest in-school influence on achievement. James Coleman, in his seminal work, *The Coleman Report* (1967), notes that a child’s home socio-economic status and race are more significant influences than any in-house school influence. Subsequent research on teacher quality indicates that it is more influential than originally published in his study, although race and socio-economic status remain huge negative influences on student achievement scores. In this study, the Pennsylvania policies for training, credentialing, hiring and evaluating teachers were analyzed for their coherence with what is known in the body of research about effective teachers, and how hiring administrators utilize these policies to inform their decisions on which teacher candidates were offered interviews.

**Key words:** teacher hiring, teacher screening process, interview, teacher application, teacher credentialing, teacher training, teacher effectiveness, Pennsylvania, educational policy
ACKNOWLEDGEMENTS

While attaining this doctorate is a milestone for me, I would be remiss in not publicly noting those in my life who have made this step possible. I thank my dissertation committee for the time they spent helping me complete this journey. The vision of Dr. Jerry Starratt, my original dissertation mentor, was very important in helping me shape the study and its importance. His wise counsel, his experience, and his gentle nudging were vitally important to me. He assumed the role of dissertation mentor in a way not replicated after his absence on my committee, and for that, I am eternally grateful. I wish he were able to see me through to the end; no doubt, the journey would have been more efficient and quick. My on-site Seton Hall mentor, Dr. Elaine Walker stepped in when needed, even on top of her already heavy workload. I appreciate her time on my study. Dr. Patricia Madeira, my mentor and friend provided invaluable guidance, recommendations and the occasional pep talk. Finally, I appreciate Dr. Daniel Gutmore’s clarifying questions providing more structure to my study and ability to synthesize the results into the most simplistic terms. Thank you all for your guidance and support.

My parents, Ed and Jerry, have always instilled the importance of education. Their regular assistance in caring for my family in the early days of attaining my master’s degree while I attended classes and their later encouragement while I completed my doctorate certainly positioned me well. I wish I were able to raise a glass with my mother as I write these final words.

To my husband, Ralph, without your unending love and support I am not sure this would be possible. You were a Seton Hall weekend and summer widower for many, many days over three long years, and I appreciate knowing that you wanted me to pursue this goal as much as I needed
to do it, even as it meant you fended for yourself all those lonely days. Your pride in my accomplishment is exceeded only by my pride in you as my stalwart companion! We made it!

Matt, Allie, Harper, and Quinn, you were there for the ride. I hope I was able to make you know that you were more important to me than all of this by providing the right balance between school, work, and home. I hope never to miss any more milestones. I love you all.

Without the encouragement of my sisters and their willingness to take care of mom and dad so that I could take care of school, I would certainly not have been able to make this process work. Thank you, and know that I love you more.

Finally, this was a journey undertaken by many more. Friends, Seton Hall executive cohort 17 members, and colleagues have been wonderful. You know who you are, and I hope you know how much I appreciate all your words of wisdom, useful reflections, and the occasional trip outside the office to unwind. Now we can celebrate!
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CHAPTER I

STATEMENT OF THE PROBLEM

Introduction

Based on the proliferation of research highlighting the importance of the individual teacher in a child’s academic achievement (Bolz, 2009; Pretorius, 2012; Wiliam, 2010), and the fact that effective teaching qualities have been identified (Dyck-Stoddard, 2006; Johnston, Almerico, Henriott, & Shapiro, 2011; Pretorius, 2012), one might surmise that hiring an effective teacher is merely finding a match between a teacher candidate and those descriptors. This appears to not always be the case. Take for instance the math teacher hired to replace a teacher for her second semester pregnancy in a middle class suburban high school. The district did its due diligence in screening for applicants’ grade point averages using an on-line database. Of the eight applicants granted an interview, four were invited to teach a demonstration lesson to the actual class where the vacancy would be; one subsequently removed herself from consideration due to an offer in a nearby district. The position was offered to a recent college graduate primarily based on the strength of the recommendation he received from his student teaching supervisor. Less than two weeks into the semester assignment, he began having difficulty with classroom management, adjusting to the workload, and presenting a professional demeanor with the students. He resisted all assistance from mentors and job coaches. The complaints from students and parents escalated. In spite of interventions from well-intentioned peers and monitoring by the administrative team, he continued to struggle. By the end of ten weeks, the principal had collected sufficient data to warrant dismissal. He was coached out of the position.
in lieu of an unsatisfactory rating (Anonymous, personal communication, June 10, 2013). Where did the hiring team go wrong? It is the belief of this author that through careful rating of candidates during the screening process and into the interview process, this travesty would not have occurred.

Hiring teachers with the ability to engage students in learning purports to be the highest leverage strategy for increasing student achievement available to schools today (Atha, 2009; Butler, 2012; Dyck-Stoddard, 2006; Jacob, 2007; Treese, 2012; Wiliam, 2011). Indeed, Dylan Wiliam posits that the most important element driving student achievement, socio-economic status notwithstanding, is the effectiveness of the teacher (Wiliam, 2011). The author concedes that teacher talents and skills are very important for mediating student learning, but for many students they are not determinative of student achievement due to other inhibiting variables in the students’ lives, such as undiagnosed learning differences, a history of being bullied or approaching puberty.

Hiring the best available candidates then becomes an administrator’s most important job given the evidence that student achievement is predicated on at least one controllable factor: teacher effectiveness (Donaldson & Center for American Progress, 2011). Hiring these teachers takes time. From screening applications, to interviewing teachers, to observing demonstration lessons, hours are spent in filling a single opening. While both urban and rural areas present the greatest challenges in recruiting high-quality teachers for their classrooms, without a mechanism to effectively screen top candidates, none of the nation’s schools can guarantee a good teacher for every child (Budig, 2006). How do schools efficiently find the most promising candidates, interview them, and hire them? Is there a way to more effectively cull the candidate pool so that
interviews are only offered to those most likely to be the better teachers? These and other questions will be the focus of the following discussions.

In 2009, the Bill and Melinda Gates Foundation published findings from a three-year study of 23,000 lessons. The study analyzed five observation protocols in an effort to determine which aspects of a teacher’s practice correlated to student achievement (Gates, 2013). The data indicated that when adjusted for prior knowledge and student background, effective (and ineffective) teachers can be discerned through analyses of several commonly employed teaching strategies. [In this study, student perception surveys were also found to be slightly predictive of effective teachers, which may be important in future studies regarding hiring the best teachers.] Since Charlotte Danielson’s *Framework for Teaching* (2011) was used in the study and is aligned with the Interstate Teacher Assessment and Support Consortium (InTASC) Standards (CCSSO, 2011 & The Danielson Group, 2014), the results of the study are important in that effective teachers can be identified using this model. The rubric associated with the “Danielson framework” includes four domains and twenty-two components that describe the practices, skills, and characteristics that effective teachers should possess and employ. The domains cover four practice areas including (Domain 1) Planning and Preparing for Student Learning, (Domain 2) Creating an Environment for Student Learning, (Domain 3) Teaching for Student Learning, and (Domain 4) Professionalism. As teaching, when viewed as the planned systematic research-based approach to increasing student learning, can be assessed through evaluation models such as Danielson’s, and that states such as Pennsylvania, New York, Ohio, and Connecticut have adopted the Danielson rubrics either in whole or in part for their teacher evaluations, it behooves districts to search for teachers who rate highly on this model besides exhibiting talents in teaching special needs students and in culturally responsive pedagogies.
In Pennsylvania, teaching candidates complete a *Standard Application* (24 P.S. §12-1204.1, 1996), whether downloading a pencil and paper application or using on-line receptors of said electronic applications. Pennsylvania’s “Act 107 of 1996 requires that all school districts use the application for evaluating those seeking teaching positions. School districts, however, are permitted to supplement the application with other application requirements

([http://www.education.state.pa.us/portal/server.pt/community/finding_a_teaching_position/8629/commonly_asked_questions_and_answers/506859](http://www.education.state.pa.us/portal/server.pt/community/finding_a_teaching_position/8629/commonly_asked_questions_and_answers/506859))”

The Standard Application contains the following relevant elements as noted in Table 1 (See Appendix A for actual the application.)
### Table 1

**Pennsylvania Standard Application for Teaching**

<table>
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<th>Relevant elements from the Pennsylvania Standard Application for Teaching</th>
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Districts that collect hard copies of the applications find themselves in the unenviable
spot of sorting applications with often only the Human Resources director or another
administrator identifying potential viable candidates. Districts utilizing the on-line databases
often use search terms to find these promising candidates. Depending on a district’s values or
those of the administrator doing the screening, an application may or may not be chosen for
further review.

While Pennsylvania standardized the application process for prospective teachers, many
administrators believe that only through an interview or a demonstration lesson can candidates
display their real talents. It may be counter-intuitive that the most promising employees will
always emerge from a standardized application process as the best.

The California Department of Education publishes qualities of an effective teacher
(California Dept. of Ed, retrieved July 30, 2013), none of which is represented on the
Pennsylvania Standard Application (see Table 1). These skills include motivation, interpersonal
skills, and cognitive skills, and are further replicated in studies of pre-service teachers that
eventually prove to be proficient (Johnston et al., 2011; Mason & Schroeder, 2010; Peterson,
2002). In a study completed in Wisconsin, the authors found variability in methods and
preparation of administrators and teachers for the work of screening potential teachers. Borden
(2009) comments:

*The results of this study indicate that the screening of teacher candidates in Wisconsin is
done with minimal preparation or training of those responsible for this important part of
the hiring process. In addition, the findings indicate a lack consistency in how teacher
candidates are screened even within a given district (Borden, 2009).*
While schools use applications to screen for the best candidates to interview, the final decision, as self-reported by principals and other hiring administrators, is often noted to be “a gut feeling” (Peterson, 2002; Ziebarth-Bovill, Kritzer, & Bovill, 2012). Additionally, according to one study, many principals hired “a known entity”, and most often one who had previously worked within their school (Donaldson & Center for American Progress, 2011).

**Purpose of the Study**

This study will examine the coherence or lack of coherence between the criteria for identifying promising prospective teachers and criteria for evaluating the actual expertise of teachers who have been hired and are currently employed by a school district. Once the study has analyzed the presence or absence of such coherence, the study will seek to identify the perceptions of a sample of those responsible for hiring those prospective teachers concerning their sense of the connection between the process of evaluating prospective teachers and the qualities of effective instructors as identified by the broader research. The study will report its findings from the policy analysis as well as its findings from interviewing a sample of hiring agents. Those findings may point to inconsistencies between the criteria used in the hiring process and the criteria used in evaluating teachers once hired. The underlying purpose of the study is to aid school districts in their efforts to hire the most promising teachers through bringing the criteria used in the two processes more closely aligned. Missing from the field of research on the screening process for hiring effective teachers are the most commonly used criteria for screening teacher candidates. Also absent in this research on criteria for hiring are explicit references to criteria by which those teachers who are hired will subsequently be evaluated for evidence of their effectiveness, e.g., criteria within the Danielson model. In sum,
this is a study of the problems of present policy and its implementation at the ground level by practitioners.

In this concurrent mixed-method study, the researcher will conduct a minor policy analysis on whether and how the new Charlotte Danielson Framework for Teaching appears in some form or impacts the screening process for evaluating prospective teachers within the required Pennsylvania Standard Application for Teaching. In other words, the Pennsylvania Standard Application for Teaching will be reviewed to determine possible alignment to the Danielson model. Additionally, a descriptive cross-sectional study will be conducted to investigate whether and how the Pennsylvania policy of using the Charlotte Danielson model to evaluate teachers impacts hiring processes used by hiring teams in Pennsylvania. Administrators responsible for evaluating teachers will be surveyed and asked to rate the usefulness of the standard application as a tool for screening potential hires and to consider what elements may be missing, specifically, elements contained or implied in the Danielson model.

From a theoretical perspective, both common sense and research indicate that there should be consistency between how school administrators hire and subsequently evaluate teachers. When using a research-based framework for evaluating teaching, such as the Danielson model, one should expect that hiring teachers with the qualities and capabilities as denoted in the proficient and distinguished columns of the Danielson rubrics would yield both increased student achievement and an evaluation score of either proficient or distinguished on the end of year teacher evaluation forms. Of course, attention to these strengths and capabilities should be balanced against the unique needs of the school with teacher vacancies, such as various subject matter certification needs as well as the need for more culturally responsive pedagogical and relational skills. This theoretical rationale, of reviewing the possible policy and
practice links between teacher hiring criteria and teacher evaluation criteria will guide the study and its assumptions. Furthermore, it will serve as a useful analytical tool as the study unfolds.

**Research Questions**

The study will answer the following questions.

1. Is there a coherent consistency between the criteria in Pennsylvania policy documents (K-12 Program Framework Guidelines, The Public School Code inclusive of the common application for teaching, Chapter 354, and the Educator Effectiveness Manual) used in hiring effective teachers?

2. How do administrators who screen teacher candidates live with the common application for teaching to screen prospective teacher candidates?

3. What criteria in the Pennsylvania standard application do Pennsylvania hiring administrators find most helpful in screening teacher applicants and how well do they align with current research on the qualities of effective teachers?

4. What elements, if any, are missing from the Pennsylvania standard application for teaching that school administrators believe are essential to selecting the best teacher candidates in order to meet the requirements of Charlotte Danielson model?

**Significance of the Study**

Young and Delli (2002) have noted there has been relatively little research in the field of education on the relationship between the hiring process and post-hire outcomes. Should the results of this study prove to be predictive of best practice in hiring effective teachers, fewer children run the increased risk of being assigned to ineffective teachers and subsequently of poor performance on standards-focused assessments. In addition, the cost savings of the salaries of
those teachers (not to mention the human resource hours, benefits, and other financial considerations associated with hiring a candidate deemed not proficient) would have a positive impact on school finances. The deleterious effects of ineffective teachers would be mitigated (Pretorius, 2012) for both students and business directors.

There is significant literature describing various tools used to screen teacher candidates (Connors et al., 2004; Johnson, 1976; Kahl, 1980; Liu, 2006; Peterson, 2002; Wise, Darling-Hammond and Berry, 1987). Missing from the field is the body of research that identifies which of those strategies is most effective in identifying candidates that are likely to be successful teachers. In a doctoral study by Bolz (2009), principals agreed that one area for further study may be the development of an accurate means of assessing a candidate's general knowledge as well as development of a screening tool to efficiently assess a candidate’s personal attributes. This study will attempt to identify the gap between hiring criteria and elements of the Danielson Framework for Teaching as well as school administrators’ understanding of how to screen for qualified teacher candidates using the common application. Further, the policy discussions will address how school administrators hire teachers without benefit of evidence of quality teaching as measured by Danielson and how the screening tools and common application may be adjusted to solicit such evidence. Since many states, including Pennsylvania, the site of the study, use the Danielson rubrics as the basis for the teacher evaluations, how does the absence of that alignment affect screening decisions? This apparent disconnect between the hiring criteria and the Danielson teacher evaluation model may prove to be problematic for school administrators seeking to hire the best qualified candidates for their schools. Finally, this study may provide recommendations for improving the screening tool and redesigning the Standard Application to
better suit the needs of school administrators seeking to attract candidates with qualities of distinguished teachers as noted by Charlotte Danielson.

**Limitations of the Study**

This mixed-method approach benefits from interviewing those who participate in the hiring of teachers. However, a limitation of this study quite naturally will be the numbers of administrators who participate in the hiring process that respond to the survey. As the study focused on Pennsylvania hiring administrators and its common application, states utilizing other applications or another foundation for quality teaching, such as the Marzano model (2013), may find the results to be interesting, but limiting if not altogether applicable.

**Definition of Terms**

To better serve the readers of this paper, the author identifies the following domain specific terms and their definitions.

- High-stakes testing includes any test administered to a body of students with important consequences, such as the SATs or a driving test. In Pennsylvania, the high stakes tests referenced include the PSSAs and the Keystones.

- Pennsylvania Value-Added Assessment System (PVAAS) is a series of high-stakes tests upon which the results for a group of students bears serious consequences for their schools and teachers. These tests are administered in response to No Child Left Behind and given to students in grades three through eight. Reading, writing, math and science are covered.

- Value Added Measures (VAMs) are the actual level of achievement demonstrated by an educator’s students is compared to the level that would be predicted after accounting for
students’ own prior achievement histories and factors such as the characteristics of their family backgrounds and peers. The differential amount (above or below zero) is averaged across students taught by each educator and attributed to educators as their contribution to achievement. VAMs measure relative teacher performance based on the assessments that are used in the models. The value of VAMs depends in significant part on the validity of the underlying student assessments in capturing what students ought to be learning and the capacity of the tests to allow VAMs to capture meaningful distinctions in achievement. In principle, VAMs can be applied to any quantifiable measure of student outcomes. As measure of educator quality, a VAM’s fairness depends on whether the method successfully removes influences outside an educator’s control (p. vi). (Lipscomb et al., 2012)

- The screening process in hiring relates to reviewing and narrowing a pool of applicants for a specific teaching position by analyzing the applications of said pool against a set of parameters.
CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

Review of relevant research includes determining why staffing every classroom with a high quality teacher makes a difference to students, and ultimately our society. Without knowing how to describe an effective teacher, staffing decisions become difficult; therefore, this study also reviews literature on effective teachers. Finally, staffing decisions occur so frequently that one must determine the processes hiring teams use, and which currently yields the most promising candidates. The study will also shed light on specific aspects of processes by Pennsylvania hiring teams. Until more is known about value-added systems for student assessments that may or may not indicate overall achievement and teacher efficacy, this study will not address those issues.

Studies of why high-quality teachers matter

The economic costs of a high quality teaching force cannot be discounted. Dylan Wiliam, in a paper presented to the ‘The Schools Network’ annual conference (2011), presents a clear case for the economic benefits of an excellent teacher in every classroom. However, a study by Chetty, Friedman, and Rockoff (2011) investigating the long term impacts of teachers provides ample data and analyses that indicate that high quality teachers raise student test scores, but fails in its methodology to substantiate the claims linking value added scores to long-term earnings. (Ballou & University of Colorado at Boulder, National Education, Policy Center, 2012) Furthermore, comparisons of cost effectiveness strategies for raising teacher quality finds that
rapid formative assessment yields higher student achievement than raising minimum standards for entry into the profession or earning a National Board Certification (Yeh, 2009). What leaders do know is that in order for American children to compete in a global economy, as well as participate as engaged citizens of a democratic polity, they must be educated well on 21st century political and work-related skills. This requires skillful planning on the part of school systems and teachers.

Steven Rivkin and Eric Hanushek from the Hoover Institution of Stanford University report on research conducted in 2006 on 50 teachers:

- **Students taught by the most effective teacher in that group of 50 learn in six months what those taught by the average teacher learn in a full year.**
- **Students taught by the least effective teacher in that group of 50 will take two years to achieve the same learning.**
- **In the classrooms of the most effective teachers, students from disadvantaged backgrounds learn at the same rate as those from advantaged backgrounds** (p. 1068).

Findings from two studies on teacher expectations show that achievement increases proportionally with teacher estimation of students’ abilities (Sorhagen, 2013) and (Friedrich, Flunger, Nagengast, Jonkmann, & Trautwein, 2015). In the first study, 894 first grade teachers and 1273 students from a longitudinal sample drawn when they were infants in the NICHD Early Childhood Research Network were studied. Researchers administered the Woodcock-Johnson-R several times to the students throughout their elementary and middle school years. The first grade teachers were asked to rate the children on academic skills. Results showed a positive correlation to achievement as a fifteen year-old and first grade teacher prediction, even when a
teacher underestimated a child’s abilities (Sorhagen, 2013a). In the Friedrich, et al. (2015) study, similar effects were found, noting that believing in a child’s abilities coupled with strong pedagogical strategies of exemplary teachers make a quantitative difference in achievement.

Studies from a seven year panel of statewide data from North Carolina elementary schools further illustrate this effect that effective teachers do make long-range contributions to student opportunities for achievement (Goldhaber, Cowan, & Walch, 2013). Noting that recent research validates value-added estimates of elementary and middle school teachers are statistically significant predictors of college attendance and future earnings (p. 216). In their study, 700,000 students and their 21,000 teachers were matched as unique data sets in which student test scores were standardized within grades and years. Correlations across math and reading portions of teacher effectiveness were high, and the authors suggest that value-added to math and reading exams reflect teaching effectiveness. Goldhaber, et al., report that the effect sizes of value-added in math and reading are consistent with the literature published from other resources, such as the Bill & Melinda Gates Foundation in 2011 (p. 220). One caution to the reader would be to understand that the data sets used in the study were not guaranteed to be exact matches. For example, on each student’s test is listed a teacher who may or may not have been the child’s teacher as others may have proctored the tests (p. 219). In fact, a report from the National Education Policy Center cautions readers of such claims noting that studies are not randomized nor sufficiently validated (Ballou & University of Colorado at Boulder, National Education Policy Center, 2012).

In sum, common sense and recent literature recommend that a student’s future is likely predicated, in part, on having a succession of effective teachers. Might the notorious achievement gap be reduced if an effective teacher was placed in every classroom where
disadvantage children attend (Pretorius, 2012)? The remainder of this chapter will identify research describing the qualities of effective teachers, teacher effectiveness models, and the hiring practices undertaken by schools to select the most effective candidates.

**Exemplary teacher qualities and teacher effectiveness**

Wong and Wong (2011) argued that effective teaching is not a mystery. “Effectiveness is identifiable, teachable and implementable.” Teachers who value children and wish to create close caring relationships were seen as effective (Butler, 2012). Butler reported on two studies that extended her earlier work to measure achievement goals for teaching. In the first study, 530 teachers across all grade levels in 31 Israeli school districts completed two open-ended surveys, one at the beginning of the year and one at the end of the school year. Of these, 73 teachers of grades 7, 8 and 9 and their students (n=1790) were selected for the second study designed to investigate approaches to instruction. Significant correlations were found with student perceptions of teacher relation goals and the teachers’ self-report of their commitment to their students. Conversely, teacher reports of mastery goals were significantly correlated with students’ perceptions of social support. She summarized results of both studies to conclude that teachers who value creating close and supportive relationships with students is positively correlated with good teaching (p.738).

Some of the characteristics of accomplished teachers fell in the domain of qualitative descriptors. Confident, committed, positive, friendly, warm and open: these are the ideals of many hiring managers (Ziebarth-Bovill et al., 2012). These coupled with intelligence, strong content knowledge, an ability to match child development characteristics with instructional strategies completed an overall sense of effective instructors (Mason & Schroeder, 2010; Pretorius, 2012; Ziebarth-Bovill et al., 2012). For example, in the Ziebarth-Bovill study of four-
year teacher education graduates of the University of Nebraska, teacher candidates must demonstrate proficiency in eight areas. The eight areas deemed important to effective teaching by the University are knowledge of: standards, assessment and evaluation, self-reflection and self-assessment, instructional planning, instructional methods, professional responsibility, classroom management, and collaborating with other teachers. 143 hiring officials, teacher candidates, cooperating teachers, supervising teachers rated whether those items on the University rubric were important qualities of first year teachers. In this part of the study, all agreed. However, in the second part of the study the participants were asked to itemize up to five factors that might distinguish one candidate over another. The researchers noted disagreement between the responding groups. Hiring officials cited enthusiasm for teaching and staff collaboration equally important. Teacher candidates cited prior classroom experience as the most important quality when all other proficiencies were met. Cooperating teachers noted the ability to form positive relationships as the most essential when all other qualities were equal. Finally, university supervisors noted both enthusiasm for teaching and motivational skills as equally important. It bears mention that hiring officials and teacher candidates agreed upon four areas in their top eight: positive personality traits, professionalism, enthusiasm, and management skills, noting that three of the four are “soft” or “strategic” skills that are not easily measured on an objective test of knowledge.

Of these areas, (Mason & Schroeder, 2010) noted in their research the importance of enthusiasm in hiring teachers. In their mixed-method study of 60 Wisconsin principals, the researchers asked open-ended questions related to their hiring practices which were then coded for common themes. Of all of the responses, personal characteristics, such as excitement, appearance, confidence and a love of children were most highly rated (p. 190). In the
quantitative component of their research, principals rated elements of the hiring process for efficiencies.

In another study testing the perceptions of selecting teachers for permanent positions, 68 administrators across 12 states and Washington, D. C. rated 23 items commonly associated with the hiring process (Supon & Ryland, 2010). The study was conceived by researchers at Bloomsburg University and validated with a panel of experts. The outcome of the study confirmed the results of many others researching the hiring of effective teachers. Again, the theme of making a difference in a child’s life emerged as the most important intangible quality, followed by enthusiasm, positive outlook, student-centered disposition, ability to identify with diverse populations, and content knowledge. Interestingly, the administrators rated the quality of the perfunctory essay low, with only <10% indicating it holds any relative importance.

The Pygmalion effect refers to “the effects of interpersonal expectancies, that is, the finding that what one person expects of another can come to serve as a self-fulfilling prophecy” (Friedrich et al., 2015). In this study, data from 73 fifth grade classes were collected and two multi-level regression analyses were conducted for the following variables: teacher expectancies of math competencies of their students and their students’ math self-concepts. The findings revealed that teachers’ expectations significantly predicted both their students’ math achievement test scores and math grades. The association between teachers’ expectancies of their students’ competences and students’ achievements were partially mediated by students’ self-concept in math for the math-grade outcome but not for the math-test outcome. The study also found significant associations between teachers’ expectancies and students’ self-concept, including a significant direct effect of students’ self-concept on students’ achievement.
Sorhagen further supported this notion in his study of how early childhood estimates of future achievement disproportionately affected children of poverty (Sorhagen, 2013). He wrote:

Using data from a 10-site, longitudinal study of U.S. children, the present study shows that students’ academic achievements in high school are affected by early teacher expectations, such that high school students whose first-grade teachers underestimated their abilities performed significantly worse on standardized tests of math, reading comprehension, vocabulary knowledge and verbal reasoning than would have been predicted on the basis of their early test scores. Conversely, when early abilities were overestimated, high school students performed better than expected. The findings of the present study demonstrate that misperceptions of abilities early in students’ schooling continue to exert an effect on academic achievement 10 years later (p. 472).

Interestingly, overestimation of abilities benefited low-income children more, which, the author contends, may help define policies to reduce to persistent achievement gap between students in historically underperforming groups and their majority group peers. This research, in part, supported the intuitive aspects of teacher selection that were previously identified by hiring officials as one might extrapolate that inherent in a teacher’s love of the child is the expectation for the child to succeed.

“Research has repeatedly shown that observable teacher characteristics, including experience and academic proficiency, are poor predictors of teachers’ impact on student learning (Steele, Pepper, Springer, & Lockwood, 2015, p. 1). According to Chingos and Peterson, neither holding a college major in education nor acquiring a master’s degree is correlated with elementary and middle school teaching effectiveness, regardless of the university at which the degree was earned (Chingos & Peterson, 2011). In their study of Florida teachers, experience
played a positive role in effectiveness for a few years after their first year, but there was also evidence, particularly late in their careers, that some teachers became less effective over time. 

The data for this study came from the Florida Department of Education Data Warehouse and included reading and math data for students in grades four through eight. Administrative data on student, teacher and school characteristics were made available to the researchers. Findings, in general included that while National Board Certification (NCATE) was positively correlated with achievement in both math and reading in the elementary and middle school levels, but the differences were minor ranging from 0.02 to 0.03 student-level standard deviations, which is about 25–30% of a standard deviation in teacher effectiveness in the elementary grades and 40–60% of a standard deviation in the middle school grades (p. 456). The researchers summarized:

It is easier to pick a good teacher than to train teachers to make them more effective. NBPTS certification identifies more effective teachers, but its process of selecting them (which involves extensive self-examination of teaching strategies) appears not to have additional value. Masters’ degrees appear to have little impact. More generally, we find little difference in the apparent effectiveness of attending a more selective university or, indeed, in having majored in any specific Florida university teacher training program. We also find that the on-the-job training that teachers receive with each year of experience on the job to be fairly modest and that it may even turn downward at some point later in their careers (Chingos & Peterson, 2011, p. 464).

Additional literature confirmed that holding a master’s degree continues to be a poor predictor of teacher effectiveness according to a policy study of current research by Walsh and O’Tracy (2005).
While a teacher’s master’s degree may not have predictive value in student achievement, a study involving 318 teachers serving 19 “hard to staff” secondary schools in Dallas determined the extent to which teacher’s academic and professional characteristics predicted their effectiveness (Leake, 2013). “Teachers’ college transcripts, service records, and district records of classroom assignments are used to examine undergraduate content and pedagogy courses, graduate work, and professional experience; the district’s own value-added indices are utilized as the measure of teacher effectiveness (p. v).” Value added indices or measures (VAMs) are defined by Mathematica, a company contracted by the Pennsylvania Department of Education to create VAM accountability measures for the teacher effectiveness project, as an estimate of an educator’s or a school’s contribution to student growth. (Lipscomb, Chiang, Gill, & Mathematica, 2012) According to the research brief, VAMs are:

the actual level of achievement demonstrated by an educator’s students is compared to the level that would be predicted after accounting for students’ own prior achievement histories and factors such as the characteristics of their family backgrounds and peers. The differential amount (above or below zero) is averaged across students taught by each educator and attributed to educators as their contribution to achievement. VAMs measure relative teacher performance based on the assessments that are used in the models. The value of VAMs depends in significant part on the validity of the underlying student assessments in capturing what students ought to be learning and the capacity of the tests to allow VAMs to capture meaningful distinctions in achievement. In principle, VAMs can be applied to any quantifiable measure of student outcomes. As measure of educator quality, a VAM’s fairness depends on whether the method successfully removes influences outside an educator’s control (Lipscomb et al., 2012, p.vi).
From the school year 2002-2003 to the school year 2005-2006, student data was collected for the teachers included in the study. Leake established fixed effects for student groups by delineating their inclusion in various subgroups, such as English Language Learner proficiency, socio-economic status, gender, ethnicity, and prior achievement scores (p. 18). Teachers were ranked into quintiles according to prior Classroom Effect Indices (CEIs), with 144 teachers consistently ranked in the bottom two quintile, 70 teachers in the top two quintiles, and 37 teachers who fell in the middle or third quintile. According to Leake’s study (2013), several indicators correlate with effective teachers: National Board Certification, SAT scores, licensure exams, experience, number of subject-related courses, and writing samples, though at varying degrees of effect sizes. Academic characteristics have a small to moderate effect on CEI scores. Undergraduate grade point averages (GPA) in the content in which the teacher teaches was a significant positive predictor of teacher effectiveness. Interestingly, the higher the GPA, the more it had an effect on CEI scores. Also noteworthy was the finding that having a major in the content was not a significant factor in mean CEI scores. More interestingly, while earning a master’s degree does not correlate with increased teacher effectiveness, a higher GPA in those graduate classes was a significant predictor of increased CEI scores. Conversely, the relationship between GPA in undergraduate educational coursework and mean CEI scores is negative (p. 49).

Teacher credentials have been studied by numerous researchers and organizations seeking to find ways to increase student achievement. In one such review of studies, Walsh and O’Tracy (2005) noted that teachers with four to six courses in their content major, specifically math and science, made more effective teachers. Additionally, they reported that a teacher’s level of literacy as measured by vocabulary and other standardized tests of literacy affected students’ achievement more than any other reportable indicator, such as certification, experience,
and prior professional development (p.8). They further contended that their findings were based on “numerous robust studies spanning many decades” all of which concluded that a teacher’s level of literacy is a strong predictor of student achievement (Walsh & O’Tracy, 2005). In support of their conclusion, they cited a recent North Carolina study indicating that distinguished National Board-certified teachers consistently had higher average scores on licensing exams, the SAT, and the GRE (p. 8). Their review of studies did note that no study has yet been completed that correlates licensing exam scores to teacher effectiveness.

In a dissertation designed to answer questions about how districts recruit and hire proficient teachers, Holcomb (2009) focused on teachers’ and administrators’ experiences as well as qualities administrators used to identify successful candidates. Discussions on the results of the process administrators used to hire and the inherent barriers will be discussed under a separate heading. In this study of 48 teachers identified by their administrators as effective and 10 principals, several common themes emerged (Holtom, 2009). Using the Patton qualitative interviewing model, all interviewees were asked the same open-ended questions, and their responses were coded for similar themes. Additionally, the participants answered a 22 question survey with most questions using a ranked or Likert scale configuration (p. 45). A love and genuine concern for children emerged as the top attribute critical to the principals hiring new teachers (p. 53). Second, the study found that administrators wanted “team players” who would “fit” in their organization. Several administrators noted that “personality and behavior traits were difficult to change in adults, but classroom skills like classroom management and content knowledge could be taught and developed.” Holtom’s research corroborates the findings from the research studies previously reported in this chapter about what hiring officials value in teachers.
While classroom management was not noted in previously reviewed studies to be an important factor in the hiring of effective teachers, a 2014 study by Goldhaber, et al. found that the coefficient for it is relatively large. In fact, it is the only significant coefficient (at .60) for reading. Flexibility and instructional skills were also significant for math (p. 20). Interestingly, the researchers of the study cited the U.S. Department of Education statistic (1997) noting that certification and education were not significant indicators of effectiveness for reading or math. Similarly, in another study led by Goldhaber (Goldhaber, Liddle, & Theobald, 2013) the effectiveness of typically credentialed teachers was not a predictor of student achievement when one accounts for other factors (p. 42). The 2014 study did show that student achievement for first year teachers relative to second year teachers was about 0.03-0.06 standard deviations lower on the state assessment, similar to estimates from the literature from Rockoff, in 2004; Rivkin, Hanushek, and Kain from 2005; Clotfelter, Ladd, and Vigdor from 2006; Boyd et al. from 2010; and Goldhaber & Hansen in 2013 (Goldhaber, D., Grout, C., and Huntington-Klein, N., 2014 and Donaldson, 2013).

Another study sought to identify causal indicators of student achievement focused on student and teacher attendance rates (Roby, 2013). Roby collected data from the Ohio Department of Education website (ODE, 2012) and chose a total of 60 schools for the study: the bottom 30 schools for teacher attendance and the top 30 schools for teacher attendance. Descriptive statistics were reported for average attendance rates and adequate yearly progress towards meeting achievement standards, and t-tests were conducted to report significance. The study found that schools with the lowest attendance, on average, met approximately 20 percent of the academic standards while schools with the highest teacher attendance met 91 percent of all standards (p. 204).
High self-efficacy, in one study by Holzberger, Philipp, and Kunter purported to increase achievement as well as an increase in classroom management skills (Holzberger, Philipp, & Kunter, 2013). The authors cited several cross-sectional studies that showed positive correlations between teachers’ self-efficacy and several variables that may predict a teacher’s effectiveness. 155 secondary math teachers and a matched set of almost 3500 9th grade students completed survey instruments at two time periods one year apart. “The data were derived from the study of “Professional Competence of Teachers, Cognitively Activating Instruction, and the Development of Students’ Mathematical Literacy (COACTIV). Participants in COACTIV were a subsample of the nationally representative sample of Grade 9 students participating in PISA and their mathematics teachers.” (p. 776) Holzberger, et al. found that high quality instruction led to an increase in teacher’s self-efficacy. More importantly, in classes where students reported more cognitive activation and a higher level of classroom management were positively correlated to increased self-efficacy for teachers. Through their analysis, the authors contend that teacher self-efficacy increases with student perceptions of instructional quality (Holzberger et al., 2013).

In another, complementary study, enthusiasm in the teacher positively predicted a student’s self-efficacy (Zhang, 2014). Results of the regression analysis of the responses to a survey instrument administered to 165 college students with a mean age of 19.37 indicated that teacher enthusiasm effectively predicts not only self-efficacy, but also student engagement (p. 51). These two qualities may be important when compiling qualities of effective teachers as noted by several researchers (Cranston, 2012; Holzberger et al., 2013; Mason & Schroeder, 2010; Zhang, 2014; Ziebarth-Bovill et al., 2012).
Charlotte Danielson’s Teacher Effectiveness Model

Charlotte Danielson, in her Framework for Teaching, provides an opportunity for hiring teams to discuss attributes of potential candidates against four rubrics designed to bring science to the art of teaching (Viviano, 2012). Pennsylvania, along with many other states, including Arizona, Arkansas, Delaware, Illinois, Iowa*, Louisiana, New York, Oklahoma, South Dakota*, and Washington*, adopted or is piloting* the Danielson model for teacher supervision. While the Danielson Group claims the Framework is research-based and provides a structure for evaluating teachers (Danielson, 2012) as well as inviting teachers to self-assess their own practice, this researcher cannot find documentation of any studies that helped create the model. The only reference to prior work that Danielson provides is noted in the ante pages of the evaluation instrument (Danielson, 2011). Two notations provide a clue:

The Framework for Teaching identifies those aspects of a teacher's responsibilities that have been documented through empirical studies and theoretical research as promoting improved student learning (p. iv), and

It is built on the research compiled by ETS in its development of Praxis III: Classroom Performance Assessments, an observation-based evaluation of first-year teachers that is used for the purpose of licensing. The Framework extended this work (examining current research) to capture the skills of teaching required not only by novice teachers but by experienced practitioners as well (p. iv).

However, in Murray’s dissertation on the usefulness of the framework to evaluate student achievement, she wrote that framework is grounded in Shulman’s (1987) research on pedagogical content knowledge and the Interstate New Teacher Assessment and Support Consortium (INTASC, 1992) standards (Murray, 2014). To the extent that it addressed the
qualities Danielson, and subsequently, the many states that adopted her model identified as important in a teacher, the Framework should be a useful tool in helping to identify promising candidates.

In Pennsylvania, legislation was passed in 2012 creating a statewide evaluation system for educators. This system was designed to rate teachers using the Danielson Framework as well as incorporate multiple levels of data (aggregate building data, teacher specific data, and accomplishment of student learning objectives, with student growth data included where possible.) Educators are rated in one of four categories based on the compilation of the individual rating factors (distinguished, proficient, needs improvement, and failing.) In as much as the original purpose of the Framework for Teaching (FFT) was to be formative, intended to help teachers improve their practice, there now exists a conflict of interest (Murray, 2014). In fact, the FFT as a model was based on a constructivist view of student learning with the provision of useful feedback for the teacher at its core (Murray, 2014). The model includes four domains of teaching that Danielson identifies as: planning and preparation, the classroom environment, instructional delivery, and professional responsibilities. These domains contain 22 components and 76 elements or indices of effective teaching (Danielson, 2011). In Murray’s study of the perceptions of the new teacher evaluation system in Pennsylvania and its impact on student achievement (2014), she writes that the FFT as an evaluation tool is positively associated with student achievement gains (p. 6). She does note that strong teacher quality does not always guarantee effective teaching (p. 7).

Cited by another researcher (Wiebers, 2014) are several studies correlating teachers who score higher on the FFT with greater gains in student achievement (Wiebers, 2014). Additionally, she noted a 2011 study conducted by Chicago School Research that found a strong
significant relationship between the components of Domain 2 (Classroom Environment) and Domain 3 (Instruction) and student achievement in both math and reading. The sample data was drawn from standardized tests administered to students in grades 4-8 for the years 2008-2010.

In a meta-analysis study of generic qualities of effective instruction, Kyriakides, Christoforou, & Charalambous, (2013) sought to find which, if any, factors had a strong positive effect on student learning. From the 167 studies that dealt with teacher input and student outcome, seven teacher factors held strong positive effects on student learning. They used the Fisher’s Z transformation of the correlation coefficient and transformed the effect size measures to correlations where they were not initially present. Kyriakides, et al., omitted two strong factors from the results due to small sample sizes, but they are represented in Table 2 along with the matching domain from Danielson’s FFT for comparison. Most of the factors fell within Danielson’s domains 2 and 3 (Classroom Environment and Instruction.) (Danielson, 2011)
Table 2

*Teacher factors leading to strong positive effects on student learning*

<table>
<thead>
<tr>
<th>Teacher factors</th>
<th>Avg. effect size</th>
<th>Total # studies</th>
<th>Domain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structuring the lesson</td>
<td>0.36</td>
<td>36</td>
<td>1</td>
</tr>
<tr>
<td>Time management</td>
<td>0.35</td>
<td>30</td>
<td>1</td>
</tr>
<tr>
<td>Orientation or purpose*</td>
<td>0.36</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>Classroom learning</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>environment</td>
<td>0.45</td>
<td>102</td>
<td>2</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>0.47</td>
<td>27</td>
<td>2</td>
</tr>
<tr>
<td>Assessment</td>
<td>0.34</td>
<td>32</td>
<td>3</td>
</tr>
<tr>
<td>Questioning*</td>
<td>0.34</td>
<td>15</td>
<td>3</td>
</tr>
<tr>
<td>Modeling</td>
<td>0.41</td>
<td>53</td>
<td>3</td>
</tr>
<tr>
<td>Application</td>
<td>0.18</td>
<td>28</td>
<td>3</td>
</tr>
<tr>
<td>Concept mapping</td>
<td>0.75</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

*Adapted from Kyriakides, Christoforou, & Charalambous, (2013)*

*Eliminated from study due to small sample size.*
Washington State undertook a massive campaign to increase its level of National Board Certified teachers, and thus transform teaching (National Board for Professional Teaching Standards, 2010). In a study of the impact of National Board Certified Teachers (NBCTs) in Kentucky, Boulden noted that the state implemented an annual bonus of $7000 for teachers completing the program (Boulden, 2011). Of the peer reviewed studies in her literature review, only 4 showed some statistical significance on student learning with NBCTs. Her study corroborated the mixed results of previous studies. She used results from the NWEA MAPS assessment for students in grades 2-5 and compared the scores of teachers with NBCTs (n=66) to those without the certification (n=1440). She used t-tests to determine if the differences in means were statistically significant. She wrote that students in 2nd and 3rd grade confirmed a statistically significant higher mean, while in the 4th and 5th grades, the mean differences were not statistically significant at all (p. 73). As Goldhaber, et al., wrote in 2005, the National Board for Professional Teaching Standards identifies more effective teaching candidates than those who do not apply to the program; however, there continues to be no evidence that the process improves teacher effectiveness (Goldhaber, Anthony, & Urban Inst., 2005).

How then do the factors for NBCTs compare to the factors in Danielson’s FFT? Viviano undertook a study to find out (Viviano, 2012). First, Danielson’s FFT served as an agreed upon rubric that can guide what a teacher should know and be able to do. It can guide discussions about pedagogy among educational professionals. Of late, as noted previously in this chapter, it has become a preferred component in teacher evaluation. By contrast, the NBPTS is a certificate achieved by volunteers willing to undertake the ten assessments that comprise the program. As there is little evidence that students of NBCTs consistently achieve more than students of teachers who are not NBCTs (Chingos & Peterson, 2011; Goldhaber et al., 2005), and there is
some evidence that teachers rated highly on the Danielson FFT do raise student achievement scores (Murray, 2014; Wiebers, 2014; Yannucci, 2014), this is likely a debate that requires more thorough and recent scrutiny.

High-stakes testing, an outcome of No Child Left Behind (2002) provided a source of data for governments to ascertain the benefits of public education (Wiliam, 2010). The type and purpose of testing seems to play an important role for interpreting the data. Students required to pass an exam, such as those in New York and North Carolina, achieved at a higher rate on subsequent internationally benchmarked exams than those that did not tie the high stakes to individual student achievement (Wiliam, 2010). High stakes tied to teacher accountability present a different perspective.

Dylan Wiliam writes:

*There is evidence that high-stakes accountability testing makes it harder to keep teachers (Clotfelter, Ladd, Vigdor, & Diaz, 2003), that teachers of disadvantaged students are likely to experience greater pressure to improve their test scores and to focus on test content than teachers of more advantaged students (Herman, Abedi, & Golan, 1994), as well as a host of other unintended outcomes (p. 37).*

In a recent policy study, Shepard (2013) summarized her work on validity of test design by remarking that, “Test validity depends on test use. When a test is used as an educational reform, the theory of action behind the reform should be made explicit and that theory or series of claims and assumptions is what should be examined in the validity evaluation.” (Shepard, 2013) The recent accountability mandates from No Child Left Behind (2002) increased the amount of testing and the severity of consequences for poor results. She further comments that the use of these value-added accountability measures suffer from a lack of validity studies. For
example, accountability tests cover too broad a range of content to be of any use at the child-specific level. To be useful as policy tools, she writes, these tests must be standardized for content, administration methods, and time, which they are not. While value-added measures purported to be useful in determining what effect the teacher had on the achievement of her students, it was not possible to discern what the teacher added from the collective effect of interacting with motivated or disruptive peers (Shepard, 2013). Additionally, these type of tests suffered from a floor and ceiling effect in that students who took the test and were out of range of the test’s precision did not have sufficient items to measure growth (Shepard, 2013). Shepard concluded with a call to action citing that a “far better way to use multiple sources of evidence would be to triangulate, granting extra credibility to individuals judged ineffective (or effective) by multiple independent indicators. Test validity depends on use, and to make policy decisions or build a case for educational reform distorts the validity of tests when they are also used to determine a teacher’s ability to teach.

**Research on the screening processes used to hire teachers**

Teacher candidates submit resumes and applications and hope that hiring managers find something of merit in their packet so they might advance to the interview phase. Research on the screening process yielded mixed results (Citarelli, 2006; Clement, 2013; Cranston, 2012; Supon & Ryland, 2010; Weisberg et al., 2009; Ziebarth-Bovill et al., 2012). Some teams invite individual principals to review the applications. Some utilize an on-line database and sort for varying criteria. According to several studies, the best practice for this initial screening utilized a well-trained multidisciplinary team and a predetermined set of descriptors for reducing the pool to manageable numbers (Bolz, 2009; Boody, 2009; Borden, 2009; Mason & Schroeder, 2010; Peterson, 2002). Efficient decisions were made using a hiring tool, often a rating scale (Dyck-
Stoddard, 2006). The applications and resumes were prepared by the individual seeking a position and thus leaned toward presenting the candidate in the most favorable light. Aside from the obvious quantitative data found in years of experience, grade point averages and testing scores, teams often reviewed letters of recommendation.

The researchers associated with the New Teacher Project report on a common theme found in many studies: plan to hire early (Levin & Quinn, 2003; Weisberg et al., 2009). Cranston concurs (p. 22) and goes further by writing that the timelines for hiring often give little time to make a good decision (Cranston, 2012). In Clement’s work, Hiring Good Colleagues: What You Need to Know about Hiring Good Teachers, she recommends a district create a hiring rubric for evaluating application (Clement, 2013). Acquisition of reliable and valid information on teacher candidates is often associated with greater cost (Mason & Schroeder, 2010). They write that schools can employ low cost screening tools and invest in higher cost items, such as reference checks, interviews, teacher assessments, and demonstration lessons after the pool is culled to fewer, more manageable candidates (p. 187). Larger school districts tend to centralize the screening process while rural schools tend to depend on the principal to complete the hiring process (p. 188). Spokane, for example, uses a bi-level system for screening. First, a 21 point scale is used to rate resumes for experience and recommendations, then 60 point tool reviews those documents looking for evidence of attributes such as flexibility, experience, and instructional skills (Goldhaber, et al., 2014). Goldhaber cautions hiring officials with the use of a screening tool as it is only marginally effective at identifying teacher quality and may in fact remove minority candidates who do not meet a certain cut score (Goldhaber & Hansen, 2010).

In Mason and Schroeder’s study (2010), 38 percent of respondents mentioned that in their screening they looked for proper certification followed by 27 percent looking for candidates with
years of experience. They further note that verbal references were valued most highly while portfolios were the lowest rated artifact used in the screening process.

Several studies cited the challenges of teacher mobility and seniority as barriers to hiring qualified candidates in a timely manner (Donaldson, 2013; Steele et al., 2015). Donaldson’s work, in particular, used a qualitative research design to interview principals about their hiring practices in context with their work on increasing teacher effectiveness. In her findings, she reports that principals also cited the lack of quality candidates as a major barrier to hiring effective teachers.

One study offered evidence that some school districts actively recruited candidates by going to job fairs, being present at universities, belonging to a consortium, and using technology to its fullest (Citarelli, 2006). In his qualitative study of high performing districts, Citarelli noted that some school districts used the Teacher Insight Assessment published by Gallup as a way to learn about someone’s interest and ability to teach. Gallup provided the following information about the Teacher Insight Assessment.

*The Teacher Insight is an automated online interview used by many school districts to help them identify the best potential teachers. If you ever had a personal interview for a job, the interviewer asked a variety of questions to get to know you better and determine if you would be a good fit for the job. Gallup’s Teacher Insight is much the same, but with several advantages. Teacher Insight is fair because all applicants are asked exactly the same questions and they are evaluated exactly the same way. The questions have been thoroughly researched and tested to be sure they identify potentially superior teachers. The Teacher Insight interview development study, originally completed in January 2002, demonstrated content, construct, and criterion-related validity as well.*
as fairness across Equal Employment Opportunity Commission (EEOC) classifications of race, gender, and age. Subsequent analysis of candidate scores indicates similar results and interview fairness across groups. A new study was conducted in 2010, using a revised assessment based on value-added student growth and focus groups with teachers who demonstrated exceptionally high student growth numbers. From this research, a new version of TeacherInsight was released in early 2011. TeacherInsight does not replace personal interviews, but by efficiently identifying the best potential teachers, district representatives are able to spend more time with these promising candidates and conduct more productive personal interviews.

A third theme emerged from his study, in which he used a semi-structured interview process to answer his research questions. Several of the respondents commented they use a brief telephone interview as a screening mechanism. This interview generally consisted of behavior-based questions in an effort to learn how candidates would behave in certain situations (p. 64).

Research on letters of recommendation yielded varying results, including obvious polarity in their usefulness (Aamodt & Bryan, 1993; Knouse, 1983; Nicklin & Roch, 2009). Practitioners do not agree on their usefulness, with some calling for an end to the practice in favor of more objective rating scales (Nicklin & Roch, 2009). In a 1962 study, Peres and Garcia attempted to codify, thus quantify, common themes in letters of reference in order to better predict performance. To that end, they categorized the adjectives found in the thousands of letters they examined and placed them in one of five distinct categories: dependability-reliability, consideration-cooperation, mental agility, urbanity, and vigor (Aamodt & Bryan, 1993). While some of the terms may seem lost in translation, essentially they are the dispositions and the intellectual capacity to effectively instruct young people. Specifically, urbanity refers to the
refinement of manner and polished courtesy of the individual (http://ahdictionary.com/, 2013), while mental agility refers to the ability to think, draw conclusions, and quickly adapt to changing circumstances.

When hiring committees examine letters of recommendation, they do so often with untrained eyes and particular biases noted in the research (Aamodt & Bryan, 1993; Knouse, 1983). Accuracy in letters is often diluted as the person writing the letter may not know the applicant well, as in the case of professors and student teachers. Women and administrators of color often grant leniency to the applicant when the letter writer uses vague, but positive adjectives. Further, reliability of letter writers has been noted to be low; in particular, two letters regarding a single applicant may not yield similar evidence of the applicant’s ability to effectively instruct a class. These factors contribute to the notion that letters of reference in and of themselves pose no reliable method to predict successful teacher performance (Aamodt & Bryan, 1993; Knouse, 1983; Nicklin & Roch, 2009). However, when letters of recommendation provide specificity, they provide a level of validity to readers (Knouse, 1983).

In the study conducted by Aamodt and Bryan (1993), they attempted to validate the earlier methods espoused by Peres and Garcia (1962). They found that an employer can effectively dissect letters of reference in order to make use of them. First, employers would underline the descriptive words the letter writer would use, place each trait into one of the five categories, total the words in each of the five categories, then determine how the profile measures up to the preferred candidate profile of the employer. This methodology was revealed to be an effective tool for hiring committees.

However, other studies question the utility of letters of recommendation, hence the polarity of research. Practitioners in the Nicklin and Roch study (2009) determined that it is
possible to hire the best candidates without the benefit of letters of recommendation. In fact, they were more likely to view them as inflated estimations of the candidate’s potential and suggested the practice of collecting them discontinue. As many considered these letters a rite of passage and of little value in the hiring process, the recommendation to instead request standardized rating forms in lieu of the letters is one of merit that honors both the flaws and the traditions of the letters. (Nicklin & Roch, 2009).

The components of the letters categorized by Peres and Garcia (1962) complement the dispositional qualities of pre-service teachers. Indeed, the attitudes and beliefs of successful pre-service teachers as defined by The National Council for the Accreditation of Teacher Education (NCATE) can be neatly enfolded in the five categories of traits that can predict successful job performance on a letter of recommendation (see Table 3). According to the NCATE (2002) dispositions encompass the values, commitments, and professional ethics that influence behaviors towards students…. (Johnston et al., 2011).
Table 3

*Cross reference dispositions and traits.*

<table>
<thead>
<tr>
<th>Dependability-reliability</th>
<th>Consideration-cooperation</th>
<th>Mental agility</th>
<th>Urbanity</th>
<th>Vigor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrates accountability for their students’ learning and development</td>
<td>Committed to ensuring all children have the opportunity to achieve to the best of their potential</td>
<td>Adjusts or revises lessons to meet student needs and/or changing circumstances</td>
<td>Works professionally with colleagues, parents, peers, and community agencies</td>
<td>Has a passion for teaching and demonstrates enthusiasm for working with children</td>
</tr>
<tr>
<td>Demonstrates commitment to the whole child</td>
<td>Treats all students equally and fairly, while respecting individual differences</td>
<td>Recognizes the value of intrinsic motivation</td>
<td></td>
<td>Realizes learning is an ongoing process and is committed to reflection</td>
</tr>
<tr>
<td>Demonstrates integrity and honesty and meets ethical expectations</td>
<td>Appreciates and values human diversity</td>
<td>Knowledge and pedagogical skills</td>
<td></td>
<td>Persists in helping children become lifelong learners</td>
</tr>
</tbody>
</table>

Adapted from the work of Peres and Garcia (1962) and NCATE (2002)
With research lending towards categorizing letters of recommendation, or providing rating scales based on the traits of effective teachers, and evidence that the presence of positive dispositions of teachers can predict, to some degree, successful teaching candidates, determining whether any of these characteristics align with the Pennsylvania Standard Application for Teaching makes sense for hiring committees who rely on these applications to screen for the most promising employees. A cursory cross-reference of the traits and dispositions previously discussed with the Standard Application reveal only the most basic connections. On the application, teacher candidates are prompted to provide evidence of their academic and pedagogical prowess in the form of grade point averages in their majors, as well as scores on national qualifying exams. Prospective employees are required to submit an essay utilizing one of five prepared topics, which may, depending on the topic chosen, provide additional insight into the passion and pedagogy of the candidate. Finally, references are requested, but depending on the hiring team’s ability to decipher from the reference the quality of candidate, these, too, may provide little security that a candidate is promising.

In spite of the research has been reviewed on the hiring processes of schools, many studies note that hiring a known commodity or hiring on a gut feeling often precludes any of the quantifiable measures that research purports to be important to effective teaching (Donaldson, 2013; Holtom, 2009b; Kendrick & Olson, 2012; Strauss, Bowes, Marks, & Plesko, 2000; Ziebarth-Bovill et al., 2012). Kendrick, et al. note that the more intuitive a person feels, the more likely they are to trust their gut reactions. They write that people who possess feelings of expertise in their field and will likely see their “gut reactions” as valid and appropriate sources of knowledge (Kendrick & Olson, 2012). In the Cranston study (2012), principals are noted as playing a crucial role in assessing teacher candidates’ ability to teach, and included in that
judgment is whether or not the teacher matches their beliefs of whether they would be a good teacher (Cranston, 2012). Hiring officials or principals are “looking for the intangibles found in all effective teachers (Ziebarth-Bovill et al., 2012). Principals from rural areas, according to Mason and Schroeder, often focus more on “fit factors” than do their counterparts from urban schools (Mason & Schroeder, 2010). In their study, they found that the principals they studied preferred personal attributes over professional attributes, though they did utilize them to screen candidates. These notions are further supported in the work of Supon and Ryland (2010). They cite positive personal characteristics as important and their ability to “fit” in the culture of a school as important to hiring decisions. Holtom’s (2009) work stands to support these ideas: that administrators hire teachers that will “fit” in a grade level or team (p. 54) and that frequently they hired someone they knew (Holtom, 2009).

How then do schools with little time to spare, and frequently diminishing resources, use the application to their advantage? Can a hiring rubric applied to the application and interview process be an effective tool in selecting the candidates with the most promise? Dyck authored a study that utilizes a tool which shows promise (Dyck-Stoddard, 2006). In this study, two groups of first year teachers were identified as either highly proficient (n=20) or least proficient (n=20). Pearson Correlation Coefficients were created on 32 pre-service variables to determine if there were any statistically significant differences. Of these 32, eleven with significant correlations were selected as factors in a Discriminant Function Analysis to develop a predictive equation of effective first year teachers. This calculation predicted first-year teacher proficiency 92.9% of the time. These eleven statistically significant variables include, in order of significance: GPA in language or literature courses, the practicum evaluation, the number of social science courses, the GPA for the required math methods courses, the assessment course grade, final GPA, natural
science GPA, mathematics GPA, the number of educational psychology courses, the Interview total score, and the reading methods GPA. While the sample size was small, these results may be used to better understand the elements of the Pennsylvania common application for teaching and the focus of this study.

**Summary**

In summary, several studies concluded that good teachers do matter. In fact, the literature states that teacher quality is the single most important controllable variable in student achievement. Hanushek (2006) writes, “The magnitude of estimated differences in teacher quality is impressive (p. 1068)”. Hanushek (1992) showed that teachers near the top of the quality distribution can get an entire year’s worth of additional learning out of their students compared to those near the bottom. “That is, a good teacher will get a gain of 1.5 grade level equivalents while a bad teacher will get 0.5 year for a single academic year (Hanushek, 2011, p. 1068).” Linda Darling-Hammond (2008) wrote teacher quality can account for up to 64% of the total variance in student outcomes when controlling for race or economic disadvantage. Also in this literature review, elements of effective teaching were highlighted and discussed as variables that contribute to student achievement in multiple studies. Danielson’s Framework for Teaching was presented in context of the research supporting the components of the four domains and their role in student learning. The author cited studies of common hiring practices schools use to identify and employ effective teachers. Finally, a study with promise for future research was summarized for its relevance to this study.
CHAPTER III

RESEARCH DESIGN AND METHODOLOGY

Introduction

Hiring the best available teachers is an administrator’s most important decision. Relevant research on the characteristics of effective teachers clearly provides some guidance, yet the mechanisms for finding these teachers have not been sufficiently studied. This author designed a study that hoped to provide data for Pennsylvania’s administrators to assist in making the best possible decisions about their teachers. The study, employing a mixed method research design included a descriptive study of how administrators screen potential teachers from the Pennsylvania Standard Application for Teachers, which according to Pennsylvania’s Act 107 of 1996 (24 P.S. §12-1204.1, 1996) is required of all applicants, as well as a retrospective policy analysis that addresses how closely the application mirrors the characteristics of effective teachers as noted by research. That policy analysis was framed through the work of Fowler (2009). This study is designed to investigate how well administrators can rely on the application to identify strong teachers.

Research Design

This study utilized a minor retrospective policy analysis that identified how well the application procedures used in Pennsylvania capitalize on the broader research on effective teachers, including the work of Charlotte Danielson and others who have identified key characteristics of effective teachers. In this retrospective policy analysis, the researcher used
information from previously adopted educational policies in Pennsylvania to inform the current research question. Specifically, the researcher examined the parent policy that led to the standard application and determined if there is any connection to the research on teacher effectiveness and how well it correlates to it. Through a series of interviews with administrators’ responsible for hiring teachers in Pennsylvania schools, the author determined how these nine hiring practitioners make sense of the need to balance hiring effective teachers with the information presented in the standard application. This study seeks to identify any gaps in the process, how much these administrators rely on the application for screening potential hires, which components provide the best indicators of effective teachers, and what other methods they use in the potential absence of solid information indicating teacher effectiveness, such as evidence of strong content knowledge or grades in specific content courses, evaluations from prior supervisors addressing the candidate’s ability to effectively engage students and deliver instruction consistent with proficient on the Danielson Framework for Teaching rubric, or factors that indicate the candidate’s ability to increase student achievement.

**Research Questions**

To determine if teacher quality can be effectively screened during the application process, the following questions were addressed.

1. Is there a coherent consistency between the criteria in Pennsylvania policy documents (K-12 Program Framework Guidelines, The Public School Code inclusive of the common application for teaching, Chapter 354, and the Educator Effectiveness Manual) used in hiring effective teachers?

2. How do administrators who screen teacher candidates live with the common application for teaching to screen prospective teacher candidates?
3. What criteria in the standard application do Pennsylvania hiring administrators find most helpful in screening teacher applicants and how well do they align with current research on the qualities of effective teachers?

4. What elements, if any, are missing from the Pennsylvania standard application for teaching that school administrators believe are essential to selecting the best teacher candidates in order to meet the requirements of Charlotte Danielson model?

**Population**

The population used for this study included seven principals, one central office curriculum and instruction supervisor, and one supervisor of special education. All of the subjects participate in hiring decisions for their district and were chosen for their unique perspectives on the process. Of the nine, three were elementary principals, two of those working in suburban districts and one from a rural district. There were two middle school principals, both from suburban districts. There were two from suburban high schools. The special education supervisor works in an urban setting and has experience hiring mainly secondary teachers.

**Sampling**

The researcher used the purposeful sampling method because she was interested in how school districts screen and hire their teachers. On behalf of the researcher, her superintendent attended a county-wide summit to explain the nature of the study and asked for permission to contact principals in their district. After the superintendent gained verbal permission for the researcher to contact them via email, she sent letters of solicitation to southeastern Pennsylvania superintendents requesting permission to contact their principals and central office hiring
administrators. Once permission was received via return email, the researcher followed up by sending 31 invitation emails to those administrators in the ten districts where permission was granted. While the goal was to have a sampling representing a cross-section of urban, suburban and rural school districts, only two hiring managers from urban or rural school districts responded to the researcher’s request. The nine individuals selected to participate in the semi-structured interviews for the qualitative study represented an overall perspective from elementary, middle, and high schools. They consisted of three elementary principals, one supervisor of special education who hires for secondary schools, one supervisor of instruction who hires for secondary schools, two high school principals, and two middle school principals. Their experiences and grade level representation are found in Table 4. For the purposes of the data analysis presented in this study, the names of the interviewees are pseudonyms to protect their anonymity.
Table 4.

Participants in the administrator interviews

<table>
<thead>
<tr>
<th>Participant (pseudonyms)</th>
<th>Hire teachers for which grade levels</th>
<th>Years’ experience (0-5, 5-10, 10-20, 20+)</th>
<th>Approximate number of interviews conducted annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amie, Principal</td>
<td>K-5</td>
<td>5-10</td>
<td>10</td>
</tr>
<tr>
<td>Patricia, Principal</td>
<td>9-12</td>
<td>5-10</td>
<td>5</td>
</tr>
<tr>
<td>Marcus, Principal</td>
<td>9-12</td>
<td>20+</td>
<td>5</td>
</tr>
<tr>
<td>Bella, Supervisor</td>
<td>6-12</td>
<td>10-20</td>
<td>5</td>
</tr>
<tr>
<td>Mindy, Principal</td>
<td>K-5</td>
<td>5-10</td>
<td>20</td>
</tr>
<tr>
<td>Kelly, Supervisor</td>
<td>6-12</td>
<td>0-5</td>
<td>5</td>
</tr>
<tr>
<td>Kim, Principal</td>
<td>6-8</td>
<td>10-20</td>
<td>20</td>
</tr>
<tr>
<td>Sean, Principal</td>
<td>6-8</td>
<td>10-20</td>
<td>20</td>
</tr>
<tr>
<td>Ryan, Principal</td>
<td>K-5</td>
<td>20+</td>
<td>15</td>
</tr>
</tbody>
</table>
After the researcher sent solicitation emails to the potential subjects, she arranged for a mutually convenient time and place for conducting the interviews. Prior to the actual interview, each of the subjects was reminded of their rights as a human subject and signed the consent form approved by the Seton Hall University Institutional Review Board, which along with the letters of solicitation can be found in the appendix.

**Policy Data Sources**

*Policy Documents*

In order to conduct the minor policy analysis, several policy documents found in the legislation codes and on the Pennsylvania Department of Education website were reviewed for relevance and their ability to answer the research questions. The documents selected for analysis are represented in Table 5.
### Table 5.

**Data sources for the policy content analyses**

<table>
<thead>
<tr>
<th>Document</th>
<th>Date published or enacted as law</th>
<th>Type of document</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUBLIC SCHOOL CODE OF 1949 P.L. 30, No. 14 Cl. 24</td>
<td>1949</td>
<td>An Act</td>
</tr>
<tr>
<td>Article I, Sections 111 &amp; 1109, &amp; Chapter 49</td>
<td>2015</td>
<td>An Act</td>
</tr>
<tr>
<td>(subsections of Public School Code specifically related to certifying and hiring teachers)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educator Effectiveness Administrative Manual</td>
<td>2014</td>
<td>Administrative regulation</td>
</tr>
<tr>
<td>Chapter 354: Preparation of Professional Educators</td>
<td>2000</td>
<td>Code</td>
</tr>
</tbody>
</table>
The Public School Code of 1949 explicitly states the Commonwealth’s expectations for the full complement of services required of all public school entities. This law addresses everything from what is to be taught, how school buildings are erected and funded, how school boards must function, to who is to be hired. To further explore how the Commonwealth expects teachers to be certificated and hired, Article I, section 111, chapter 49, and section 1109 are also analyzed in aggregate in this study. These subsections of the public school code identify recent changes to the law governing the hiring individuals who do not have a criminal history, and certification, eligibility, and the hiring of teachers of good moral character in Pennsylvania, respectively. Good moral character, for the purposes of the Pennsylvania Department of Education addresses only criminal complaints and convictions and the certifications issued by the department (PDE, Good Moral Character, FAQs, no date given).

The Educator Effectiveness Administrative Manual contains the regulations explaining how teachers will be evaluated in Pennsylvania. This document provides specific guidance to school administrators for rating teachers, which explicitly states that the Danielson Framework for Teaching will be used for 50% of the teachers’ evaluations.

Chapter 354, a Pennsylvania code, addresses how colleges and universities must select and prepare teacher candidates. This document identifies minimum entry qualifications, such as a GPA of 3.0 and cut scores on various qualifying exams. This code also explains the content of such training programs and the outcomes for each potential educator. Contained in the code are specific skill areas the prospective teacher must develop, such as technology expertise, understanding of how children learn, and collaborative processes. The K-12 Program Framework Guidelines are the operationalized procedures for the legislative guidance found in Chapter 354.
This document describes the professional knowledge, skills, and competencies that K-12 teachers will learn by completing a prescribed sequence of courses (including field placements). In addition to specific requirements and competencies, these guidelines discuss the K-12 program design, professional core rationale, candidate competencies, Pennsylvania Academic Standards and Assessments in a standards-aligned system, faculty, field experiences and student teaching, new teacher support, and an appendix containing the specific requirements for Accommodations and Adaptations for Diverse Learners in Inclusive Settings and Meeting the Needs of English Language Learners. (PDE, no publication date provided).

A detailed review of both documents revealed that they were similar in content, therefore only the original code, Chapter 354, was analyzed for this study.

Additionally, in order to identify criteria by which the policy analyses were conducted, the researcher examined the Pennsylvania School Code (Act 107, 1996) and the standard application for teaching. These were reviewed for alignment to the top ten criteria for hiring effective teachers as determined by their prevalence in the previously cited literature review.

Studies on Effective Teachers

In order to identify the criteria for effective teachers to be used as benchmarks for this study, the researcher conducted a literature search using the key terms: criteria for effective teachers, teacher effectiveness, great teachers, and teacher proficiency. Due to the fact that the Charlotte Danielson model for teacher effectiveness was adopted in the state of Pennsylvania as part of its teacher effectiveness framework, the researcher also used Danielson as a key search term. She limited her search to the 1990’s and more recent since in 1983, the National Commission on
Excellence in Education released its report, now known as “A Nation at Risk” which prompted a host of new research on how to effectively instruct our nation’s youth (Demmert, et al., 1983, and Maloney, et al., 1993). Much of the research known on quality education was conducted in the three decades since that seminal report. Furthermore, in Pennsylvania, policies were adopted to reflect the national concern on effective instruction, including creating legislation regarding the common application and, more recently, adoption of the Danielson model for teacher supervision. The data in this table represent the studies used to identify the most commonly noted terms for use in benchmarking the Pennsylvania policies against. These terms were used in the content analyses of the policy documents reviewed in the policy study as well as in the interview portion of the study. These criteria are represented in Table 6.
<table>
<thead>
<tr>
<th>Characteristic of effective teachers</th>
<th>Source(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Cognitive skills (intelligence, literacy/writing skills, GPA for literature, math, science and social sciences courses)</td>
<td>Aamodt &amp; Bryan, 1993; Bolz, 2009; California Department of Education, 2013; Dyck-Stoddard, 2006; Leake, 2013; Mason &amp; Schroeder, 2010; Walsh &amp; O’Tracy, 2005</td>
</tr>
<tr>
<td>4. Credentials (National Board Certification, 2-10 years of experience, SAT scores, licensure exam scores)</td>
<td>Chingos &amp; Peterson, 2011; Leake, 2013; Walsh &amp; O’Tracy, 2005</td>
</tr>
<tr>
<td>9. Strong content knowledge (High grades in 4-6 content area courses)</td>
<td>Leake, 2013; Mason &amp; Schroeder, 2010; Supon &amp; Ryland, 2010</td>
</tr>
</tbody>
</table>
Data collection

Nine southeastern Pennsylvania hiring managers agreed to respond to a seven item interview either on site or via telephone in order to answer the research questions. The interviews were conducted during the months of March, April, and May of 2016. Prior to the interview, participants were informed of the Consent to Participate in Research form, had the form shared with them, and agreed to be recorded. As eight of the interviews were conducted via telephone at the request of the participant, the consent form was emailed to the interviewees and returned via email or mail. The ninth interview was conducted in person. After the interviews, the recording for each hiring manager was transcribed and emailed to them for review.

They ranged in length from 15 minutes to 30 minutes. Data was stored electronically in a secure site, accessed only by a password in the researcher’s possession. The researcher transcribed those semi-structured interviews verbatim shortly thereafter to provide more opportunity for accuracy. She incorporated the notes she took during the course of the interview in the transcription of them as they provided helpful information when organizing the responses. Each respondent was given a code to identify its author to ensure anonymity.

Instrumentation

The questions to identify the usefulness of the Standard Application for Teaching were designed by the researcher. Validity and reliability were verified by a panel of experts, one director of instruction at a local school district and one professor at a local university. In the summer of 2015, the questions were field-tested on a small group of three hiring managers who were not selected for participation in the study to determine if the questions yielded the
responses needed to answer the research questions. As a result, one question was removed as it was redundant to the initial contact for participation in the study. That question asked if the subject was responsible for hiring teachers at his or her district. One criterion for participation in the study was hiring responsibility, so that question was removed. The question on alternate sources of information was added to the study at the suggestion of the principals who noted they often contact their peers for suggestions on hiring teachers. After the first analytic memo, the researcher used the ‘member-check” strategy with one interviewee to determine if the trends and language used fairly represented their intent. In this way, construct validity is maintained. By cross checking transcripts with a senior researcher from a local university, the research plan and subsequent data was determined to be valid and reliable.

For the interviews, the hiring managers were asked the following questions.

1. What, if any, on-line or electronic tools does your district use to collect and sort teacher applications, such as TalentEd or PaREAP?
2. When screening potential teaching applicants, what criteria on their applications do you use when searching candidates for scheduling an interview?
3. If you use the letters of reference candidates provide, what qualities to you use when screening for an interview?
4. What, if any, alternate sources of information do you use to search for prospective teachers (resume, personal references, etc.)?
5. What are your perceptions of the *PA Standard Application for Teaching*?
6. Which three elements of the application are most helpful in your work of selecting prospective teachers?
7. What, if any, suggestions do you have for improving the *PA Standard Application for Teaching*?

**Policy Analysis**

Fowler (2009) describes public policy as the *dynamic and value-laden course of action that the political system employs to deal with public problems*. The stages in his model address issue definition, agenda setting, policy formulation, policy adoption, and implementation. This study focuses on the implementation of the policy issue in Pennsylvania previously defined as the need to put successful teachers in every classroom to improve the education children receive (Boulden, 2011). In Pennsylvania, potential teachers complete a Standard Application for Teaching. To complete the study, the author conducted a textual analysis of the coherence between the standard application, the policies for preparing and credentialing teachers and the Danielson model found in the Educator Effectiveness Manual, an administrative regulation in which all teachers are evaluated. Textual analysis provides a technique that allows the researcher, given those two documents, the ability to extract, code, and analyze as cognitive maps (Carley, 1997). When there is a 50% match between the texts of both documents, in areas of significance, a mental model of the coherence can be said to be found (Carley, 1997). The higher degree of sharing, the smaller and more coherent the mental model exists.

Of the five most commonly used textual analysis techniques: content analysis (Namenwirth and Weber, 1986; Stone et al., 1968a, 1968b; Ogilvie et al., 1982), procedural mapping techniques (e.g., semantic-planning nets (VanLehn and Brown, 1980), procedural task analysis (VanLehn and Garlick, 1987), protocol analysis (Ericsson and Simon, 1984; Newell and Simon, 1972), and various cognitive mapping techniques (Axelrod, 1976; Eden, Jones and Sims,
content analysis was selected as most appropriate for this task as the presence of, the absence of, and the frequency with which certain items are represented in multiple texts yielded the best data.

In content analysis, some researchers utilize a technique called “windowing” where proximity of words is relevant (Carley, 1997). In this case, windowing was not necessary as the researcher did not need to identify a set of contiguous concepts. She utilized, however, an automapping application, NVivo. Without the use of such automapping, inter-rater reliability will be required. This researcher identified words and concepts to filter by grouping concepts into generalization categories, such as grade point average and GPA, and noting words to be omitted, such as articles and prepositions. Filtering in this way reduces intersections on the content mapping. Categorical data was analyzed through clustering common content and finding similarities and differences in the textual sources. NVivo permits data querying, and in this study, data querying such as text frequency counts, text searches, and coding comparisons were conducted. Data visualization, such as word clouds and tree-map diagrams, permitted the researcher to further identify similarities and differences in the texts being compared in NVivo. By using the automapping features of NVivo and applying the logic of the human researcher, common trends were identified and the content analyses of the policy documents were conducted. The results of these analyses are reported in chapter four.

Data Analysis Plan

The data from the semi-structured interviews were examined first to glean any coherence or new insights into the hiring processes of nine administrators. As the policy in Pennsylvania 1979; Shavelson, 1972; Reitman and Rueter, 1980; Carley and Palmquist, 1992; Carley, 1993; Carley, 1997), content analysis was selected as most appropriate for this task as the presence of, the absence of, and the frequency with which certain items are represented in multiple texts yielded the best data.

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Data Analysis Plan

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indicates that districts use the common application, this study benefitted from learning how they used the application, their understanding of effective instruction as indicated by their preferences of content on the application itself, and by stating what information they needed that was missing from the application process. These data were analyzed for inclusion in the policy documents and criteria for effective teachers. Next, the researcher examined policy documents to also identify common themes and coherency with the research on effective teachers. Chapter four presents the findings of these analyses and intersections of content.

To analyze and report on the data collected from the semi-structured interviews, the researcher read through each of the entire transcripts once, and the researcher read through them again while using an open coding inductive approach to identify specific codes for the data uncovered using NVivo, a qualitative analysis software program. The data codes were grouped into categories that serve to answer each of the research questions according to the relationships found between the codes. After every three interviews, analytic memos were written describing the codes and categories identified. Each memo documented common themes and potential outliers of data. In order to answer the guiding questions, the following factors were examined and reported on:

- District categorization (urban, suburban, rural)
- Hiring administrator categorization (human resources, central office administrator, principal, assistant principal)
- Application storage and screening practices
- Impact on hiring decision-making
  - Areas of certification, state and date issued
- Tenure acquisition
- Date available for employment
- Educational background, school, degree conferred, and grade point average
- Experience, title and dates of service, supervisor, salary, work performed, reasons for leaving
- Activities qualified to supervise or coach
- Student or practice teaching, grade/subject, school, supervisor and cooperating teacher
- References
- Other qualifications
- General background information
- Essay
  - Prior knowledge of candidate and/or recommendations from trusted colleague
  - Perceptions of hiring administrators on the qualities of effective instructors that are not measured in the application

The author utilized NVivo to discover the differences between what should be occurring during the screening process and what is actually occurring. This notion of discrepancy analysis helped the author determine the level of fidelity of implementing the existing policies among the sample of hiring administrators. By checking the frequency with which the coded items occurred during the interviews and the same or similar terms were found in the policy documents, this fidelity or lack thereof was made evident. The author also determined that it was beneficial to hand-review the Standard Application for Teaching and look for evidence of the characteristics of effective teachers (Table 10) in order to ensure that the context of the characteristics and the
document were not lost in the *nVivo* program. She used this method for several analyses in when it was necessary to identify whether there were common elements present in the policy documents and participant responses and the frequency of common terms did not answer the research questions. The analyses that did not require the *nVivo* frequency counts included those found in the following tables:

Table 10. Characteristics of effective teachers and location in standard application
Table 11. Danielson Framework domains and their prevalence in policy documents
Table 13. Responses to how districts store the completed common applications
Table 14. Criteria the administrators indicate is important on the application
Table 15. Administrator responses to which teacher characteristics they seek in reference letters
Table 16. Administrator perceptions of common application
Table 17. Cross reference of administrator responses to characteristics of effective teachers and their preferred candidate qualities
Table 18. Administrator suggestions to improve the common application
Table 19. Danielson Framework and participant references to each domain

**Human Subjects’ Protection**

The study was approved by the Seton Hall Institutional Review Board (IRB). Appropriate documentation is found in Appendix B. The researcher conducted the interviews according to the ethical considerations and procedures outlined in approved documents.
CHAPTER IV
DATA ANALYSIS AND RESULTS

Introduction

This chapter presents the results of this study in which the author seeks to determine if teacher quality can be effectively screened during the application process. The following questions were addressed.

1. Is there a coherent consistency between the criteria in Pennsylvania policy documents (K-12 Program Framework Guidelines, The Public School Code inclusive of the common application for teaching, Chapter 354, and the Educator Effectiveness Manual) used in hiring effective teachers?

2. How do administrators who screen teacher candidates live with the common application for teaching to screen prospective teacher candidates?

3. What criteria in the standard application do Pennsylvania hiring administrators find most helpful in screening teacher applicants and how well do they align with current research on the qualities of effective teachers?

4. What elements, if any, are missing from the Pennsylvania standard application for teaching that school administrators believe are essential to selecting the best teacher candidates in order to meet the requirements of Charlotte Danielson model?

The first section presents the summary of the data used to answer the three research questions inclusive of the descriptive characteristics of the policies reviewed and the subjects interviewed. Next, the author presents results of the minor policy analysis in context of the research questions. Through a combination of the policy analysis and the results of the
interviews with hiring managers the researcher will identify patterns and justify the findings in the context of the research on effective teachers cited in chapter three. The final section includes a discussion of the themes that emerged from this triangulated data review and analysis.

This study examined the coherence or lack of coherence between the criteria for identifying promising prospective teachers and criteria for evaluating the actual expertise of teachers who have been hired and are currently employed by a school district. The study sought to identify the perceptions of a sample of those responsible for hiring those prospective teachers and the qualities of effective instructors as identified by the broader research. The findings from the policy analysis as well as the findings from interviewing a sample of hiring agents will answer the research questions. The underlying implication of the study may be to aid school districts in their efforts to hire the most promising teachers through bringing the criteria used in the two processes more closely aligned.

The study utilized a minor policy analysis in order to ascertain the coherence between the laws regarding the expectations of teacher certification, training, and hiring and the relevant current literature examined in chapter two. As the analyses was conducted on policies already in place and only on the coherence between them and the criteria for effective teachers, and subsequently what a sampling of hiring administrators perceived regarding implementing the policy requiring prospective teachers to utilize a common application. There was no need to conduct a full policy analysis to answer the research questions.

Content analysis is a useful method of analyzing documents in the social sciences (Neuendorf, 2002) and was implemented in this study to identify several key concepts common to a selection of policy documents from the Pennsylvania Department of Education, the
characteristics of effective instructors from the literature review, and the Danielson Framework for Teaching found in the Educator Effectiveness Administrative Manual.

Using the product, NVivo, designed to assist with content analyses and qualitative research, information from the data sources (the selected policy documents and the criteria for effective teachers) were organized, coded and analyzed for word frequency, concept frequency and connections. First, the documents were read and annotated with key words. These key words were coded as nodes in the software. Word frequency queries were completed on each of the data sources, and then compared for common terms. These terms became themes for exploration. This cataloging served as the first step in the content analysis process. The next step was to determine the alignment of the common themes to the matrix of effective instruction identified in the literature search. The notion of discrepancy analysis between what policy indicates is required and the actual practice was made evident.

Qualitative research methodology was used to gain an understanding of hiring managers’ perceptions of the Pennsylvania common application for teaching and its usefulness in identifying the most promising candidates for subsequent teacher interviews. Learning these perceptions was important to the overall study linking how the policies adopted in Pennsylvania align with the criteria for effective teachers and the actual practices of hiring those teachers.
Summary of findings

Minor policy analysis

In order to answer research question one, several policy documents found on the Pennsylvania Department of Education website were reviewed and analyzed. Research question one reads as follows:

Is there a coherent consistency between the criteria in Pennsylvania policy documents (K-12 Program Framework Guidelines, The Public School Code inclusive of the common application for teaching, Chapter 354, and the Educator Effectiveness Manual) used in hiring effective teachers?

1. How do administrators who screen teacher candidates live with the common application for teaching to screen prospective teacher candidates? Minor policy content analyses benefit from understanding common terminology. To achieve this goal and review data that demonstrates possible coherency between the policies, text and word frequency queries were conducted based on the themes that emerged from the open-coding concept, specifically finding common terms within the policy documents and categorizing them into themes such as certification and criteria for effective teachers. A content analysis was completed on policy documents governing the hiring, training, and evaluating of teachers to answer the first research question. For Table 7, the key terms from the characteristics of effective teachers was cross-referenced with the policy documents regarding the training, hiring and evaluation of teachers in Pennsylvania. The data are sorted by the most coverage of the terms found in the specific documents to the least coverage. Data listed as a percent of coverage means that that portion of the document specifically addresses the key characteristics of effective teachers previously noted in the literature. The
criteria for effectiveness used were: collaboration, instructional strategies, cognitive skills, academic skills, GPA, scores, gut feeling, high expectations, personality classroom management, engagement, diverse, and content knowledge. Specific breakdowns of the terms found in each document which are aligned to the Pennsylvania common application are presented in subsequent text.

With 4.57% coverage of terms found in the list of characteristics of effective teachers in the K-12 Program Framework Guidelines adopted in 2010, the Pennsylvania regulations for implementing teacher preparation programs has the highest percentage of coverage. Overall, the coverage of effective teacher characteristics found within the policy texts reviewed is less than 5%. The Pennsylvania Public School Code, updated in 2012, held only 3.71% coverage between its text and that of effective teachers. Both the document governing the training of teachers, Chapter 354, and the Educator Effectiveness Administrative Manual which governs how teachers are evaluated yielded similar matches of 3.26% and 3.23%, respectively. A 50% match between the texts and the characteristics is considered a coherent mental model (Carley, 1997); however in the case of the enacted policies governing the training, certifying, hiring, and evaluating teachers this match was much less leading one to conclude that little coherence exists between the policies examined and the characteristics of effective teachers.
Table 7.

*Overall coherence of characteristics of effective teachers found in the analyses of policy documents.*

<table>
<thead>
<tr>
<th>Policy document</th>
<th>Purpose of document</th>
<th>% coverage of terms found in policy document</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 Program</td>
<td>Regulations for implementing teacher preparation programs at universities</td>
<td>4.57% coverage</td>
</tr>
<tr>
<td>Framework</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guidelines</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Public School</td>
<td>PA legislation that includes certification policy</td>
<td>3.71% coverage</td>
</tr>
<tr>
<td>Code, inclusive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of Article I,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 111.,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Section 1109,</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and Chapter 49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chapter 354</td>
<td>Policy document regarding teacher training</td>
<td>3.26% coverage</td>
</tr>
<tr>
<td>Educator</td>
<td>Regulations for evaluating teachers</td>
<td>3.23% coverage</td>
</tr>
<tr>
<td>Effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Manual</td>
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</tr>
</tbody>
</table>
While Table 7 identified overall coverage in the policy documents for alignment to research on effective teachers, the policies were next compared with each other utilizing a word frequency query found in the nVivo product. After that query was completed, each text was coded according to terms describing effective teachers, application criteria, and teacher evaluation criteria. The most common terms found in this query are presented in Table 8. PA Public School Code of 1949-Section 1109 (a subsection of the public school code articulating requirements for eligibility for teacher credentialing) was omitted from the table because there was no coverage found in the queries related to the key terms. Of note, references to professionalism were found in some manner in each of the policy documents with coverage ranging from 3.21% to a minimum of 0.32% by searching for the term ‘good moral character’. Some reference to instruction and holding high expectations for students were found in four of the five listed documents by searching derivatives of instruction and ‘high expectations’. The Public School Code section requiring a criminal history background check was devoid of coverage in these two traits of effective teachers.

Of the nine remaining traits in Table 8, professionalism and assessment held the highest cumulative coverages in the policy documents reviewed at 9.98% and 5.82%, respectively. Classroom environment, instruction, and holding high expectations ranged between 3.75% to 3.34% cumulative coverages. Communication and academic requirements both held a 2.5% or just under coverage. Collaboration and student engagement were barely represented in any of the documents with less than 1% in each.

The plans for preparing teachers and evaluating teachers in Pennsylvania are most closely aligned with the content found in the expectations for hiring effective teachers, although the
coverage percentages were low. All three sections of the Public School Code analyzed held the lowest percent coverage with respect to any of the characteristics of effective teachers, excepting the requirement that teachers be of good moral character as stated in Act 14, the employment of professionals which rated 2.03% coverage. Noting that Carley (1997) identified a 50% match as a coherent mental model, these policy documents lacked the coherency desired, even when presented as cumulative coverages.
Table 8.  
*Outcomes of the text frequency queries for each policy document.*

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism</td>
<td>3.21%</td>
<td>4.09%</td>
<td>0.32%</td>
<td>0.33%</td>
<td>2.03%</td>
</tr>
<tr>
<td>(Good moral character</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(criminal history and</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>background check)</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Assessment</td>
<td>2.67%</td>
<td>2.55%</td>
<td>0.60%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(formative, summative,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>student)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Classroom environment</td>
<td>1.18%</td>
<td>2.20%</td>
<td>0.37%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(management, diversity)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Instruction (and</td>
<td>1.03%</td>
<td>2.19%</td>
<td>0.06%</td>
<td>0.05%</td>
<td>0.35%</td>
</tr>
<tr>
<td>derivatives)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High expectations for</td>
<td>0.80%</td>
<td>2.03%</td>
<td>0.19%</td>
<td>0%</td>
<td>0.32%</td>
</tr>
<tr>
<td>students</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>0.69%</td>
<td>1.57%</td>
<td>0.24%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Academic requirements</td>
<td>1.73%</td>
<td>0.68%</td>
<td>0.06%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>(cognitive skills, content</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>knowledge, GPA, scores)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student engagement</td>
<td>0.82%</td>
<td>0.68%</td>
<td>0.06%</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>Collaboration</td>
<td>0.47%</td>
<td>0.17%</td>
<td>0.34%</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>
The Pennsylvania law that requires teaching candidates to complete the standard application for teaching was next examined to determine if its parent policy for public school operations (the Public School Code of 1949 inclusive of its amendments and recently enacted subsections), the K-12 Framework for Teaching articulated in Chapter 354 for teacher preparation, and the Teacher Effectiveness Manual designed for the purposes of outlining teacher supervision, were reflective of the contents of the application. The application was enacted into law in 1996 and asks prospective public school teachers to provide information designed to standardize necessary human resources information. Ostensibly, this information was to assist school districts in hiring teachers and the reason for interviewing hiring managers who are required to use the application in order to screen promising candidates. Eleven elements found on the application were analyzed to determine if there was coherence between the product of the parent policy and Pennsylvania’s laws governing the training and evaluating of teachers. The numbers of items in the application that are referenced in the policy documents governing teaching, training teachers, and evaluating teachers are reported in Table 9. An “X” in the table designates that this information requested on the application is found in the corresponding policy. The percent of the application elements found in the policies is noted at the bottom of the table; this figure was calculated by dividing the number of elements found in the policies by eleven, the total number of elements contained in the application. Not surprisingly, the parent policy of the application, The Public School Code, contains more references to the elements than either the teacher preparation policy or the supervision policy.
Table 9. Elements on the Pennsylvania Standard Application for Teaching

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Areas of certification, state and date issued</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>2. Tenure acquisition</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Date available for employment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Educational background, school, degree conferred, and grade point average</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>5. Experience, title and dates of service, supervisor, salary, work performed, reasons for leaving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Activities qualified to supervise or coach</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Student or practice teaching, grade/subject, school, supervisor and cooperating teacher</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>8. References</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Other qualifications</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. General background information – includes criminal history</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Essay</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percent of application elements referenced in noted public policies</td>
<td>46%</td>
<td>18%</td>
<td>9%</td>
</tr>
</tbody>
</table>
While Table 9 reported on the percentages of the common application elements found in the specified policy documents in order to determine if there is a consistency between the information available to the hiring administrator on a potential teacher and the actual policies guiding the preparing and evaluating teachers, the second part of research question one needed to be addressed. Specifically, is there a coherency between the common application created as an outcome to the parent policy governing public education and the characteristics of effective teachers? This comparison was completed to determine if the common application that administrators must use when hiring teachers addresses the need to screen for the most promising teachers. Without knowing if the document in practice actually assists these hiring agents in culling the candidate pool to those most likely to be effective, an administrator may need to rely on other means, which is explored during the interviews with hiring managers. Specifically, in Table 10, the results of the analysis comparing the common application requirements to the characteristics of effective educators is reported. The table lists the criteria for effective educators in the first column and in the second column notes where in the application a hiring administrator might find a connection to these characteristics. Of particular note, the portion of the application most frequently listed as having the potential of providing evidence of a candidate’s ability to effectively instruct is the references. The table notes that references are available if offered by the author as an addendum to the application. While the application requests that references be attached, there is no guaranteed provision that all candidates comply with that request. Hiring administrators benefit from having the reference letters at their fingertips. Following the provision of references for most useful in identifying promising candidates is the essay that all candidates submit, in particular essay choice #4 in which a candidate shares his or her understanding of the essential elements of instruction. Beyond the
transcripts providing some evidence of cognitive abilities and strong content knowledge, there is little match between the characteristics of effective teachers and elements on the common application that administrators must use when culling the candidate pool.
Table 10

*Characteristics of effective teachers and location on the PA Standard Application for Teaching*

<table>
<thead>
<tr>
<th>Characteristic of effective teachers</th>
<th>Common application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to collaborate</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td>Ability to match child’s needs with instructional strategies (assessment, adjustment, questioning,</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td>modeling, application, concept mapping)</td>
<td>Essay, (#4 – Essential elements of instruction)</td>
</tr>
<tr>
<td>Cognitive skills (intelligence, literacy/writing skills, GPA for literature, math, science and social</td>
<td>Educational background, school, major, degree earned,</td>
</tr>
<tr>
<td>sciences courses)</td>
<td>GPA</td>
</tr>
<tr>
<td>Credentials (National Board Certification, 2-10 years of experience, SAT scores, licensure exam scores)</td>
<td>Other qualifications, if provided by candidate</td>
</tr>
<tr>
<td>“Gut-feeling” of hiring administrators to hire teachers who “fit”</td>
<td></td>
</tr>
<tr>
<td>High expectations of students</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td>Qualitative descriptors of a positive personality and interpersonal skills (confidence, committed,</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td>positive, friendly, warm, open, enthusiastic, values children)</td>
<td></td>
</tr>
<tr>
<td>Strong classroom management</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td>Strong content knowledge (High grades in 4-6 content area courses)</td>
<td>Transcripts, if attached</td>
</tr>
<tr>
<td>Student engagement; Student-centered, connects to diverse populations</td>
<td>References, if offered by author</td>
</tr>
<tr>
<td></td>
<td>Essay, (#4 – Essential elements of instruction)</td>
</tr>
</tbody>
</table>
To further answer the question regarding consistency between policy documents on preparing, hiring and evaluating teachers, a content comparison between the Educator Effectiveness framework and the common application, Chapter 49 of the Public School code which identifies how Pennsylvania credentials teachers, Chapter 354 which articulates the preparation of teachers.

The information in the Educator Effectiveness Administrators Manual is designed to guide administrators in carrying out one of their tasks outlined in the PA School Code – that of evaluating professional staff. School code articulates that the Framework for Teaching (2011) by Charlotte Danielson be used to evaluate educators on four domains. All public school districts in Pennsylvania must utilize this framework, and the implementation guide for this is found in the subsequent administrator’s manual. Teacher ratings, as determined by administrators in each domain, as a composite, constitute 50% of a teacher’s overall rating. This study analyzed the four domains of effective instruction used to evaluate teachers by cross-referencing hiring criteria itemized in the common application, Chapter 49 designed to provide guidance to the state on awarding certifications, and on Chapter 354 which guides how universities prepare teachers. Those data representing items of congruence are presented in Table 11. As the Pennsylvania legislature implemented the teacher effectiveness requirements that included the Danielson Framework, one would presume a high degree of match.

The first column presents the language in the Danielson framework by which administrators evaluate teachers on their practice. The second column presents where in the application a principal might find evidence of their practice. The third column reviews where in the credentialing policy there is evidence of effective teaching as determined by Pennsylvania when it adopted the Danielson framework for supervision. The fourth column also presents a
comparison between the training of teachers and the evaluation of teachers, specifically it notes which components in the teacher preparation code are also found in the Danielson framework.

There is clear evidence in the state policies that grades in college (GPA) and qualifying exam scores may suggest evidence of “extensive content knowledge”, a requirement for successful planning and preparation. References and the essay continue to provide evidence of Domains II and III, to the extent that they are written. Depending on the essay a teacher chooses to address, such as the most important qualities of an outstanding educator, the essential elements of instruction, or the integration of technology into the instructional process, one may infer the degree of a teacher’s understanding of creating a safe and organized classroom environment or their ability to effectively engage learners in instruction. By the same token, an administrator, when presented with letters of reference that address those same items, may conclude that a teacher is more or less prepared to effectively instruct students in her school or district.

The state has a requirement that all teachers be of good moral character and as such requires prospective, and in-service teachers, to complete criminal background checks. These are found in all three documents reviewed and may suggest a small degree of competence in domain IV in the component, Showing Professionalism, which suggests that “teacher interactions are characterized by honesty and integrity.” (Danielson, 2011) This is likely a moot point, as an educator who fails the background checks in Pennsylvania is not likely to receive consideration.

Successful completion of student teaching is further used as evidence for competence in domains I, II, and III and is found in all three documents reviewed. Clearly, there is some alignment of the preparation, certification and hiring documents to the supervision document, providing that references are valid and useful, the essay is a true representation of the candidate’s
thought processes, and that the student teaching evaluation is based on truthful critical examination of the candidate’s practice.
Table 11
*Danielson’s four domains and their prevalence in hiring and certifying teachers in PA.*

<table>
<thead>
<tr>
<th>Domain I – Planning and Preparation.</th>
<th>Common Application</th>
<th>PDE Certification Requirements in Chapter 49 of the Public School Code</th>
<th>Chapter 354 – Teacher preparation program requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective teachers plan and prepare for lessons using their extensive knowledge of the content area, the relationships among different strands within the content and between the subject and other disciplines, and their students’ prior understanding of the subject. Instructional outcomes are clear, represent important learning in the subject, and are aligned to the curriculum. The instructional design includes learning activities that are well sequenced and require all students to think, problem solve, inquire, and defend conjectures and opinions. Effective teachers design formative assessments to monitor learning, and they provide the information needed to differentiate</td>
<td>Areas of certification, state and date issued. Educational background, school, degree conferred, and GPA. May be found in references. May be found in the essay.</td>
<td>Areas of certification, state and date issued Educational background, school, degree conferred, and GPA. Completion of teacher training program. Evidence from supervising professor that candidate appropriately plans lessons.</td>
<td>Develop strong content knowledge, minimum GPA scores before advancing to student teaching, requires minimum scores on qualifying exams. Requires methodology course work. Evidence from supervising professor that candidate appropriately plans lessons.</td>
</tr>
</tbody>
</table>
instruction. Measures of student learning align with the curriculum, enabling students to demonstrate their understanding in more than one way.

Domain II – Classroom Environment.

Effective teachers organize their classrooms so that all students can learn. They maximize instructional time and foster respectful interactions with and among students, ensuring that students find the classroom a safe place to take intellectual risks. Students themselves make a substantive contribution to the effective functioning of the class by assisting with classroom procedures, ensuring effective use of physical space, and supporting the learning of classmates. Students and teachers work in ways that demonstrate their belief that hard work will result in higher levels of learning. Student behavior is consistently appropriate, and the teacher’s handling of infractions is subtle, preventive, and respectful of students’ dignity.

Domain III – Instruction. May be found in references. Evidence from the essay. Evidence from supervising professor that candidate demonstrates effective classroom management practices. Requires minimum coursework in classroom management topics, child development, and assessment.
In the classrooms of accomplished teachers, all students are highly engaged in learning. They make significant contributions to the success of the class through participation in high-level discussions and active involvement in their learning and the learning of others. Teacher explanations are clear and invite student intellectual engagement. The teacher’s feedback is specific to learning goals and rubrics and offers concrete suggestions for improvement. As a result, students understand their progress in learning the content and can explain the learning goals and what they need to do in order to improve. Effective teachers recognize their responsibility for student learning and make adjustments, as needed, to ensure student success.

| Domain IV – Professional Responsibilities. | \begin{itemize} \item General background information includes criminal history check. \item May be found in references. \end{itemize} | \begin{itemize} \item Good moral character. \item May be found in references. \end{itemize} | \begin{itemize} \item Minimum GPA requirements to progress to student teaching. \item Successful completion of student teaching. \end{itemize} |

Supervising professor that candidate demonstrates high quality instructional practices.
colleagues. Their record-keeping systems are efficient and effective, and they communicate with families clearly, frequently, and with cultural sensitivity. Accomplished teachers assume leadership roles in both school and LEA projects, and they engage in a wide range of professional development activities to strengthen their practice. Reflection on their own teaching results in ideas for improvement that are shared across professional learning communities and contribute to improving the practice of all.
A content analysis was conducted to learn if there was actual coherence between the Danielson framework and the characteristics of effective teachers. The specific language that was mapped through the *nVivo* application is listed where the coverage is more than 14%. The results in Table 12 are presented as percent of language covered in the documents. The highest percent of coverage of the Danielson document articulating the effective characteristic of teachers was the ability to match child’s needs with instructional strategies (assessment, adjustment, questioning, modeling, application, concept mapping) at 35% coverage. Not surprisingly, the ability to match a child’s needs with strong instructional practices has a 35% coverage in the Danielson model followed closely by student engagement at a 27% match and strong classroom management at a 26% match. Additional coverages ranged from teachers who hold high expectations for students (18.56% coverage) to candidates with desirable personality traits and interpersonal skills (14.6%). In the table, the left hand column reiterates the characteristics of effective teachers, while the right hand column denotes the amount of language intersection, or coverage, found in the Danielson Framework.
### Table 12

**Percent of characteristics of effective teachers found in the Danielson Framework for Teaching.**

<table>
<thead>
<tr>
<th>Characteristic of effective teachers</th>
<th>% coverage in Danielson Framework for Teaching (2011) followed by the specific elements references</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to collaborate</td>
<td>0.03% coverage</td>
</tr>
<tr>
<td>Ability to match child’s needs with instructional strategies (assessment, adjustment, questioning, modeling, application, concept mapping)</td>
<td>35.87% coverage</td>
</tr>
<tr>
<td>1a. Accomplished teachers understand the internal relationships within the disciplines they teach, knowing which concepts and skills are prerequisite to the understanding of others…. are also aware of typical student misconceptions in the discipline and work to dispel them.</td>
<td></td>
</tr>
<tr>
<td>Lesson and unit plans that accommodate prerequisite relationships among concepts and skills</td>
<td></td>
</tr>
<tr>
<td>Accurate answers to student questions • Feedback to students that furthers learning • Interdisciplinary connections in plans</td>
<td></td>
</tr>
<tr>
<td>1b. teachers must know not only their subject content and its related pedagogy but the students to whom they wish to teach that content….students learn in their individual ways and may come with gaps or misconceptions that the teacher needs to uncover in order to plan appropriate learning activities.</td>
<td></td>
</tr>
<tr>
<td>Students whose first language is not English, as well as students with other special needs, must be considered when planning lessons and identifying resources that will ensure their understanding.</td>
<td></td>
</tr>
<tr>
<td>Knowledge of students’ special needs Children do not all develop in a typical fashion. Indicators: • Formal and informal information about students gathered by teacher for use in planning instruction</td>
<td></td>
</tr>
<tr>
<td>1c. establishing instructional outcomes entails identifying exactly what students will be expected to learn; the outcomes describe not what students will do but what they will learn.</td>
<td></td>
</tr>
</tbody>
</table>
Assessment of student attainment • Outcomes differentiated for students of varied ability

1d. Teachers look beyond the school for resources to bring their subjects to life and to assist students who need help in both their academic and nonacademic lives.

1e. Planning, reflects the teacher’s knowledge of content and the students in the class, the intended outcomes of instruction, and the available resources.

Educators must determine how best to sequence instruction in a way that will advance student learning through the required content. It further requires the thoughtful construction of lessons that contain cognitively engaging learning activities, the incorporation of appropriate resources and materials, and the intentional grouping of students. Proficient practice in this component recognizes that a well-designed instruction plan addresses the learning needs of various groups of students; one size does not fit all. At the distinguished level the teacher plans instruction that takes into account the specific learning needs of each student and solicits ideas from students on how best to structure the learning.

Instructional groups are intentionally organized to support student learning.

1f. Assessments must be designed in such a manner that they provide evidence of the full range of learning outcomes; that is, to assess reasoning skills and factual knowledge, different methods are needed. Assessments may need to be adapted to the particular needs of individual students.

Incorporate assessments directly into the instructional process, and to modify or adapt instruction as needed to ensure student understanding.

Assessments must match learning expectations.

Assessments for learning must be planned as part of the instructional process. Results of assessment guide future...
planning.

3a. When teachers present concepts and information, those presentations are made with accuracy, clarity, and imagination; when expanding upon the topic is appropriate to the lesson, skilled teachers embellish their explanations with analogies or metaphors, linking them to students’ interests and prior knowledge.

Teacher presents complex concepts in ways that provide scaffolding and access to students.

Skilled teachers, when explaining concepts to students, use vivid language and imaginative analogies and metaphors, connecting explanations to students’ interests and lives beyond school.

3b. Good teachers use divergent as well as convergent questions, framed in such a way that they invite students to formulate hypotheses, make connections, or challenge previously held views. Students’ responses to questions are valued; effective teachers are especially adept at responding to and building upon student responses and making use of their ideas. High-quality questions encourage students to make connections among concepts or events previously believed to be unrelated, and arrive at new understandings of complex material. Effective teachers also pose questions for which they do not know the answers. Even when a question has a limited number of correct responses, the question, being nonformulaic, is likely to promote thinking by students.

Questions of high quality cause students to think and reflect, to deepen their understanding, and to test their ideas against those of their classmates. When teachers ask questions of high quality, they ask only a few of them, and provide students with sufficient time to think about their response to reflect on the comments of their classmates, and to deepen their understanding. High levels of student participation in discussion.

3c. Students are developing their understanding through what they do. They are engaged in discussing, debating, answering “what if?” questions, discovering patterns, and the like. They
may be selecting their work from a range of (teacher-arranged) choices. The teacher organizes student tasks to provide cognitive challenge and then encourages students to reflect on what they have done and what they have learned. Student enthusiasm, interest, thinking, problem-solving, etc.

3d. To assess student learning for the purposes of instruction, teachers must have a “finger on the pulse” of a lesson, monitoring student understanding and, where appropriate, offering feedback to students. Teachers are monitoring student learning, they look carefully at what students are writing, or listen carefully to the questions students ask, in order to gauge whether they require additional activity or explanation in order to grasp the content. It is essential that students know the criteria for assessment. At its highest level, students themselves have had a hand in articulating the criteria for, for example, a clear oral presentation. Monitoring of student learning A teacher’s skill in eliciting evidence of student understanding is one of the true marks of expertise.

Valuable feedback must be timely, constructive, and substantive and provide students the guidance they need to improve their performance. Teacher posing specifically created questions to elicit evidence of student understanding • Teacher circulating to monitor student learning and to offer feedback • Students assessing their own work against established criteria

3e. Teachers respond to ‘teachable moments’, teachers who are committed to the learning of all students persist in their attempts to engage each student in learning, even when confronted with initial setbacks. Experienced teachers are able to make both minor and (when needed) major adjustments to a lesson, a mid-course correction. Such adjustments depend on a teacher’s store of alternate instructional strategies and his or her confidence to make a shift when needed. Visible adjustment in the face of student lack of understanding • Teacher seizing on a teachable moment. Incorporation of student interests.

4a. teachers must use their reflections to make adjustments in their practice. As their experience and expertise increases, teachers draw on an ever-increasing repertoire of strategies to
inform these plans

4b. Inform parents; teachers monitor learning and adjust instruction accordingly. To plan instruction, teachers need to know where each student “is” in his or her learning. This information may be collected formally or informally, but must be updated frequently.

Cognitive skills
(intelligence, literacy/writing skills, GPA for literature, math, science and social sciences courses)

0.44% coverage

Credentials (National Board Certification, 2-10 years of experience, SAT scores, licensure exam scores)

0.15% coverage

“Gut-feeling” of hiring administrators to hire teachers who “fit”

0.01% coverage

“one size does not ‘fit’ all”

High expectations of students

18.56% coverage

1e. Activities that represent high-level thinking

1f. Assessments must match learning expectations. Criteria and standards Expectations must be clearly defined.

2b. classroom is characterized by high cognitive energy and by a sense that what is happening there is important and that it is essential to get it right. There are high expectations for all students. The classroom is a place where the teacher and students value learning and hard work

2b. Expectations for learning and achievement In classrooms with robust cultures for learning, all students receive the message that while the work is challenging, they are capable of success if they are prepared to work hard. Student pride in work
When students are convinced of their capabilities, they are willing to devote energy to the task at hand, and they take pride in their accomplishments. This pride is reflected in their interactions with classmates and with the teacher. Indicators: • Belief in the value of the work • High expectations, supported through both verbal and nonverbal behaviors • Expectation and recognition of quality • Expectation and recognition of effort and persistence • Confidence in students’ ability evident in teacher’s and students’ language and behaviors • Expectation for all students to participate

2c. A smoothly functioning classroom is a prerequisite to good instruction and high levels of student engagement.

2d. Standards of conduct are clear to students; they know what they are permitted to do and what they can expect of their classmates. Even when their behavior is being corrected, students feel respected; their dignity is not undermined. Skilled teachers regard positive student behavior not as an end in itself, but as a prerequisite to high levels of engagement in content.

3a. Students are clear about what they are expected to do during a lesson, particularly if they are working independently or with classmates, without direct teacher supervision.

3b. Questions of high cognitive challenge, formulated by both students and teacher. High levels of student participation in discussion

3c. Students highly motivated to work on all tasks and persistent even when the tasks are challenging

Qualitative descriptors of a positive personality and interpersonal skills (confidence, committed, positive, friendly, warm, open, enthusiastic, values children)

14.60% coverage

2a Creating an Environment of Respect and Rapport An essential skill of teaching is that of managing relationships with students and ensuring that those among students are positive and supportive.

Teachers create an environment of respect and rapport in their classrooms by the ways they interact with students and by the
interaction they encourage and cultivate among students.

Teachers convey that they are interested in and care about their students.

Positive interaction among students is mutually supportive and creates an emotionally healthy school environment. Teachers model and teach students how to engage in respectful interactions with one another and acknowledge respectful interactions among students.

Respect for students’ background and life outside the classroom

- Teacher and student body language
- Physical proximity
- Warmth and caring
- Politeness
- Encouragement
- Active listening
- Fairness

2b. Confidence in students’ ability evident in teacher’s and students’ language and behaviors

2d. Teachers respond in such a way that they respect the dignity of the student.

3e. Confidence to make a shift when needed

Committed teachers don’t give up easily; when students encounter difficulty in learning…

4c. Teachers establish relationships with families

4f. Teachers put students first in all considerations of their practice. Teachers support their students’ best interests, even in the face of traditional practice or beliefs. put students first

<table>
<thead>
<tr>
<th>Strong classroom management</th>
<th>26.21% coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a. Clear and accurate classroom explanations.</td>
<td></td>
</tr>
<tr>
<td>2a. Teachers create an environment of respect and rapport in their classrooms by the ways they interact with students and by the interaction they encourage and cultivate among students.</td>
<td></td>
</tr>
</tbody>
</table>

Teacher interactions with students, including both words and
actions A teacher’s interactions with students set the tone for the classroom.

2b. the general tone of the class. The classroom is characterized by high cognitive energy. The classroom is a place where the teacher and students value learning and hard work. Pride is reflected in their interactions with classmates and with the teacher.

2c. A smoothly functioning classroom is a prerequisite to good instruction and high levels of student engagement. Teachers establish and monitor routines and procedures for the smooth operation of the classroom and the efficient use of time. Hallmarks of a well-managed classroom are that instructional groups are used effectively, non-instructional tasks are completed efficiently, and transitions between activities and management of materials and supplies are skillfully done in order to maintain momentum and maximize instructional time. The establishment of efficient routines, and success in teaching students to employ them, may be inferred from the sense that the class “runs itself.”

Teachers help students to develop the skills to work purposefully and cooperatively in groups, with little supervision from the teacher. Little time should be lost as students move from one activity to another; students know the “drill” and execute it seamlessly. Experienced teachers have all necessary materials at hand and have taught students to implement routines for distribution and collection of materials with a minimum of disruption to the flow of instruction. Performance of non-instructional duties Overall, little instructional time is lost in activities

2d. In order for students to be able to engage deeply with content, the classroom environment must be orderly; the atmosphere must feel businesslike and productive, without being authoritarian. In a productive classroom, standards of conduct are clear to students; they know what they are permitted to do and what they can expect of their classmates. Even when their behavior is being corrected, students feel respected; their dignity is not undermined. Skilled teachers regard positive student
behavior not as an end in itself, but as a prerequisite to high levels of engagement in content. Expectations for student conduct have been established and that they are being implemented. Experienced teachers seem to have eyes in the backs of their heads; they are attuned to what’s happening in the classroom and can move subtly to help students, when necessary, reengage with the content being addressed in the lesson. At a high level, such monitoring is preventive and subtle and thus a challenging to observe. Experienced teachers find that their students occasionally violate one or another of the agreed-upon standards of conduct; how the teacher responds to such infractions is an important mark of the teacher’s skill. Accomplished teachers try to understand why students are conducting themselves in such a manner (are they unsure of the content, are they trying to impress their friends?) and respond in such a way that they respect the dignity of the student. The best responses are those that address misbehavior early in an episode, although doing so is not always possible.

Clear standards of conduct, possibly posted, and possibly referred to during a lesson • Absence of acrimony between teacher and students concerning behavior • Teacher awareness of student conduct • Preventive action when needed by the teacher • Fairness • Absence of misbehavior • Reinforcement of positive behavior

2c. The use of the physical environment to promote student learning is a hallmark of an experienced teacher. All classrooms must be safe (no dangling wires or dangerous traffic patterns), and all students must be able to see and hear what’s going on so they can participate actively. Both the physical arrangement of a classroom and the available resources provide opportunities for teachers to advance learning; when these are skillfully used, students can engage with the content in a productive manner. At the highest levels of performance, the students themselves contribute to the physical environment.

3a. provide clear directions for classroom activities, so that students know what it is that they are to do. Students are clear about what they are expected to do during a lesson, particularly if they are working independently or with classmates, without
direct teacher supervision.

Strong content knowledge
(High grades in 4-6 content area courses) 18.70% coverage

1a. accomplished teachers have command of the subjects they teach. They must know which concepts and skills are central to a discipline, and which are peripheral; they must know how the discipline has evolved into the 21st century, incorporating such issues as global awareness and cultural diversity, as appropriate. Accomplished teachers understand the internal relationships within the disciplines they teach, knowing which concepts and skills are prerequisite to the understanding of others. They are also aware of typical student misconceptions in the discipline and work to dispel them. Every discipline has a dominant structure, with smaller components or strands as well as central concepts and skills. Knowledge of prerequisite relationships

Clear and accurate classroom explanations • Accurate answers to student questions

1c. The instructional outcomes should reflect important learning and must lend themselves to various forms of assessment so that all students are able to demonstrate their understanding of the content. experienced teachers are able to link their learning outcomes with others both within their discipline and in other disciplines.

2b. Teachers convey the educational value of what the students are learning.

3a. When teachers present concepts and information, those presentations are made with accuracy, clarity, and imagination; when expanding upon the topic is appropriate to the lesson, skilled teachers embellish their explanations with analogies or metaphors. The explanations are clear, with appropriate scaffolding, and, when opportunity arises, anticipate possible student misconceptions. Absence of content errors and clear explanations of concepts

4e. growth in content; Enhancement of content knowledge and pedagogical skill Teachers remain current by taking courses,
reading professional literature

Student engagement; Student-centered, connects to diverse populations

27.10% coverage

1b. students learn through active intellectual engagement with content. Learning requires active intellectual engagement.

Teacher participation in community cultural events • Teacher-designed opportunities for families to share heritage • Teacher-created database of students with special needs available for teacher use

1c. the resources used, their suitability for diverse learners,

1e. teacher plans instruction that takes into account the specific learning needs of each student and solicits ideas from students on how best to structure the learning. Activities that represent high-level thinking • Opportunities for student choice • The use of varied resources • Thoughtfully planned learning groups

1f. assessments may need to be adapted to the particular needs of individual students; an ESL student, for example, may need an alternative method of assessment to allow demonstration of understanding. Modified assessments available for individual students as needed

2c. A smoothly functioning classroom is a prerequisite to good instruction and high levels of student engagement.

2d. Skilled teachers regard positive student behavior not as an end in itself, but as a prerequisite to high levels of engagement in content. They are attuned to what’s happening in the classroom and can move subtly to help students, when necessary, reengage with the content being addressed in the lesson.

3b. In a true discussion, a teacher poses a question and invites all students’ views to be heard, enabling students to engage in discussion directly with one another, not always mediated by the teacher. High levels of student participation in discussion

3c. Student engagement in learning is the centerpiece of the framework for teaching; all other components contribute to it.
When students are engaged in learning, they are not merely “busy,” nor are they only “on task.” Rather, they are intellectually active in learning important and challenging content. The critical distinction between a classroom in which students are compliant and busy and one in which they are engaged is that in the latter students are developing their understanding through what they do. That is, they are engaged in discussing, debating, answering “what if?” questions, discovering patterns, and the like. They may be selecting their work from a range of (teacher-arranged) choices and making important contributions to the intellectual life of the class. Such activities don’t typically consume an entire lesson, but they are essential components of engagement. A lesson in which students are engaged usually has a discernible structure: a beginning, a middle, and an end, with scaffolding provided by the teacher or by the activities themselves. The teacher organizes student tasks to provide cognitive challenge and then encourages students to reflect on what they have done and what they have learned. That is, the lesson has closure, in which students derive the important learning from their own actions. A critical question for an observer in determining the degree of student engagement is “What are the students being asked to do?” If the answer to that question is that they are filling in blanks on a worksheet or performing a rote procedure, they are unlikely to be cognitively engaged. In observing a lesson it is essential not only to watch the teacher but also to pay close attention to the students and what they are doing. The best evidence for student engagement is what students are saying and doing as a consequence of what the teacher does, or has done, or has planned.

Student enthusiasm, interest, thinking, problem-solving, etc. • Learning tasks that require high-level student thinking and are aligned with lesson objectives • Students highly motivated to work on all tasks and persistent even when the tasks are challenging • Students actively “working,” rather than watching while their teacher “works”

3e. teachers who are committed to the learning of all students persist in their attempts to engage each student in learning, even when confronted with initial setbacks. Incorporation of student
interests and events of the day into a lesson

4c. Successful and frequent engagement opportunities are offered to families so that they can participate in the learning activities. Frequent and culturally appropriate information sent home regarding the instructional program and student progress

Sourced from NVivo query and Danielson Framework for Teaching (2011).

Summary of the Policy Analysis Findings

The overall findings discerned through the various content analyses presented demonstrated that there is little to no coherence between and among the policies on preparing, hiring and evaluating teachers. There is more alignment found in the policy on evaluating teachers than there is on preparing and hiring teachers when compared with the characteristics of effective teachers. By combining the results of this minor policy analysis with the results of the following qualitative study where the researcher examined how well the practitioners hiring teachers live with the policies that are not fully aligned with the criteria for effective teachers, and what they deem necessary in the policy on hiring teachers, the research questions will be answered.

Administrators’ Self-Reported Hiring Procedures

The purpose of this part of this addendum to the policy study addresses the important consideration of how the policy documents on hiring and evaluating are supposed to be used and how useful they are to public school administrators. The common application, as the document developed from the Public School Code, Act 107 (1996) on hiring teachers, was developed to standardized how all public schools collect teacher applicant names and their accompanying credentials. The teacher evaluation instrument was developed from the Public School Code, Act
82 (2011) and resulted in the Educator Effectiveness Manual reviewed in the policy study. This document uses the work of Charlotte Danielson and serves to provide 50% of a teacher’s final evaluation. Both of these documents were designed to assist administrators in their work.

This part of the study attempts to answer research questions two through four via the seven item interview instrument. Specifically in order to answer research question two, nine sitting administrators responded to several questions. Research question two asks, “How do administrators who screen teacher candidates live with the common application for teaching to screen prospective teacher candidates?”

**Lack of Uniform Approach to Screening for the Best Candidates**

Question one on the instrument asked respondents to reveal what, if any, online or electronic tools are used in their district to collect and sort teacher applications. Their answers revealed how their districts collect and store teacher applications for screening when a position is open. Based on Table 13, six of nine of the respondents indicate they utilize an online warehouse tool to store and review applications for teaching positions. Two respondents indicated they also use a service entitled PaREAP, a web-based service that also allows districts to advertise for school-based jobs and potential employees to complete the common application on-line. This service permits teaching candidates to complete the application in advance of finding a particular job, while district-hosted programs require applicants to complete the application for each job in which they have interest. For the two respondents, both high school administrators, who cited “the common application”, their answers were indicative of the presumption that their districts still used paper applications and they noted they did not know if their district uses online tools to store and sort applications. A high school assistant principal responded “emails and resumes” and indicated she was also unclear how her district actually
stored applicants electronically by stating, “We use the common app and other than I’m not aware what we use as far as any kind of electronic stuff to gather that information.”

One interviewee, an elementary principal, also noted that the human resources director has little to do with the process of screening, interviewing and hiring teachers in her district. Another elementary principal commented, “We are not permitted to screen online applications,” adding that she was thus unaware of whether the most promising candidates were selected for her to interview. The supervisor of special education interviewee reported that in her district, they use “Recruit and hire, which is accessed on the district website, to identify teacher candidates which then automatically sends out reference checks through the system and color codes applications of those reviewed and whether we wish to see or not see them for an interview.”
<table>
<thead>
<tr>
<th>District hosted commercial application program (TalentEd, Recruit and Hire)</th>
<th>PaREAP</th>
<th>Common Application</th>
<th>Other (emails and resumes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>6</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
Steps in the Hiring Process

The screening process held some similarities for all interviewees. While the responsibility of each task may fall on different district leaders, the process includes a combination of the following. First, the applications, whether stored on-line or in paper form are screened for whatever criteria the district deemed appropriate for the job. In most cases, certification was the first screening tool. Next, the qualified applicants are further screened at the building level for the specific job. After the screening, candidates whose applications rise to the top are invited for an interview, whether it be a telephone screen or a face-to-face interview. After the interview, selected candidates are invited to perform a demonstration lesson as a second stage interview. From there, districts vary on final selection, but in each case teachers earning a contract meet with the superintendent. In one example of practice, an elementary principal stated, “We divide up the candidate pool into alphabet groups so each principal screens a portion of applicants to make recommendations to find thirty names to call for an interview.” She further comment that in this way they all have to agree on criteria prior to screening potential candidates.

Variations in evaluation of the standard application

In questions two and six, participants were asked to identify criteria they use when screening applicants for an interview, and then to rate which three elements of the standard application are most helpful in screening the most promising teacher candidates. The results presented in Table 14 address this question: impact on hiring decision-making. In Table 14, the elements of the application appear in the left-hand column, and across the top are the unique codes for each of the respondents. Data in the table, represented by an X, denotes whether or not
a particular item on the common application was suggested as criteria by which administrators find useful when screening applicants. The final column shows the cumulative number of respondents who use the criteria for screening. An asterisk placed next to the X indicates that element on the common application fell within the top three important items by which a respondent screens prospective teacher applications. Background, experience, and contents of the reference letters were important to at least five out of nine respondents. Those same three items also were suggested as one of the top three for at least five of the nine administrators. The elementary principals agreed they use the certification, educational background, prior experience, and the essay when screening applicants. Interestingly, the essay was selected as important to six of the nine administrators while only four noted it was useful as a screening tool. The secondary administrators found the references important in their screening work. For five of the elements on the application, none of the administrators found them helpful when selecting candidates to interview, including information related to a candidate’s student teaching experiences.
Table 14. Application criteria that administrators find important

<table>
<thead>
<tr>
<th>Common application</th>
<th>ES1</th>
<th>ES2</th>
<th>ES3</th>
<th>MS1</th>
<th>MS2</th>
<th>Sec SpEd</th>
<th>HS1</th>
<th>HS2</th>
<th>CIA</th>
<th>SUP</th>
<th>TOT</th>
<th>TOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Areas of certification, state and date issued</td>
<td>X</td>
<td>X</td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>b. Tenure acquisition</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
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<tr>
<td>c. Date available for employment</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>d. Educational background, school, degree conferred, and grade point average</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td></td>
<td>X*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>e. Experience, title and dates of service, supervisor, salary, work performed, reasons for leaving</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>X</td>
<td>X*</td>
<td></td>
<td>X*</td>
<td></td>
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<td></td>
<td>6</td>
</tr>
<tr>
<td>f. Activities qualified to supervise or coach</td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
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<tr>
<td>Section</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>*</td>
<td>X</td>
<td>X*</td>
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<tr>
<td>g. Student or practice teaching, grade/subject, school, supervisor and cooperating teacher</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>h. References</td>
<td>X*</td>
<td>X*</td>
<td>X*</td>
<td>*</td>
<td>X</td>
<td>X*</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>i. Other qualifications</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>j. General background information</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>k. Essay</td>
<td>X*</td>
<td>X*</td>
<td>*</td>
<td>X</td>
<td>X*</td>
<td>*</td>
<td>*</td>
<td>4</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

X Indicates interviewee discussed this section as important to screening.
* Indicates if the administrator chose this criterion as a top three indicator.
While the criteria on the common application group the following items in one section, educational background, school, degree conferred, and grade point average, the respondents tended to separate the elements and report them singly. For example, 4/9 reported grades and grade point averages as important screening criteria. These same four also separately noted that coursework was important to them as hiring managers. Three out of the four who indicated grades and coursework were important deciding factors also cited scores on certification exams as qualifiers for moving through the application process into an interview, although there was nowhere to directly report these scores on the common application. Instead, prospective teachers are invited to submit their scores as attachments to the application. These four spanned the demographic gamut.

Two elementary principals reported they were specifically looking for additional certifications beyond an elementary education certificate. One stated, “I’m looking for someone who is Wilson certified or has a reading specialist certificate.” The other commented she was looking for someone with professional development in the programs and resources currently in use in her building, such as Lucy Calkins units of study, the West Chester University literacy program, or recent training from Columbia’s Teacher’s College.

The curriculum supervisor responsible for screening secondary candidates indicated she was interested in the sum of skills a candidate possessed by reporting, “I want someone with a strong background in instruction; someone who can build rapport with student; someone who understands the connection between curriculum, instruction, and assessment; someone who can work with a variety of students and maintain academic rigor in the classroom.” She continued her discussion by referencing that she looks for evidence in the recommendation letters that the candidate understands instructional practices.
Question three of the interview protocol asked the hiring administrators what qualities in candidates they hope to find in the letters of reference, if used as a screening tool. As 5/9 of the respondents believed these letters to be valuable in allowing the most promising candidates to rise above the others, the researcher inquired how these letters were utilized as a screening tool. 4/9 of the respondents volunteered that the role of the person writing the letters was deemed important, and if a supervisor wrote the letter, the contents were more believable. Two of the interviewees noted they do not use the letters at all, with one (the special education supervisor) offering that, “The letters of reference can be glorified. After the interview I will talk to people. The letters aren’t near as important as the personal interview.” An elementary principal (ES2) shared that in her district they do not use the letters of reference, but rather they perform reference checks on people the candidate did not list as a reference or call three prior supervisors. Two of the most experienced principals cited the level of detail found in the letters to be important, noting that if a supervisor takes the time to write specificities, they believe the letter more than likely reflects the true abilities of a candidate.

When this particular data from the interviews was compared to the characteristics of effective teachers found in a preponderance of literature, and noted in chapter three, one finds that the “soft” or “strategic” skills were most prominently noted in the data with 11 of 19 total responses provided. In Table 15, these data are coded, reported and summarized, with the strategic skills in bold-face font. Four of seven administrators, all of whom work in secondary schools, cited references to strong instructional practices as a key item when scanning reference letters during the screening process. Two administrators noted they looked for evidence of a strong background and student engagement in the letters. (Administrators ES2 and SecSPED
were omitted from the table as they reported they do not use the letters of recommendation to screen candidates.)

The elementary principals cited a desire to read about a candidate’s work ethic and ability to collaborate, while the only area in which the middle school and high school principals agreed was in preferring to interview a candidate whose letters mentioned strong instructional practices.
Table 15

*Prospective teaching candidate qualities useful in reference letters.*

<table>
<thead>
<tr>
<th>Preferred qualities found in letters of reference.</th>
<th>ES1</th>
<th>ES3</th>
<th>MS1</th>
<th>MS2</th>
<th>HS1</th>
<th>HS2</th>
<th>CIA SUP</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Professionalism; work ethic; dependability</strong></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Qualitative descriptors of a positive personality and interpersonal skills (confidence, committed, positive, friendly, warm, open, enthusiastic, values children)</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Ability to communicate</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>Collaboration, teamwork</strong></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Strong instructional practices</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Credentials; subject competence</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Student engagement; Student-centered, connects to diverse populations</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2</td>
</tr>
</tbody>
</table>

**Bolded** items represent “soft” or “strategic skills”
The fourth question on the interview protocol sought to determine how else an administrator identifies strong candidates absent an effective screening mechanism. In this question, 7/9 of the interviewees acknowledged they access their own personal or professional network to identify promising candidates, thus reinforcing the old adage, “It’s not what you know, but who you know that counts.” One principal noted he reads resumes sent to him directly. Two administrators call references listed on the application before passing the candidate through the screening process. One high school principal noted that she did not have an alternate source of information to assist her with the screening.

In question five on the interview protocol, hiring administrators were asked their overall impressions of the common application. The responses to this question add to the pool of knowledge regarding how administrators live with the Pennsylvania policy of requiring districts to use the common application, which is, in part, asked in research question two. In sum, administrators explain that they are resigned to using the application; which some interviewees spoke more clearly to the information they desire in order to screen applications for teaching positions; or some remarked they have not given it much thought heretofore. Their specific responses follow in Table 16.
Table 16

*Responses to the interview question seeking administrators’ perceptions of the common application.*

<table>
<thead>
<tr>
<th>Interviewee</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>ES1</td>
<td>It has the essentials and sets up a good interview opportunity. It’s very limiting. I usually go right to their essay and cover letter. It provides a consistent format.</td>
</tr>
<tr>
<td>ES2</td>
<td>It helps to gather info to look at candidate as a whole; sometimes what's on paper and what's in front in interview are often very different. It puts people on a level playing field.</td>
</tr>
<tr>
<td>ES3</td>
<td>It provides basic elemental information; the sort of information that human resources needs. It does give a glimpse to their academics.</td>
</tr>
<tr>
<td>MS1</td>
<td>It is too generic and poorly organized. It removes any sense of the candidate as an individual that could be determined from a resume.</td>
</tr>
<tr>
<td>MS2</td>
<td>It provides consistency, but not enough information. I prefer to use the interview to gather more information. It does have the same criteria and information to put everyone on even playing field.</td>
</tr>
<tr>
<td>SEC SPED</td>
<td>I don’t care for it. Anybody can write good answers on the application, but it’s important to see who can apply knowledge.</td>
</tr>
<tr>
<td>HS1</td>
<td>Unable to respond, never gave it much thought.</td>
</tr>
<tr>
<td>HS2</td>
<td>Hard to say, the application to me is just negligible. They sell me in their interview. When I look at their application, I am looking for things in their essay. Their application needs to be free of errors. Their reference letters help me know how well they could teach high school.</td>
</tr>
<tr>
<td>SEC CIA SUPERVISOR</td>
<td>It seems very limiting, but not my strong area - reading through applications. I think they’re hard to read.</td>
</tr>
</tbody>
</table>
Research question three investigated what criteria in the standard application do Pennsylvania hiring administrators find most helpful in screening teacher applicants and how well do they align with current research on the qualities of effective teachers? As reported in Tables 14 and 15, administrators value strong backgrounds, experience, instructional practices and strategic skills when culling a mass of applications to bring a candidate to an interview for a vacancy. Question three, in addition to inquiring about the qualities of a teacher they find most appealing in prospective teachers, also asks how well those qualities align with the current research on effective teachers. In Table 17, a research-based list of characteristics is presented with interviewee perceptions of what is important when screening for candidates. This list was first presented in chapter three with relevant sources identifying researchers and studies. The characteristics are presented in alphabetical order while the responses are summarized. Four of the secondary administrators noted they preferred to hire teachers with the ability to match a child’s needs with appropriate instructional strategies, which is consistent with those noting they wanted to screen reference letters for strong instructional practices. All of the administrators noted that a positive personality and strong interpersonal skills were important. This is also consistent with the responses of the majority of those citing references letters as important, when they indicated they looked for “soft” skills in a candidate’s reference letters. Of note, none of the administrators spoke of a prospective teacher’s ability to manage a classroom.
Table 17.

Participant responses to interview questions connected to characteristics of effective teachers.

<table>
<thead>
<tr>
<th>Characteristic of effective teachers</th>
<th>Summary of participant responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ability to collaborate</td>
<td>Teamwork and collaboration were identified by two principals.</td>
</tr>
<tr>
<td>Ability to match child’s needs with instructional strategies</td>
<td>Four of the principals wanted strong instructional practices.</td>
</tr>
<tr>
<td>(assessment, adjustment, questioning, modeling, application, concept mapping)</td>
<td></td>
</tr>
<tr>
<td>Cognitive skills (intelligence, literacy/writing skills, GPA for literature, math, science and social sciences courses)</td>
<td>One principal wanted a strong GPA in the candidate’s major.</td>
</tr>
<tr>
<td>Credentials (National Board Certification, 2-10 years of experience, SAT scores, licensure exam scores)</td>
<td>Two principals cited high Praxis scores.</td>
</tr>
<tr>
<td>“Gut-feeling” of hiring administrators to hire teachers who “fit”</td>
<td>One principal cited “a good fit” for middle school.</td>
</tr>
<tr>
<td>High expectations of students</td>
<td>No interviewee offered this characteristic as important.</td>
</tr>
<tr>
<td>Qualitative descriptors of a positive personality and interpersonal skills (confidence, committed, positive, friendly, warm, open, enthusiastic, values children)</td>
<td>All of the administrators mentioned at least one of these strategic skills. Examples of their preferred qualities included: work ethic, builds rapport with students, supports the whole child, high emotional IQ, connects to children, and interpersonal skills.</td>
</tr>
<tr>
<td>Strong classroom management</td>
<td>No interviewee offered this characteristic as important.</td>
</tr>
<tr>
<td>Strong content knowledge (High grades in 4-6 content area courses)</td>
<td>Two principals desired the candidates to possess subject competence or a passion for their subject.</td>
</tr>
<tr>
<td>Student engagement; Student-centered,</td>
<td>The curriculum supervisor desired experience and competence in meeting the needs of a</td>
</tr>
<tr>
<td>connects to diverse populations</td>
<td>variety of principals while maintaining academic rigor in the classroom.</td>
</tr>
</tbody>
</table>
The seventh question in the structured portion of the interview addresses research question four:

\textit{What elements, if any, are missing from the Pennsylvania standard application for teaching that school administrators believe are essential to selecting the best teacher candidates in order to meet the requirements of Charlotte Danielson model?}

The respondents primarily wanted to learn more about how well a candidate will function in their buildings through additional writing prompts. The graph in Table 18 depicts the administrator’s coded responses. The “other” category includes responses such as: requiring a resume or CV be attached, require letters of reference be attached, require transcripts from universities be attached, and one middle school principal indicated he would want a picture of the candidate. One high school principal indicated she did not have any suggestions as she did not give it any thought prior to the interview.
Table 18

Responses to interview question 7 asking what additional information would be helpful to administrators screening teachers.

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>More writing to show thinking</td>
<td>2</td>
</tr>
<tr>
<td>Improve essay question</td>
<td>3</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
</tr>
</tbody>
</table>
Specifically, seven of the administrators noted a desire to see additional writing, either through a revised essay choice, or through specific open-ended writing prompts that would yield a clear understanding of the candidates’ experiences specific to the job vacancy, their unique talents, and their ability to apply their theoretical knowledge about teaching and learning. The two not noting an interest in seeing additional writing had conducted the fewest number of annual interviews. One elementary principal would like a section added so the candidate could share what they wanted and highlight their own unique gifts and talents. The supervisor of special education commented when asked this question, “I wish I did know a way to improve the application because we are faced with 200 applications for each job and I wish there was a way to automatically sort them rather than read through each one.” Ironically, she also commented she desired to see more writing prompts that reflect a candidate’s practical application of theory and not just theory. In a prior response, this interviewee also stated she knew that “anybody can write these applications, but she needs to see who can apply their knowledge.”

A middle school principal noted that she did not have anything to suggest for improvements as she is struggling to find qualified applicants due to the recent certification changes in Pennsylvania. She elaborated that it is harder to review the applications for the various certifications needed to fulfill one position. For example, she oversees a middle school configured to serve students in grades six through eight. The certifications and requirements for highly qualified personnel formerly aligned to traditional school level configurations (K-6, middle level subject area grades 7-9, or secondary certifications 7-12). Recently, the Department of Education made changes and now candidates must be highly qualified and certificated in grades PreK through 4, grades 4-8 in specific subject areas, or grades 7-12 in specific subject
areas. She noted in her interview that these changes have made it more difficult to find teachers able to teach multiple subjects in her middle school.

**Intersection of Danielson as an evaluation tool and the hiring practices**

In order to analyze the information needed to fully answer research question four, the elements in the Danielson Framework for Teaching that is used to evaluate teachers in Pennsylvania is reported in Table 19 and the associated responses from the administrators interviewed. Effective with the 2013-2014 school year, classroom performance is rated via the Danielson model and counts for 50% of an educator’s evaluation (PDE, 2014). In general the components of the Danielson model did not surface in the semi-structured interviews, except as vague references by a few administrators wishing to see a section where applicants can apply their knowledge of teaching in open-ended writing prompts. Nevertheless, the administrators must abide by the policies set forth in not only hiring effective teachers, but in evaluating the teachers they do hire. With that notion in mind, it is important to note the intersection of policy and practice as viewed through the lens of the hiring managers. The majority of connections included opportunities for the candidate to demonstrate application of knowledge of strong instructional practices through revising the essays on the application or adding open-ended responses to questions about pedagogy. Administrators also suggested that transcripts and references not only be attached to the application, but be required.
Table 19

Danielson Framework and interviewees references to that document or its contents.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Danielson Domain language</th>
<th>Respondent connections</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domain I – Planning and preparation</td>
<td>Effective teachers plan and prepare for lessons using their extensive knowledge of the content area, the relationships among different strands within the content and between the subject and other disciplines, and their students’ prior understanding of the subject. Instructional outcomes are clear, represent important learning in the subject, and are aligned to the curriculum. The instructional design includes learning activities that are well sequenced and require all students to think, problem solve, inquire, and defend conjectures and opinions. Effective teachers design formative assessments to monitor learning, and they provide the information needed to differentiate instruction. Measures of student learning align with the curriculum, enabling students to demonstrate their understanding in more than one way.</td>
<td>Suggested essay revision. Suggested section with questions asking candidate to apply theoretical knowledge.</td>
</tr>
<tr>
<td>Domain II - Classroom environment</td>
<td>Effective teachers organize their classrooms so that all students can learn. They maximize instructional time and foster respectful interactions with and among students, ensuring that students find the classroom a safe place to take intellectual risks. Students themselves make a substantive contribution to the effective functioning of the class by assisting with classroom procedures, ensuring effective use of physical space, and supporting the learning of classmates. Students and teachers work in ways that demonstrate their belief that hard work will result in higher levels of learning. Student behavior is consistently appropriate, and the teacher’s handling of infractions is subtle, preventive, and respectful of students’ dignity.</td>
<td>Suggested essay revision. Include open-ended section to highlight specific knowledge and experiences.</td>
</tr>
<tr>
<td>Domain III - Instruction</td>
<td>In the classrooms of accomplished teachers, all students are highly engaged in learning. They make significant contributions to the success of the class through participation in high-level discussions and active involvement in their learning and the learning of others.</td>
<td>Suggested essay revision. Suggested section with questions asking candidate to apply</td>
</tr>
</tbody>
</table>
Teacher explanations are clear and invite student intellectual engagement. The teacher’s feedback is specific to learning goals and rubrics and offers concrete suggestions for improvement. As a result, students understand their progress in learning the content and can explain the learning goals and what they need to do in order to improve. Effective teachers recognize their responsibility for student learning and make adjustments, as needed, to ensure student success.

Domain IV - Professional responsibilities

Accomplished teachers have high ethical standards and a deep sense of professionalism, focused on improving their own teaching and supporting the ongoing learning of colleagues. Their record-keeping systems are efficient and effective, and they communicate with families clearly, frequently, and with cultural sensitivity. Accomplished teachers assume leadership roles in both school and LEA projects, and they engage in a wide range of professional development activities to strengthen their practice. Reflection on their own teaching results in ideas for improvement that are shared across professional learning communities and contribute to improving the practice of all.

Summary of the Addendum to the Policy Study Findings

Overall, these findings provide the groundwork for answering the research questions in sum. After the content analysis was completed by reviewing the language in relevant policy documents guiding the training, hiring and evaluation of teachers in the Commonwealth of Pennsylvania, which was reported in the context of research question one, the responses to the semi-structured interviews were analyzed and reported as they related to research questions two, three, and four. By analyzing the discrepancy in coverage between what is written in the policy and what is actualized by the practitioners, the author finds there is little fidelity to the expected policy demands. The common thread from this portion of the analysis was that there is little coherence in policy documents and how teachers are actually hired. Further, the hiring administrators generally did not report that the common application system required in the policies suits their purposes for hiring effective teachers. While there is a partial match between what the hiring administrators indicated they need in terms of hiring teachers and the requirement to use the Danielson Framework to evaluate the teachers they hire, there are some gaps in the actual practice of finding effective teachers within the confines of the existing policies. The researcher found that an administrator’s years of experience, including their experience with conducting interviews held few differences in their responses. These gaps and recommendations for improvements will be explored further in the following chapter.

To further understand the connection between practice and policy and more thoroughly respond to research question 4, a content analysis was conducted to learn if there was actual coherence between the Danielson framework and the characteristics of effective teachers. The results in Table 12 were presented as percent of language covered in the documents. The highest percent of coverage of the Danielson document articulating the effective characteristic of
teachers was noted in the area where the most hiring agents desired competency: the ability to
match child’s needs with instructional strategies (assessment, adjustment, questioning, modeling,
application, concept mapping) at 35% coverage. All of the administrators noted they wanted to
hire a candidate with desirable personality traits and interpersonal skills. No administrator
suggested they wanted to hire a teacher who neither holds high expectations for students nor
possesses strong classroom management skills. While the “soft” or “strategic” skills fell high on
the administrators’ wish list of characteristics for hiring effective teachers, those qualitative
descriptors are barely covered in the Danielson evaluation model.
CHAPTER V

DISCUSSION AND CONCLUSIONS

Introduction

This study examined the coherence or lack of coherence between the criteria for identifying promising prospective teachers and criteria for evaluating the actual expertise of teachers who have been hired and are currently employed by a school district. The perceptions of a sample of those responsible for hiring those prospective teachers concerning their sense of the connection between the process of evaluating prospective teachers and the qualities of effective instructors as identified by the broader research. This chapter contains a discussion of the findings from the policy analysis as well as its findings from interviewing a sample of hiring administrators.

The underlying purpose of the study is to aid school districts in their efforts to hire the most promising teachers through bringing the criteria used in the two processes more closely aligned. Missing from the field of research on the screening process for hiring effective teachers are the most commonly used criteria for screening teacher candidates. Also absent in this research on criteria for hiring are explicit references to criteria by which those teachers who are hired will subsequently be evaluated for evidence of their effectiveness, e.g., criteria within the Danielson model. In sum, this is a study sought to answer the problems of present policy and its implementation at the ground level by practitioners.

In this concurrent mixed-method study, the researcher conducted a minor policy analysis on whether and how the new Charlotte Danielson Framework for Teaching appears in some form or impacts the screening process for evaluating prospective teachers within the required
Pennsylvania Standard Application for Teaching. This study contains the results from the content analyses of the legislated common application, the Pennsylvania Standard Application for Teaching and its alignment to the Danielson evaluation model, the legislation regarding the certificating teachers in Pennsylvania, and the framework for teacher training at the university level. Additionally, a descriptive cross-sectional study was conducted to investigate whether and how the Pennsylvania Common Application for Teacher impacts the hiring processes used by hiring teams in Pennsylvania. Administrators responsible for evaluating teachers interviewed and asked to rate the usefulness of the standard application as a tool for screening potential hires and to consider what elements may be missing, specifically, elements contained or implied in the Danielson model.

From a theoretical perspective, both common sense and research indicate that there should be consistency between how school administrators hire and subsequently evaluate teachers. When using a research-based framework for evaluating teaching, such as the Danielson model, one should expect that hiring teachers with the qualities and capabilities as denoted in the proficient and distinguished columns of the Danielson rubrics would yield both increased student achievement and an evaluation score of either proficient or distinguished on the end of year teacher evaluation forms. Of course, attention to these strengths and capabilities should be balanced against the unique needs of the school with teacher vacancies, such as various subject matter certification needs as well as the need for more culturally responsive pedagogical and relational skills. This theoretical rationale, of reviewing the possible policy and practice links between teacher hiring criteria and teacher evaluation criteria guided the study and its assumptions.
Through identifying these gap between hiring criteria and elements of the Danielson Framework for Teaching as well as school administrators’ understanding of how to screen for qualified teacher candidates using the common application, suggestions for policy and practice improvements will be presented in this chapter. Further, the policy discussions will address how school administrators hire teachers without benefit of evidence of quality teaching as measured by Danielson and how the screening tools and common application may be adjusted to solicit such evidence. This apparent disconnect between the hiring criteria and the Danielson teacher evaluation model may prove to be problematic for school administrators seeking to hire the best qualified candidates for their schools. Finally, this study may provide recommendations for improving the screening tool and redesigning the Standard Application to better suit the needs of school administrators seeking to attract candidates with qualities of distinguished teachers as noted by Charlotte Danielson. While Pennsylvania standardized the application process for prospective teachers, many administrators believe that only through an interview or a demonstration lesson can candidates display their real talents. It may thus be counter-intuitive that the most promising employees will always emerge from a standardized application process as the best.

**Research Questions**

The study addressed the following questions.

1. Is there a coherent consistency between the criteria in Pennsylvania policy documents (K-12 Program Framework Guidelines, The Public School Code inclusive of the common application for teaching, Chapter 354, and the Educator Effectiveness Manual) used in hiring effective teachers?
Results and discussion

The data from the minor policy analyses reveal that there is overall very little coherence between the documents governing the hiring, training, and evaluating teachers. Using Carley’s (1997) model in which a 50% match yields a significant coherence between content in analyzed documents, the first major finding concludes there is no significant match found within and among any of the documents presented. To determine whether there are gaps in the policy and the practice, research questions one and four were examined through several lenses. First, the criteria on the common application and the policy documents were examined using the nVivo program. With only a 3.71% of the text showing a match on the Public School Code; 3.26% of Chapter 354 matching the application criteria; and 3.23% of the Educator Effectiveness Administrative Manual for evaluating teachers showing a text match; that leaves over 96% of each matched set of documents having no coherence.

In a doctoral study by Bolz (2009), principals agreed that one area for further study may be the development of an accurate means of assessing a candidate's general knowledge as well as
development of a screening tool to efficiently assess a candidate’s personal attributes. In this study, data shows similar coherence between those qualities and the policy documents. For example, a teacher’s professionalism is measured through the recently enacted Educators Effectiveness law (2012), but the policy handbook yields only a 4% coverage in content. The teacher training law, Chapter 354, addresses professionalism in 3.21% of its content. In the Public School Code, a text analyses was run for terms describing professionalism, yielding a 0.32% coverage in the whole document, rising to 2.03% in the subset, Act 14, the employment of professionals. Additional personal attributes yield even less coverage in each of those three policy documents. Collaboration and its search derivatives yield less than 1% in each document examined. High expectations for students and communication top out at just over 2% coverage and 1.57% coverage, respectively, in the Educator Effectiveness Administrative Handbook. Other personal attributes yielded no results in any of the documents. Regarding assessing a candidate’s general knowledge, all three documents revealed less than 1% coverage in their content, even though on the common application invites prospective teachers to report their grade point average from college.

More coherence was discovered when conducting a content analysis looking specifically at whether elements of the common application appear in the policy documents. For example, 46% of the application criteria are addressed in the Public School Code, primarily because the legislation requiring the common application is found in this code. There is an 18% match between the criteria on the application and the outcomes desired for college-trained teachers. With respect to the teacher evaluation system, only 9% of the application criteria are present in the Educator Effectiveness legislation. Therefore, the legislation requiring prospective teachers to complete a common application, and the document by which school district administrator use
to screen applicants do not fully reflect the attributes necessary to hire teachers with the academic background, personal characteristics, and skills the administrators will later use to evaluate teachers or have been shown through research to be qualities of effective instructors.

An in-depth analysis of the expectations for proficient teachers and the training pre-service teachers receive in college was conducted to determine additional coherence or potential gaps. Once again, this analysis revealed an overall coverage of 18% between the documents. While this is a positive alignment of policy and practice expectations, the analysis showed very little depth to which teachers are evaluated when compared to how they are trained. For example, there was a 6% match regarding the academic criteria needed for pre-service teachers, indicating the policy is lacking at the training level, but both the elements of evaluation require substantial content knowledge and at least one study (Bolz, 2009) indicates that more administrators wanted a way to evaluate a prospective teacher’s general knowledge ability. In the same vein, less than 4% of the teacher training legislation indicates a requirement for additional academic demands (scores on qualifying exams, evidence of writing skill, and technical expertise.) Further, elements of the Danielson Framework for Teaching, which determine 50% of a teacher’s evaluation, appear in less than 4% of the training policy document. While administrators must evaluate teachers on the various domains, inclusive of substantial understanding of content, teacher training programs do not adequately address this requirement.

A content analysis of the characteristics of effective teachers as compared to the elements of the Danielson framework was also conducted to ascertain alignment between what research shows and the policy document on evaluating teachers in Pennsylvania. Of the top ten characteristics featured in the literature review, there was strong alignment (>25%) with three of these. That these are present in the policy document utilized after a teacher is hired can be
problematic for the school leader. Given that the ability to match a child’s needs with effective instructional strategies (assessment, adjustment, questioning, modeling, application, concept mapping) has a 35.87% match in the Danielson framework suggests that a hiring agent would want to know how well a candidate can perform these functions prior to being hired. Unfortunately, there is nowhere on the application to learn if this is the case, and often administrators learn too late of a teacher’s deficits in this area. The same is true for the other two highly matched characteristics, with student engagement at a 27% match and strong classroom management skills at 26%.

This study examined more thoroughly the four domains of Danielson’s expectations for teacher proficiency and compared those elements with Chapter 49, a subset of the PA Public School code governing the certification of professionals (teachers), and where those elements might be found on the common application. This comparison assisted in determining whether the criteria for evaluation were also present when earning the initial certification and highlighted in the prospective teacher’s application. While there was not a direct connection to the exact language on the application and in Chapter 49, there were several areas construed to be matches. In domain one, planning and preparation, by reviewing the areas of certification, the educational background inclusive of the degree conferred and the grade point average found on transcripts and in the application, administrators hiring teachers can find alignment with the expectation that proficient teachers have “extensive knowledge of the content area” and universities can find guidance on conferring those degrees. Additional evidence of proficient teachers who plan and prepare well for student learning can also be found in Chapter 49 that requires that all prospective teachers complete nine credits in literacy development, accommodations of students with disabilities in inclusive classrooms and three credits that address the needs of English
language learners. Further, this portion of the school code delineates that all pre-service teachers meet a minimum competency in basic skills, general knowledge; professional knowledge and practice; and subject matter knowledge. The language written in this section also directs the Department of Education to certify only candidates who have completed an approved teacher preparation program. Therefore, when the supervising professor completes an assessment of each pre-service teacher, one might presume competency in planning and preparation. Although these assessments mirror the language in very general terms, there is an expectation that graduating teachers can adequately use their knowledge of content and students to plan for instruction. The common application lacks criteria that indicate a teacher’s proficiency in this domain, except that at some point they earned a teaching certificate. As the expectation for teacher evaluation using the Danielson Framework for Teaching is a recent addition to the Pennsylvania code (Act 82), teachers certificated prior to the implementation of the Educator Effectiveness system may well be lacking in this domain. The only way to ascertain skills in this area from the application is to read the essay and letters of reference in the event the authors chose to address these skills.

This researcher concludes that variant ages of the policy documents, ranging from the common application created in 1996 to the more recent enactment of the teacher evaluation tool (2012) do not address current research in the field of teacher certification, teacher hiring processes, and lack consistency with respect to training teachers and evaluating teachers for their effectiveness. It is possible that this lack of coherence can be traced to differing expectations during the various decades in which they were implemented.

When evaluating teachers for their skills in domain two, classroom environment, the administrator looks for evidence that the teacher “organizes her classroom so that all students can
learn.” Further evidence includes communication between and among the classroom stakeholders, creating a safe and respectful atmosphere where all children have their needs met, designing procedures that enhance learning and minimize disruptions, and a strong belief that effort yields achievement. The only portions of the common application that may reveal a candidate’s ability to master the classroom environment are the essay and letters of reference, again if the author chooses to write on those skills. In Chapter 49, by virtue of completing an approved teacher preparation program, the supervisor of the student teacher must address his or her skill in classroom management, one element of the domain on a final student teaching evaluation. The letter of reference from the supervisor may be helpful. This area is not addressed on the application and is an unknown when screening applicants unless the letters of reference, or possibly the essay, speak directly to these skills.

Once again, in domain three, instruction, only letters of reference and possibly the essay may provide some degree of knowledge about a candidate’s skill in these elements. Similarly, the supervisor of the student teacher may address these areas on his or her evaluation, but not in the detail that the teacher evaluation requires. For example, student engagement, active involvement, and specific feedback are present in proficient teachers’ classrooms. There is no item on the application for an administrator to determine if the prospective teacher is adept at these critical elements, neither are these terms specifically present on a pre-service teacher’s evaluation, only that their instruction is proficient.

To answer research questions two through four, nine administrators from southeastern Pennsylvania school districts were interviewed and asked a series of questions in semi-structured interviews. These administrators, a combination of principals and central office personnel, primarily agreed that most of the work culling the numerous applications they receive includes
scanning and reading both references and essays. The work is challenging, as there is no simple way to do this. Several noted they use their own professional network to identify promising candidates. A few commented they will hire teachers who have previously taught for them in a temporary capacity.

Of the objective criteria available on the common application, most of the administrators screened applicants for their certification, experience, and educational background. A teacher’s cognitive skills are one of the top ten characteristics of effective teachers recognized in the literature study. Specific credentialing, such as National Board Certification is also recognized, but none of the administrators mentioned that as an important factor when screening candidates, quite possibly because that certification program is not highly recognized in southeastern Pennsylvania.

These administrators follow similar procedures for living with an application that offers little in the way of solid objective criteria or a way to review them quickly. While most noted they use an on-line application warehouse, none commented that they could use those systems efficiently to screen for objective criteria. All of the administrators read through the applications, first screening for appropriate certification and experience. Some commented that where a candidate received his license mattered. After the administrators sort candidates based on their backgrounds, the hiring agents read through the letters of reference. In most cases, who wrote the letter mattered just as much as the level of detail provided. All of the administrators wanted to read letters from the past supervisors and put more stock in letters that were written with a degree of detail highlighting the ability of the teacher to instruct effectively and connect with children. Absent this level of detail, a few administrators would seek verbal references on their own. In some cases, the administrators indicated they would not make any decisions until after
the most promising candidates taught a demonstration lesson to students and had at least one follow up interview with a central office administrator. Research question three sought to learn what criteria in the standard application administrators found most helpful. In summary, they believed the background, experience, letters of reference and essays were most helpful. However, in research question two, administrators were asked to identify how they live with a policy that guides them to use the application without solid criteria. For this, some were content to live with the policy, but for the majority (5/9) that were not, they improvised by reaching out to their own professional network, calling other administrators they knew to seek counsel on particular applicants, or hiring only those known entities after having seen them teach or work in their schools.

Research question four asks what elements, if any, are missing from the common application that are essential to selecting the best teacher candidate in order to meet the requirements of the Pennsylvania policy on evaluating teachers with the Danielson model. To answer this, the nine administrators were specifically asked this question and the policies of hiring and evaluating teachers were analyzed to determine coherence between them and the research-based characteristics of effective teachers highlighted in the literature study.

The administrators who were able to answer this question, (two noted they did not have any suggestions at the time of the interview), responded that they wanted to see more evidence of a candidate’s ability to write and apply their knowledge. This information would be helpful as the research indicates it is the teacher’s ability to effectively plan, model, adapt, engage, and provide feedback to diverse students that advances student achievement. Each of the administrators saw their task of hiring the best possible candidates as one of their most important and took this work seriously. In fact, while they generally lamented that the only real way to
learn about a candidate from the current application was through reading the reference letters and essays, they also wanted to read more in the form of responses to better essays or open ended prompts that required the candidate to apply his knowledge. Certainly, there is irony in wanting a more efficient system while also wanting to read more of a prospective teacher’s writing. This speaks to the administrators desire to hire the best teachers.

One particular challenge for Pennsylvania middle school administrators is a result of recent changes to certification. As the middle school principals noted, finding the “right fit” is now more difficult as the configuration of middle schools is largely unchanged (grades 6-8, typically), but the certifications now run grades 4-8 or grades 7-12. In many middle schools, one administrator noted, teachers teach multiple subject areas in order to provide a teaming experience for children. With content specific certifications now required, finding candidates with multiple certifications is more challenging.

The literature on effective teachers suggest that teachers be intelligent, possess strong literacy skills, and have an array of interpersonal skills from the ability to collaborate to being positive, in addition to well-developed pedagogical skills. The common application assists administrators in identifying candidates who were successful in college, have sold GPAs, good grades in content courses if the administrator has access to the candidate’s transcript, and could take credentialing tests well. Areas for opportunity include gaps in the application system that match the research to the practice. For example, barring any breaches in integrity, an administrator may find that evaluating the essay in the hiring process may assist with determining literacy standards of the prospective teacher. While the research cites soft or strategic skills such as positive personality traits, the ability to collaborate, possessing high regard for students’ abilities as key characteristics, the application lacks evidence of any of these
unless the administrator scans the letters of reference for these terms. Similarly, an effective
teacher must have the ability to engage all students and match their needs with appropriate
instructional strategies. They must also plan their classrooms for maximum learning and
minimal disruptions. The results indicate that while strong classroom management can provide
for maximum learning, none of the administrator’s interviewed cited that quality as important.
This may be a result of the suburban demographic common to most of the principals interviewed
where classroom management is as much an inherent skill as it is reflective of the mostly
compliant students they serve. The outcome of this study is clear that these pedagogical skills
and the strategic skills previously noted are lacking in the Pennsylvania policy requiring use of
the common application.

**Study limitations**

This study examined the policies of certifying, hiring, and evaluating teachers in the
Commonwealth of Pennsylvania. Other states may have different procedures in these areas, so
cautions should be taken when attempting to apply these conclusions to similar situations.

While every attempt was made to interview a cross-section of administrators for their
perceptions of the practices of hiring teachers in Pennsylvania, the reader should understand that
only hiring agents in southeastern Pennsylvania were contacted. Further, the administrators in
the study were directly involved in the screening and hiring practices in their respective districts.
For large urban schools, there may be different screening practices. Therefore, outcomes to the
study may not be applicable in large urban settings.
Implications for policy and practice

With so little coherence between the policy documents outlining how teachers are trained, hired and evaluated, further study on how administrators live with these policies and adapt to these gaps may be warranted. At the policy level, committees at the state level may want to review the language and build mechanisms to address the gaps noted in the study. For example, to increase coherence among all the documents and cited research, Pennsylvania legislators should consider updating all of the policies and their subsequent regulations, such as the common application to match the most recent change, the implementation of the Danielson Framework for Teaching as the evaluation tool for educators. Making these changes to the application itself can assist hiring agents immensely in their screening prospective teachers by ensuring that the characteristics of effective teachers are explicitly embedded in the information. As one principal stated, she would like to see open-ended prompts to various scenarios tied directly to the specific job for applicants to address. In this way, administrators can ascertain the candidate’s ability to apply their knowledge in each of the four domains for which they will be eventually evaluated. Another change to the application and supported by the literature regarding the characteristics of effective teachers might be to have the candidate itemize his or her grades and scores on all qualifying exams and GPAs. By embedding this information in the actual application, rather than as transcript attachments, sorting for this information will be simpler, particularly for districts using an on-line application system. Since many of the principals interviewed for this study rely on the letters of reference to assist them in sorting applications, an improvement to the application and certainly a time saver, would be to have an automatic response to each reference and ask him or her to rate the candidate on the characteristics of effective teachers noted in the study, such as the ability to collaborate, and the
elements of the Danielson framework on an electronic survey. In this way, administrators can further screen applicants based on criteria they deem most important for their schools.

During the interviews, hiring agents were asked to identify criteria they utilized when screening applications. As most of their responses bore little connection to the characteristics effective educators have in common, districts may want to provide training for administrators on those characteristics of effective teachers. In the literature review, many studies found that principals hire on a “gut feeling” or for the “right fit” in their schools. Helping these administrators understand the effects of proficient teachers on the achievement of students, as quantifiable characteristics, rather than some intuition, may assist children in having the best possible educator in their classrooms. Additionally, this training may help the administrator more effectively screen applicants if they knew which elements yielded the most positive results in terms of student achievement.

A final recommendation from this researcher would be for further research and to replicate the study with large urban districts and with districts from a geographically different area. While the results demonstrated the lack of coherence between policy and practice, they may be more or less prevalent with another demographic.

**Conclusion**

The outcomes of research question one indicate there is little coherency between the criteria in the Pennsylvania public school policy documents on hiring teachers and evaluating teachers once they are hired. Only the area of certification a teacher possesses has direct congruence, with additional alignment possible through the letters of reference and the essays in the application, presuming their contents match items in the evaluation document. Interestingly,
there is stronger alignment between the characteristics of effective teachers and the evaluation document. With respect to the policy documents regarding the training of teachers, evidence of the candidate’s skills may be ascertained through the transcript grades added to the application and the letters of reference from the student teacher supervisor and cooperating teacher.

Administrators decide who to interview from a combination of methods. Some focus on the letters of reference provided, some utilize the essay as evidence of a potential teacher’s merit, and some rely on their own networking to determine if the candidate has a strong background. The credibility of the authors writing the letters of reference, and the detail to which they are written offer the hiring agent a better understanding of the candidate than the actual application. Most administrators rely on additional evidence, such as demonstration lessons, or further reference checks beyond those offered in the application, and interviewing with more than one committee member before hiring a teacher. Most agree the common application does little to give true insight into predicting a teacher’s success in the classroom, but does provide a common playing field for the most rudimentary of information. Therefore, the administrators interviewed for this study all do the best they can with what information they have available when making decisions to cull the candidate pool.

Administrators in this study do not agree on the most important components of the standard application. The majority of them (2/3) indicated that experience was a key factor in determining who to interview, with just over half of them (5) noting that reading the letters of reference were important to them. A secondary component of research question three seeks to answer how well the standard application aligns with current research on effective teachers. Of the ten characteristics of effective teachers identified by research and included in the study, there is one direct connection to the research and the policy in practice: cognitive skills may be
ascertained by reviewing the educational background of the candidate and reading the essay, presuming the essay was penned by the candidate herself. If a candidate chooses to add any additional credentials, such as a National Board Certification, she may do so in the “Other qualifications” section. Other than those two areas, only the references or the content of the essays may yield any glimpses into a prospective teacher’s characteristics.

Finally, to answer research question four, administrators in the study responded that they wanted stronger essay questions to allow the candidate to demonstrate their ability to connect their own background with practice. Several wanted more open-ended prompts to show their ability to apply their knowledge in novel situations. As there was no single consensus, it behooves policy makers and administrators alike to consider the qualities of effective teachers and allow those gaps in the practice to be filled by revising the processes by which Pennsylvania administrators can screen quality applicants from the pool of candidates for interviews.

There is much work to be done in Pennsylvania to improve the policy and practice with respect to hiring teachers. As both Dylan Wiliam, and one interviewee agreed, there is no greater challenge for us. For the interviewee in this study, she believes, "When you think about it, there's no greater investment. It's worth it put to forth the effort on the front end (of hiring teachers,) because if it doesn't work out, there's a tremendous amount of effort on the back end." As Dylan writes in his book, *Embedded Formative Assessment* (2011), and as this researcher believes,

“The greatest impact on learning is the daily lived experiences of students in classrooms, and that is determined much more by how teachers teach than by what they teach (p. 9).”
REFERENCES


doi:[http://dx.doi.org.ezproxy.shu.edu/10.1016/j.cedpsych.2014.10.006](http://dx.doi.org.ezproxy.shu.edu/10.1016/j.cedpsych.2014.10.006)


http://search.proquest.com/docview/220693739?accountid=13793
*Personnel Psychology, 36*(2), 331.

*Teaching and Teacher Education, 36*(0), 143-152.

doi:http://dx.doi.org.ezproxy.shu.edu/10.1016/j.tate.2013.07.010


doi:10.1111/j.1468-2389.2009.00453.x


Pennsylvania Act 107 of 1996 (24 P.S. §12-1204.1) (http://www.education.state.pa.us/portal/server.pt/community/finding_a_teaching_position/8629/commonly_asked_questions_and_answers/506859.)


doi:10.1177/1932202X11424882


doi:10.1080/17404622.2013.839047
APPENDIX A– Common Application for Teaching

STANDARD APPLICATION
For Teaching Positions in Pennsylvania Public Schools

(PLEASE PRINT OR TYPE)

<table>
<thead>
<tr>
<th>POSITION(S) DESIRED</th>
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<tr>
<th>NAME</th>
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<th>E-MAIL ADDRESS (IF AVAILABLE)</th>
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LIST, IN ORDER OF PREFERENCE, THE GRADES, SUBJECTS AND/OR POSITIONS FOR WHICH YOU ARE APPLYING:

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<th>1</th>
<th>2</th>
<th>3</th>
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CERTIFICATION

(LIST ALL AREAS IN WHICH YOU HOLD VALID PENNSYLVANIA AND/OR OUT-OF-STATE TEACHING CERTIFICATES. NOTE: APPLICANTS HOLDING A CERTIFICATE FROM ANOTHER STATE MUST OBTAIN A PENNSYLVANIA CERTIFICATE IN ORDER TO TEACH IN PENNSYLVANIA PUBLIC SCHOOLS.)

<table>
<thead>
<tr>
<th>AREA OF CERTIFICATION</th>
<th>ISSUING STATE</th>
<th>DATE ISSUED</th>
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| HAVE YOU ACQUIRED TENURE IN PENNSYLVANIA? |

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<th>IF YES, IN WHAT SCHOOL DISTRICT?</th>
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<th>DATE AVAILABLE FOR EMPLOYMENT</th>
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| IF YOU ARE NOT EMPLOYED FULL-TIME, ARE YOU INTERESTED IN BEING PLACED ON OUR SUBSTITUTE LIST? |

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<tr>
<th>LONG-TERM</th>
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<td>SHORT-TERM</td>
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# APPENDIX A

## EDUCATIONAL BACKGROUND

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<thead>
<tr>
<th>School or Institution and Location</th>
<th>Major/Minor</th>
<th>Diplomas, Degrees, or Credits Earned</th>
<th>Grade Point Average (GPA)</th>
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<td>High School</td>
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## EXPERIENCE

(PRESENT OR MOST RECENT FIRST)

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<th>Date:</th>
<th>Name of Employer and Address</th>
<th>Your Title</th>
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<td>Name &amp; Title of Supervisor:</td>
<td>Final Yearly Salary:</td>
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Please list activities that you are qualified to supervise or coach:

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If you have not been previously employed in a teaching position, please complete the following:

**STUDENT OR PRACTICE TEACHING**

<table>
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<tr>
<th>GRADE OR SUBJECT TAUGHT</th>
<th>NAME AND ADDRESS OF SCHOOL</th>
<th>COLLEGE SUPERVISOR</th>
<th>COOPERATING TEACHER</th>
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**Student Teaching References:**
Please attach photocopies of letters of reference and/or evaluations from college/university student teacher supervisor and cooperating teacher(s).

**REFERENCES**

References should include superintendents, principals or professors who have first-hand knowledge of your professional competence and your personal qualifications. Experienced teachers should include the superintendent and principal of the two most recent schools in which employed. If any person(s) listed should not be contacted for reference at the present time, indicate in the left-hand margin the date contact(s) may be made.

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**OTHER QUALIFICATIONS**

Summarize special job-related skills and qualifications acquired from employment or other experiences (including U.S. military service) and/or state any additional information you feel may be helpful in considering your application, i.e. honors, awards, activities, technology skills or professional development activities:

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APPENDIX A

GENERAL BACKGROUND INFORMATION

You must give complete answers to all questions. If you answer "Yes" to any question, you must list all offenses, and for each conviction provide date of conviction and disposition, regardless of the date or location of occurrence. Conviction of a criminal offense is not a bar to employment in all cases. Each case is considered on its merits. Your answers will be verified with appropriate police records.

Criminal Offense includes felonies, misdemeanors, summary offenses and convictions resulting from a plea of "nolo contendere" (no contest).

Conviction is an adjudication of guilt and includes determinations before a court, a district justice or a magistrate, which results in a fine, sentence or probation.

You may omit: minor traffic violations, offenses committed before your 18th birthday which were adjudicated in juvenile court or under a Youth Offender Law, and any convictions which have been expunged by a court or for which you successfully completed an Accelerated Rehabilitative Disposition program.

Were you ever convicted of a criminal offense? [ ] Yes [ ] No
Are you currently under charges for a criminal offense? [ ] Yes [ ] No
Have you ever forfeited bond or collateral in connection with a criminal offense? [ ] Yes [ ] No
Within the last ten years, have you been fired from any job for any reason? [ ] Yes [ ] No
Within the last ten years, have you quit a job after being notified that you would be fired? [ ] Yes [ ] No
Have you ever been professionally disciplined in any state? [ ] Yes [ ] No
Professional disciplined means the revocation, revocation or suspension of your teaching certification or having received a letter of reprimand from an agency, board or commission of state government, such as the Pennsylvania Professional Standards and Practices Commission.
Are you subject to any visa or immigration status, which would prevent lawful employment? [ ] Yes [ ] No

Note: If you answered "Yes" to any of the above questions, please provide a detailed explanation on a separate sheet of paper, including dates, and attach it to this application. Please print and sign your name on the sheet, and include your social security number.
APPENDIX A

ACT 34 Clearance (PA State Police Criminal Background Check)
Each applicant must submit with his/her employment application a copy of a Criminal History Record from the Pennsylvania State Police. Prospective employees must submit ORIGINAL report, which may not be more than one (1) year old.

ACT 114 (Federal Criminal History Record)
Each applicant must submit with his/her employment application a copy of a Federal Criminal Record from the Federal Bureau of Investigation (FBI). Prospective employees must submit ORIGINAL report, which may not be more than one (1) year old.

ACT 151 Clearance (PA Child Abuse History Clearance)
Each candidate must submit with his/her employment application a copy of an official clearance from the Pennsylvania Department of Public Welfare. Prospective employees must submit ORIGINAL report, which may not be more than one (1) year old.

ESSAY
Please write an essay as described on page six. For your convenience, you may attach a sheet; however, your essay may not exceed one page. At the bottom of the attachment, please print and sign your name.

CERTIFICATION AND RELEASE AUTHORIZATION
I certify that all of the statements made by me are true, complete and correct to the best of my knowledge and belief, and are made in good faith. I further certify that I am the sole author of the essay. I understand that any misrepresentation of information shall be sufficient cause for: (1) rejecting my candidacy, (2) withdrawing from any offer of employment, or (3) terminating my employment.

I hereby authorize any and all of my previous employers and/or supervisors to release any and all of my personnel records, and to respond fully and completely to all questions that officials of (school district) may ask regarding my prior work history and performance. I will hold such previous employers and/or supervisors harmless of any and all claims that I might otherwise have against them with regard to statements made to this school district. I further authorize these officials to investigate my background, now or in the future, to verify the information provided and release from liability all persons and/or entities supplying information regarding my background. However, I do not authorize the production of medical records or other information, which would tend to actually identify a disability nor do I authorize inquiries which would include information related to any medical condition or medical history. Further, I do not waive any rights which I may have under state or federal law related to my right to challenge the disclosure of unlawful or inaccurate information, whether by the school district or by entities or persons providing such information to the school district, including any and all claims concerning allegations of employment discrimination because of race, color, sex, religion, national origin, ancestry, age or disability.

__________________________  __________________________
Date  Signature of Candidate (in ink)

[Must be original]

Pennsylvania school districts shall not discriminate in their educational programs, activities or employment practices based on race, color, national origin, sex, disability, age, religion, ancestry or any other legally protected classification. This policy is in accordance with state and federal laws, including Title II of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, the Age Discrimination Act of 1975, the Americans with Disabilities Act of 1990 and the Pennsylvania Human Relations Act. Information relative to special accommodations, grievance procedure, and the designated responsible official for compliance with Title VI, Title IX, and Section 504 may be obtained by contacting the school district.

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APPENDIX A

ESSAY

We are interested in your ability to organize and express thoughts on a specific topic in a succinct manner. Please select one of the following topics and write an essay in the space provided on this page.

1. The Most Important Qualities of an Outstanding Educator.
2. My Philosophy of Student Discipline.
3. The Importance of Continuing Professional Development and How I Plan to Incorporate It Throughout My Career.
4. Essential Elements of Instruction, Administration or Area of Certification.
5. How Information Technology (i.e., computers, Internet) Can Be Integrated into the Instructional Process and Curriculum.

Signature __________________________ Name __________________________

Note to applicants: This application can be downloaded from the Department of Education’s home page which is accessible at: http://www.state.pa.us.

This application was developed in accordance with Section 1204.1 of Act 107 of 1996, by the Pennsylvania Department of Education in consultation with organizations representing school administrators, including personnel administrators, teachers and school boards. Questions should be referred to PDE School Services Office at Voice Telephone (717) 787-4999, TTY Telephone (717) 757-5445 or FAX (717) 783-5002. If you need accommodation in completing this application, including alternate format, please contact the school district.
APPENDIX B – IRB Approval

Informed Consent for participating in the study: Hiring the most effective teachers: an examination of the policy and practice in Pennsylvania

You are being asked to take part in a research study seeking to learn how some principals screen and hire teachers for their districts using the Pennsylvania Standard Application for Teaching. Please read this form carefully and ask any questions you may have before agreeing to take part in the study.

1. The researcher, Barbara Lanni Powers, is a doctoral student in the Education Leadership, Management and Policy department of Seton Hall University.

2. Participants in the study (principals in this case) can expect to be interviewed and answer seven questions about their practices for hiring teachers. The time commitment is estimated to be 30 minutes.

3. After voluntary consent is obtained, the researcher will set up the recording device and identify herself as the researcher and the subject by a code as an introduction on the tape. Following this introduction, the researcher will conduct an interview in which a series of seven predetermined questions will be asked. Occasionally, the researcher may ask a follow-up question if the participant’s response warrants further clarification. The interview will conclude with the researcher noting the end of the interview on the recording.

4. A sampling of questions for the interview are as follows:
   a. What, if any, on-line or electronic tools does your district use to collect and sort teacher applications, such as TalentEd or PaREAP?
   b. If so, what qualities do you use to search for potential teaching candidates for an interview?
   c. If you screen candidates via a paper copy of the application, what qualities do you use to screen for an interview?

5. Participation in the interview is completely voluntary and refusal to participate or discontinue participation at any time involves no repercussions to the participant. The participant may skip questions or withdraw from the study at any time.

6. All responses to the interview will be coded in such a way that no one will ever be able to link the data to any individual in the study.

7. In order to maintain confidentiality, all data, inclusive of the voice recordings and transcripts of the interviews will be located on a USB memory key, locked in the researcher’s desk at home, and available only to the researcher and her dissertation mentor, Dr. Elaine Walker. All information obtained from the interviews will be coded in such a way so that no one will ever link the information to the participant.

8. All records of the interview contents will be kept confidential except when analyzing the data by the researcher with the researcher’s dissertation mentor, Dr. Elaine Walker.

9. There are no anticipated risks or discomforts to participating in this study.

10. There are no direct benefits to the participant for participating in this research study.

Seton Hall University
Institutional Review Board

Mar 07 2016
Approval Date

College of Education and Human Services
Executive Ed.D. Program
Tel: 973.275.2728 Fax: 973.275.2484
400 South Orange Avenue • South Orange, New Jersey 07079-2885

Expiration Date
Mar 07 2017
11. There is no compensation for participating in this research study.
12. There is no anticipated risk for participating in this research study.
13. There are no alternative procedures or courses of treatment applicable to this research study.
14. CONTACT INFORMATION for answers to pertinent questions about the research and your rights as a participant.
   [1] The researcher conducting this study is Barbara Launi Powers. Please ask any questions you have now. If you have questions later, you may contact her at powersbb@shu.edu or 610-693-8320.
   [2] The researcher’s faculty advisor is Dr. Elaine Walker who may be reached at (973) 275-2307, Elaine.walker@shu.edu, or in room 416 in Jubilee Hall for any additional questions you may have.
   [3] If you have any questions or concerns regarding your rights as a subject in this study, you may contact the Institutional Review Board (IRB) of Seton Hall University at (973) 313-6314 or via email at irb@shu.edu. The IRB is located in Presidents Hall Rm. 325 on the Seton Hall campus.
15. This interview will be recorded. Your signature indicates consent to the taping of the interview. By signing, the participant understands that (s)he will be identified on the tape by a code, that only the researcher and her mentor, Dr. Elaine Walker will have access to the recording, that the recording will be stored in a locked desk drawer at the researcher’s home when not used for transcribing, and that the tapes will be transcribed by the researcher herself. The consent form and the tapes of this interview will be destroyed three years after transcription.
16. You will be given a copy of this signed and dated consent form for your records.

Statement of Consent: I have read the above information, and have received answers to any questions I asked. I consent to take part in the study. In addition to agreeing to participate, I also consent to having the interview tape-recorded.

Your Signature ____________________________ Date ____________
Signature of person obtaining consent ____________________________ Date ____________
Printed name of person obtaining consent ____________________________ Date ____________
APPENDIX C - Letter of Solicitation for Subjects

Dear Superintendent:

My name is Barbara Launi Powers and I am a doctoral candidate at Seton Hall University in their Executive EdD program. For my dissertation, I am conducting a study examining the policy and practice of screening and hiring effective teachers. I hope to identify what hiring administrators find most useful as well as least helpful on the standard application as they seek to identify the most effective candidates for hiring. A further component of the study will focus on how school principals adapt to the relative usefulness of the common application in their work of hiring teachers for their schools. This examination may lead to suggestions from the field on improvements in the policy and protocols for screening teacher candidates that have the most promise to be effective teachers.

In this qualitative study, I am using a purposeful sample that includes a principal in each of the levels (elementary, middle, and high school) as well one principal from each level in a rural, suburban and urban school setting for a total of nine participants. I am requesting permission to contact principals in your district that may fill one of those nine roles for the purposes of conducting semi-structured interviews, in which principals will be asked seven questions leading to their perceptions of the common application policy and how screening tools can better serve their work. If they agree to participate, I will ask for a convenient time to conduct the interview, which can be at a place of their choosing or via telephone. In a field test of the instrument, the interviews lasted between ten and thirty minutes. Therefore, I would anticipate the time commitment to be similar.

If you approve participation of your principals in this study, would you kindly respond via email at your earliest convenience to blauni@aol.com. If you have any concerns about the rights of your principals as human subjects, please contact the Seton Hall University IRB at 973-313-6314. Should you wish any additional information, including the conclusions of the study, please contact me at blauni@aol.com or 610-639-8320.

Thank you for your contribution to this research.

Sincerely,

Barbara Powers

Seton Hall University Doctoral Candidate

Principal, Schwenksville Elementary School
Dear Principal,

My name is Barbara Launi Powers and I am a doctoral candidate at Seton Hall University. I am conducting interviews to complete my study examining the policy and practice of screening and hiring effective teachers. Since 1996, Pennsylvania public school districts have been required to use the Common Application for Teaching (Act 107). This study hopes to identify what you find most useful as well as least helpful on the application as you seek to identify the most effective candidates. A further component of the study will focus on how you adapt to the relative usefulness of the common application in your work in hiring teachers for your school. This examination may lead to suggestions from the field on improvements in the policy and protocols for screening teacher candidates that have the most promise to be effective teachers.

To participate in the study, you will be asked seven questions leading to your perceptions of the common application policy and how screening tools can better serve your work. If you agree to participate, I will ask you for a convenient time to conduct the interview, which can be at a place of your choosing or via telephone. In a field test of the instrument, the interviews lasted between ten and thirty minutes. Therefore, I would anticipate your time commitment to be similar.

If you agree to participate in this study, please respond to my email at blauni@aol.com. If you have any concerns about your rights as a human subject, please contact IRB at 973-313-6314. If you require any additional information, please contact me at blauni@aol.com or 610-639-8320.

Thank you for your contribution to this research.

Sincerely,

Barbara Powers

Seton Hall University Doctoral Candidate

Principal, Schwenksville Elementary School