ABSTRACT OF CAPSTONE

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The Graduate School

Morehead State University

January 23, 2017

HOW DO TEACHER EVALUATION RATINGS ON KENTUCKY'S PROFESSIONAL GROWTH AND EFFECTIVENESS SYSTEM RELATE TO STUDENT ACHIEVEMENT?

Abstract of capstone

A capstone submitted in partial fulfillment of the
Requirements for the degree of Doctor of Education in the
College of Education
At Morehead State University

By

Martha Collins Jones
Jennifer R. Allen
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Richmond, Kentucky

Committee Chair: Shane C. Shope, Associate Professor

Morehead, Kentucky

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HOW DO TEACHER EVALUATION RATINGS ON KENTUCKY'S PROFESSIONAL GROWTH AND EFFECTIVENESS SYSTEM RELATE TO STUDENT ACHIEVEMENT?

The purpose of this study was to determine if a teacher's Professional Growth and Effectiveness System (PGES) rating is an effective indicator for student achievement. Participants in the study were 9th through 12th grade English 10, Biology, U.S. History and Algebra 2 teachers and students enrolled in their courses. The teacher participants' evaluation rating in the second and third domain along with summary rating scores of their PGES were examined in relation to their respective student achievement scores. A Pearson Correlation was used to analyze the numerical values to measure whether there was a strong or weak correlation and direction of association between the two variables being EOC scores and PGES rating scores. Analysis of data illustrated a moderate, positive association. The researchers concluded that quality, research-based feedback provided to a teacher, intertwined with specific, job-embedded professional learning based on a specific PGES indicator, could lead to and be associated with, better EOC student achievement performance. A repository of resources was developed to aide administrators in providing such PD and feedback.

KEYWORDS: Student Achievement, Evaluation, Feedback, End of Course Assessment, Repository of Resources

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DEDICATION

The three researchers involved in this study would like to thank many special individuals in their lives to whom this study is dedicated. Those individuals are detailed in the three sections that follow.

Martha C. Jones

Without the support of family and friends, I never would have made it through this process. I have been blessed with unwavering support throughout my entire life and without such support I no doubt wouldn't be in this position. To my parents, grandparents and sister: Thank you. My entire life you pushed, supported and encouraged me. You taught me what hard work is and that nothing will ever be given to you. Thank you for instilling in me work ethic: a skill that has taught me more than any class ever has. To my friends Jen and Rejeanna, who are more like family, I love you. JA, I would never had made it without the buddy system and our accountability system. RTP your jokes, support and much needed stress relievers saved me more times than I can count throughout this journey. Lastly to the loves of my life, Justin and Jenna. Justin, you stood beside me and made sacrifices in our marriage so I could work and accomplish my dream. Thank you for never giving up on me. Jenna, you teach Mommy more every day than I could ever teach you. You've taught me what unconditional love is and you make me proud every day. You are my light. Lastly: Jenna, Harper and Sloane…you girls are the future. Your path is bright. Work hard and dream big. If you put your mind to, you can do it. You girls are my heart and soul.

Jennifer R. Allen

I would like to dedicate this work to everyone who has stood beside me through this journey and lifted me up when I doubted myself. I am beyond blessed! 'M' thank you for bringing me along on this endeavor and refusing to take no for an answer. A very special thanks to my children, Ty and Trent, for the love and support they have shown in having to give their "momma" up on countless occasions so she could do homework. This is for you. I pray you always remember what I have taught you: *Never give up; you only fail if you quit.* I thank my parents for always believing in me and showing me excellent examples of what hard work can accomplish. For my friend 'RTP', thank you for your encouragement and patience as you waited to have your running buddy back. Lastly, thank you 'BR'. You have been my number one cheerleader. There is no way I can express how much your love and support have meant to me throughout this process.

Jim Masters

Thank you mom and dad for always instilling in me a desire to better myself, to never give up and that with hard work I could achieve whatever I set my mind to. This work is dedicated to you and the sacrifices you made for me. I also dedicate this work to my amazing daughters Layne, Aubrey and Brayden. You are the greatest joy in my life and I hope in some small way this work will serve as a reminder that you can achieve anything by having the right mindset and persistence through the toughest times. I want to thank my grandparents and extended family whom I learned so much from while growing up. The morals and values you instilled in me has made

all the difference. Lastly, I want to thank “J” and “M” for taking this journey with me, your work ethic, character and persistence is second to none.

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Introduction

Research supports that a key approach towards significantly improving student outcomes is raising the level of teacher quality since teaching has a greater impact on student success than any other school-based factor (Wright, Horn, & Sanders, 1997). Consequently, a teacher's effectiveness in teaching methods and his/her knowledge of the content area correlates to student achievement (Strahan, 2003). Therefore, it stands to reason that for students to be successful, schools must develop and retain excellent teachers. For this goal to be reached, teacher evaluation should be an important focus because "without high-quality evaluation systems, we cannot know if we have high-quality teachers" (Stronge & Tucker, 2003, p. 3).

The intended goals of teacher evaluation programs are to evaluate teachers and to use the information gathered to promote teacher development, increase teacher effectiveness, and in turn, raise student achievement (Doerr, 2012). The *Framework for Teaching*, created by Charlotte Danielson, identifies those aspects of a teacher's responsibilities that have been documented through empirical studies and theoretical research as promoting improved student learning. The *Framework for Teaching* is a validated instrument; that is, studies have shown that teachers who receive higher ratings on their evaluation produce greater gains in student test scores (Danielson, 2014). Other researchers have also found that effective use of the *Framework for Teaching* can be attained and even linked to student achievement, although extensive training and understanding of the observation tool is necessary for this to occur (Kane & Staiger 2012, Sartain Stoelinga, & Brown, 2011).

As shown in Figure 1, the *Framework for Teaching* is organized into four domains: Domain 1 Planning and Preparation, Domain 2 Classroom Environment, Doman 3 Instruction, and Domain 4 Professional Responsibilities. Each domain then has separate indicators to evaluate a teacher.

Framework for Teaching

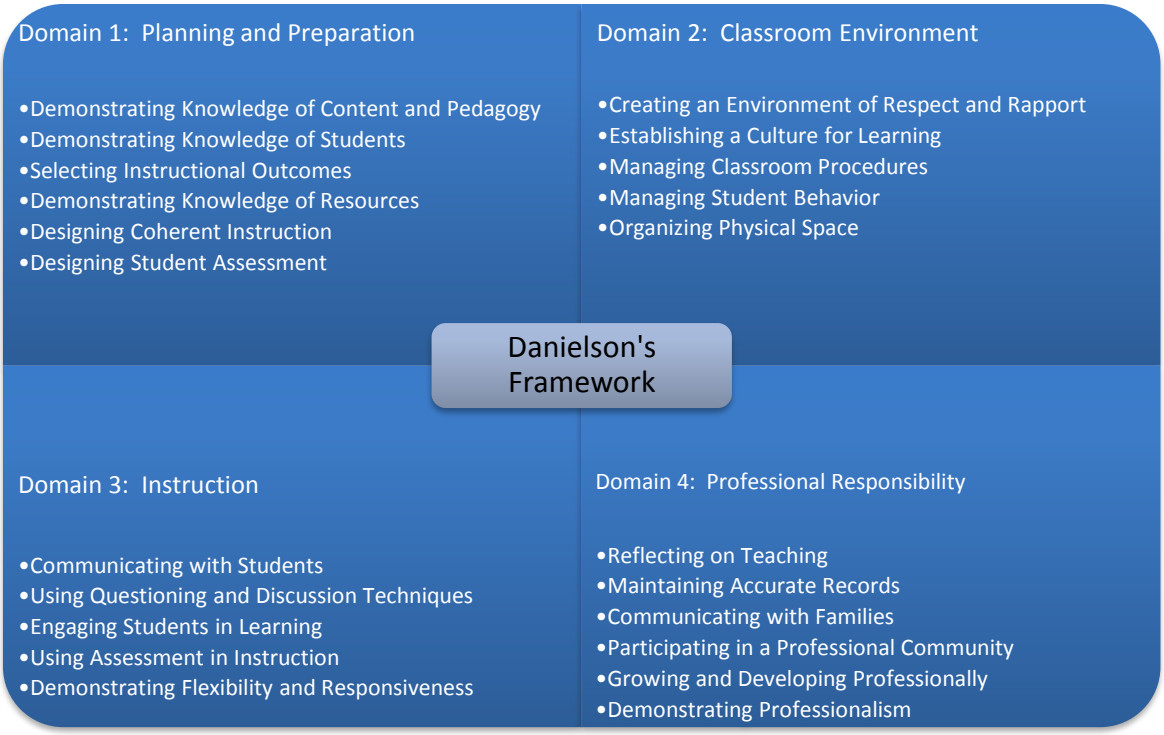

Figure 1

In 2013, Kentucky piloted the Danielson *Framework for Teaching* as part of the new evaluation method for all teachers in the state. In 2014, all districts became compliant. After a principal receives extensive training through rigorous video lessons and assessments of actual classrooms, he/she is prepared to evaluate teachers

based on the four domains, with 22 components taken into consideration. Teachers are scored as Exemplary, Accomplished, Developing, or Ineffective for each domain.

The reason Kentucky moved towards implementation of a new evaluation system was the result of the state's No Child Left Behind (NCLB) waiver and Race to the Top funding. The Elementary/Secondary Education Act (ESEA) waiver process required that Kentucky use an evaluation and professional growth system that would meet the following criteria:

- Be used for continual teaching improvement.
- Differentiate performance.
- Use multiple, valid measures.
- Evaluate regularly.
- Provide useful feedback.
- Be utilized to inform personnel decisions.

Historically, the state of Kentucky had previously allowed all 173 districts to make local decisions regarding the teacher evaluation process. This system allowed for inconsistency and the potential for a great deal of subjectivity when measuring teaching practices. Under the new evaluation process known as the Teacher Professional Growth and Effectiveness System (TPGES), teachers are evaluated based on multiple sources of evidence. A summative evaluation includes a self-reflection, a professional growth goal, a student growth goal, evaluator observations (utilizing the Danielson *Framework for Teaching*), student-voice surveys, and a peer observation.

The TPGES model, now implemented by all districts, promotes the vision of having all students taught by an effective teacher. This goal is a fundamental shift in evaluative language and meaning compared to the previous model that focused on becoming qualified as compared to effective. In the past, Kentucky's summative teacher evaluation system was a simple ***met*** or ***did not meet*** the standard as it applied to a teacher's performance. The summative evaluation system did not provide a teacher justification or support needed to achieve professional growth; feedback was not required nor recommended for the post-conference nor were next steps recommended to teachers. Feedback was instead based on instructional vision of the principal, not because the evaluation system provided a means for a teacher's professional learning. Under the new TPGES, using Danielson's *Framework for Teaching*, an evaluation rubric is used with the intent to help teachers grow in their instructional practice, which will in turn, theoretically impact student growth in the classroom.

By implementing TPGES across all districts, the end goal is to create a fair and equitable system to measure teacher effectiveness and serve as a catalyst for teacher growth. With the implementation of TPGES and the student growth goals that must be established by each teacher, the question regarding a relationship between a teacher's ratings on the Professional Growth and Effectiveness System and a student's performance on state assessments comes to the forefront. Using data from Madison, Woodford, and Franklin County Schools, we investigated if a

relationship exists between teacher evaluation ratings in Domain 3 and student academic achievement on End of Course (EOC) assessments.

Purpose

The purpose of the research study is to determine if there is a relationship between teacher evaluation ratings and student achievement scores on End of Course Assessments (EOC). If the teacher evaluation tool is valid and if achievement scores are reflective of teacher evaluation ratings, then the higher evaluation score should equal higher student achievement scores. Beerens (2000) stated, "Development of the teacher as a professional is key to a successful learning culture within a school" (p. xii). Wise, Darling-Hammond, McLaughlin, and Bernstein (1984) pointed out that researchers acknowledge that school districts have a responsibility to "hold teachers accountable to standards of practice that compel them to make appropriate instructional decisions on behalf of their students" (p.80). To spur growth, the administrator would then understand the need to develop professional learning with a specific focus within the Danielson *Framework* to improve instruction and assessment practices.

Statement of the Problem

The purpose of this study is to determine if a Teacher's Professional Growth and Effectiveness System (TPGES) rating is an effective indicator for student achievement. Can that rating predict a student's performance on End of Course assessments (EOCs)? The research will examine a teacher's overall TPGES rating

and his/her students' scores on U. S. History, Algebra 2, Biology, and English 10 EOCs.

Review of Literature

Beerens (2000) argues that the purpose of teacher evaluation is to improve teacher effectiveness, to encourage professional growth and to remediate or eliminate the weak teacher. Peterson (2000) explained that the "most visible purpose of teacher evaluation is staffing decisions" while "the most discussed purpose of teacher evaluation is to improve practice" (p. 37). This national disparity of teacher evaluation versus academic performance has created an increased demand for teacher quality, which is a key factor in student achievement (Darling-Hammond, 2013; Gates, 2012; Markow & Pieters, 2010; Marshall, 2009).

New federal initiatives, most notably the No Child Left Behind Act of 2001 (2002) and Race to the Top (U.S. Department of Education, 2010), have increased the national focus on teacher accountability and teacher evaluation (Coggshall et al.,2012; Darling-Hammond, 2010; Doerr, 2012; Kane & Satiger, 2012; Markow & Pieters, 2012; National Council on Teacher Quality, 2011; Taylor & Tyler, 2012). Lawmakers are mandating an increase in accountability, resulting in changes to teacher evaluation. Administrators are now tasked with turning evaluations into an opportunity for teacher growth, while researchers are focusing on the link between evaluations and student achievement (Baker et. al., 2013; Doherty & Jacobs, 2013; National Council on Teacher Quality, 2012).

Though there is ample research on teacher evaluation related to performance-based pay, there is a significant lack of research linking teacher evaluation to student achievement scores. Teacher evaluation scores are intended to help teachers improve educational practice. Therefore, teacher evaluations should be an indicator of student success in the classroom, and a teacher's performance rating should correlate with student achievement.

History of Teacher Evaluation

Historically, teacher evaluation systems based on principal observation have been ineffective at differentiating teaching quality (Hill & Grossman, 2013). In the past, evaluations only focused on traits such as appearance, warmth, enthusiasm, voice, trustworthiness, and emotional stability (Danielson & McGreal, 2000). Frase and Streshly (1994) summarized the state of teacher evaluation when they wrote, "Research and learned opinion strongly support the contention that teacher evaluation has been of little value" (p. 48). From there, evaluations evolved into focusing on specific skills such as math and science, with clinical observations becoming more common (Doerr, 2012). In the 1980's and 1990's, Madeline Hunter (1982) emerged as a lead researcher in evaluations, and the practice became more teacher-centered and focused on classrooms.

Previously, teacher evaluations often involved a principal observing a teacher for a class period without specific criteria or a rubric to follow.

Principals typically performed cursory observations of teachers' classroom practices once a year, using compliance oriented checklists, while in some

> places, tenured teachers went unobserved. Areas included on these checklists had little to do with teachers' ability to help students learn. (Connally & Tooley, 2016, p. 6)

Feedback was often generic, as the evaluation tool did not always lend itself to specific ways in which a teacher could improve his/her practice. Because the evaluation instruments were superficial and subjective, a prime opportunity to improve teacher practice and increase student learning was missed (Garrett, 2011). Teachers typically viewed these principal observations as "bureaucratic routine" (Holland, 2004).

Although states have made great strides in updating teacher evaluation systems to incorporate rates of student achievement, very few are using the data to inform decisions about teacher preparation programs, professional development, and consequences for ineffective teaching (Bidwell, 2013). Loup, Garland, Ellet, and Rugutt's (1996) study found that teacher evaluation practices in 100 of the largest school districts in the United States showed little change during the past 10 to 15 years despite increased attention in educational accountability and school reform. Yet, despite this outpouring of interest, little has changed in the way that teachers are evaluated and are compensated, in the content of pre-service training, or in the type of professional development offered (Kane, Thomas, Taylor, Tyler, & Wooten, 2010).

Traditional teacher evaluation systems in the past did not differentiate among high-and-low performing teachers. In Chicago, for example, historically 93% of all of the teachers were in the top two categories of the performance evaluation rating

scale while only .3% were identified as unsatisfactory; however, 66% of schools were falling short of state standards (Sartain, Stoelinga, & Brown, 2011). Connally and Tooley (2016) address this issue in *Beyond Ratings* when they state "the vast majority of teachers are being rated in the top rating categories, leaving little differentiation on which to base personnel decisions. In particular, very few teachers have been identified and dismissed for poor performance under new evaluation systems despite fear and anxiety among teachers that they would be" (p. 4).

Current Evaluation Practice

Federal teacher evaluation trends. No Child Left Behind mandated that all teachers be highly qualified (Blank, Langesen, Laird, Toye, & de Mello, 2013). This legislation fell short, however, in increasing student achievement because highly qualified teachers do not necessarily mean highly qualified teaching. The legislation, at minimum, defines a highly qualified teacher as teachers holding bachelor's degrees, full state certification or licensure, and a proven knowledge of the subject taught by typically passing a state exam (United States Department of Education, 2002)." As an example, Pool, Ellett, Schiavone, & Carey-Lewis (2001) studied teachers who obtained a rigorous teaching certification through the National Board of Professional Teaching Standards (NBPTS) program. The case studies revealed that NBPTS certified teachers showed considerable variations in their quality of teaching and student achievement across all grade levels. Other studies also confirmed that teacher qualifications alone such as certification, experience, and advanced degrees

do not categorically influence student learning (Goldhaber & Brewer, 1997; Goldhaber & Brewer, 2000).

In an effort to ensure that all students have access to quality teaching, over the past five years most states have adopted new, more rigorous teacher evaluation systems based on multiple measures of teacher performance, such as evidence of student learning and observations of teacher practice (Connally & Tooley, 2016). Many of these same states have passed new statutes mandating increased and revamped teacher evaluation programs. Danielson's (2013) *Framework for Teaching* is currently the most commonly used tool for teacher evaluation (Teachscape, 2012).

The idea of using student performance on standardized tests to judge a teacher's effectiveness gained attention after the Obama administration's Race to the Top contest required states to strengthen teacher evaluation (Garrett, 2011). Race to the Top provided $4.35 billion in competitive grants for states. These rewards are based upon meeting certain criteria, one of which specifies that states should "design and implement rigorous, transparent, and fair evaluation systems for teachers…that differentiate effectiveness using multiple rating categories" (United States Department of Education, 2009, p. 9). Race to the Top defined an effective teacher as one whose students achieved at least one grade level of academic growth during the course of the year and a highly effective teacher as one whose students achieved at least one and a half grade levels of academic growth during that time-frame (Goe, 2011). This movement was a result of numerous studies that linked teacher quality to

student effectiveness (Darling-Hammond, 2000; Darling-Hammond, 2013; Markow & Pieters, 2011).

With Race to the Top paving the way for education reform, states now have the daunting task of designing and implementing a new evaluation system. "States have prioritized getting evaluation systems up and running and are only beginning to think about using them to promote ongoing teacher learning and growth" (Connally & Tooley, 2016, p. 3). Race to the Top has provided states the opportunity to not only be compliant with federal guidelines, but simultaneously provide teachers the opportunity to grow in their profession. In an effort to support this initiative, the law provides funding for states to invest in systems that "provide useful and timely feedback and"…inform decision-making about professional development (and) improvement strategies"…"obligation for ensuring teaching quality and student success squarely on states' shoulders, along with the expectation that states will fulfill it" (Connally & Tooley, 2016, p. 3).

With sweeping changes occurring in the evaluation process, the National Council on Teacher Quality (2011) warns, "it is important to note that the development of teacher evaluation systems is a moving target, and we are in a period of rapid change" (p. 1). Although the changes are seen as positive in terms of increasing the quality of teachers, "many of these new systems are still not providing teachers with richer, more frequent feedback on their practice than they were before or differentiating teacher performance to inform their development" (Connally & Tooley, 2016, p. 7). Nonetheless, trained observers who rank teachers as highly

effective have been linked to higher student achievement (Kane & Staiger, 2012; Sartain, Stoelinga & Brown, 2011).

Teacher evaluation in Kentucky. With high stakes accountability generated from No Child Left Behind (NCLB), student achievement has been moved to the forefront of educational discussion. Kentucky has been a leader in education reform since 1990 with the Kentucky Educational Reform Act (KERA) which was designed to create a more equal playing field for learning through funding and accountability reform. Reforms continued in 2009 with the passage of Senate Bill 1 (SB 1), commonly referred to as Unbridled Learning. According to the Kentucky Department of Education (KDE), Unbridled Learning called for rigorous standards, with a new assessment and accountability system, and an intentional focus on student readiness.

Through Unbridled Learning, Kentucky's vision for education is for every student to have access and be taught by a highly effective teacher. To move closer to achieving this vision, in 2013 Kentucky passed House Bill 180 (HB 180) which adopted what Kentucky educators now refer to as PGES: Professional Growth and Effectiveness System. PGES is "designed to promote the vision of continuous professional growth and development of skills needed to be a highly effective teacher or administrator (Kentucky Department of Education, 2014)."

PGES is not a singular evaluation system or tool, but instead, includes varying levels of evaluations within the school system. A person's role within a school district will determine the evaluation system used to rate his/her performance. For

example, TPGES is Teacher Professional Growth and Effectiveness system; OPGES is Other Professional Growth and Effectiveness system designed for such roles as instructional coaches, counselors, and media specialists. PPGES is Principal Professional Growth and Effectiveness system, and SPGES is Superintendent Growth and Effectiveness System. What differs most between the various PGES represents the rubric used in scoring; the other elements of the evaluation remain the same. All PGES require, in addition to observations, a peer observation, student voice/teacher voice surveys, growth goals, and professional growth plan. Under the PGES system, the peer observers must complete two-hours of professional development training while administrators must complete an intensive training course accurately scoring videotaped teaching modules. Staff are evaluated based on their employment status: tenure or non-tenure. If someone has tenure, he/she is only required to be evaluated every three years. Within that three years, referred to as a summative cycle, each district has the discretion as to how often to require each minimum component of PGES: observations, peer observation, student growth goal, student voice, and a professional growth plan. A teacher who does not have tenure must complete all components of PGES, every year, for four years, until being granted tenure status.

PGES sets an expectation that feedback be an embedded part of the evaluation. The changes to the teacher evaluation system, with an intentional focus on feedback for the purpose of improving instruction and assessment, will lead to increased student achievement and should be the next step in Kentucky's continual move for educational reform.

The former system of evaluation in Kentucky did not address the challenge of providing formative feedback, not only from the administrator in charge of the evaluation but also from a peer. After each classroom observation, peer observers and administrators provide written feedback to the teacher and meet with the teacher at least once to discuss the results. At the end of the school year, a final summative score in each of four domains of practice is calculated and presented to the evaluated teacher (Taylor & Tyler 2012).

Concerns with current evaluation models. Using student test scores to evaluate teachers has the potential to affect the validity of results because of the pressure their evaluation adds to whether or not they retain employment. While Danielson recognizes the importance of looking at student outcomes when evaluating teachers, she cautions that making summative judgments of teachers based on value-added student achievement measures remains problematic (Danielson & McGreal, 2000). Although student assessment scores can often be linked to effective teachers, there is difficulty in linking those scores to teacher evaluation results. Other mitigating factors such as a students' socio-economic status, parental support, and various factors outside the realm of school can all have an impact on their academic success.

If a teacher feels a student achievement test score will factor into his/her overall performance rating, the chance of unethical practices increases, as evidenced by the Atlanta Public Schools cheating scandal in 2009 where 44 out of 56 schools

cheated on a criterion-referenced competency test. One hundred and seventy-eight teachers were found to have corrected answers submitted by students (Lowry, 2011).

A similar incident occurred in Philadelphia between 2009-2011 where investigations showed significant pressures existed for various schools to increase state accountability (Woodall, 2015). Over 138 educators have been implicated in the Philadelphia Public Schools cheating probe (Woodall, 2015). An inherent risk of teachers being unethical in practice increases when the teacher's evaluation rating is on the line.

In addition to unethical practice, there is evidence that teacher evaluation is unreliable. An investigative study by Scott Reeder (2005) found that 83% of Illinois school districts have never rated a tenured teacher as unsatisfactory. A study by Weisberg et al. (2009) conducted in 12 school districts in Arkansas, Colorado, Illinois, and Ohio found that less than one percent of surveyed teachers received a negative rating on their most recent evaluations. Though these low percentages can be seen as validating overall superior teacher performance, in actuality, they do not correlate with research studies that estimate that 5 to 15% of teachers are marginal or incompetent (Tucker, 1997). This conclusion leads to traditional teacher evaluation falling short in adequately assessing the multifaceted and broad scope of the position, which brings about failures in producing a positive impact on professional growth (Danielson & McGreal, 2000).

Most indicators of teacher quality are poor predictors of student growth largely due to the fact that teachers' scores on observation instruments have not been

highly correlated with student progress (Goe, 2011). Value-added models (VAMs) are the newest tools designed to evaluate student test score gains from one year to the next (Darling, Beardsley, Haertel, & Rothstein, 2012). The goal is for a VAM to measure whether or not teachers are effective based on the test scores of the students in their classrooms. Tennessee's version of the VAM is the Tennessee Value-Added Assessment System (TVAAS) (Sanders & Horn, 1998). Research conducted by analyzing data from the TVAAS has shown that race, socioeconomic level, class size, and classroom heterogeneity are poor predictors of student academic growth. Rather, the effectiveness of the teacher is the major determinant of student academic progress (Sanders & Horn, 1998). There was much skepticism concerning the use of student achievement data and teacher effects on the rate of academic progress of students at that time. Tennessee used this uncertainty to their advantage by providing statistical data showing the effectiveness of school systems and teachers.

If there is not a clear way to improve teacher practice through evaluation linked to student achievement, then the evaluation tool loses effectiveness, and a teacher should not be held accountable for student learning. As Frymier (1998) wrote, "Because every person is accountable for his or her behavior but not for what other people do, teachers must be held accountable for what they do as teachers but not for what their students do as learners. Students are responsible for their learning" (p. 233). The lack of professional learning directly linked to teacher evaluation that promotes professional growth would result in teachers designing instruction to promote test-taking skills as compared to the application of content knowledge.

Frymier himself admitted, "Teachers must be held accountable for what they do as teachers" (p. 234); but learning is a partnership where both students and teachers must be willing to take responsibility.

The question then is how can principals effectively measure quality teaching in their building? How can teacher evaluation be a predictor of student performance? Should student growth factor into a teacher's evaluation? Little research has been done in the area of linking teacher evaluations to student achievement scores. Discussions in the popular media have polarized a correlation of evaluation with student achievement as a topic of fair pay and the reason for dismissal; however, the goal of teacher evaluation as a means for improving instructional and assessment strategies geared toward enhancing student achievement has not been supported.

Danielson Framework

Researchers have argued that a well-designed teacher evaluation system should be an important component of school improvement (Normore, 2005). Such an evaluation system should incorporate "multiple measures" (Darling-Hammond, 2006a, p. 135) where "individual teachers in a system are evaluated with different kinds of data" (Peterson, 2004, p. 63) through the incorporation of "multiple assessors" (Odden, 2004). As Stronge (2006) further stated, "As multiple data sources are properly employed in performance evaluation, the validity and utility of the process can be dramatically enhanced" (p. 11).

The use of multiple data sources is why Danielson's (2013) *Framework for Teaching* is the most commonly used tool for teacher evaluation (Teachscape, 2012).

Danielson's *Framework* is not merely an evaluation tool, but its intended goal is to provide a "foundation for professional conversations among educators as they develop their skills" (Danielson, 2007, p.5). The evaluation rubric itself focuses solely on observations and does not include other measures of observations (Danielson, 2013).

In research conducted by Sartain, Stoelinga, and Brown (2011), evaluation data sampled from 321 observations in Chicago Public Schools found there was high reliability in identifying strong and weak teachers using the Danielson *Framework* (reliability=.93, separation=3.60). Reliability was defined as "teachers with estimated measures of high teaching ability were more successful in the classroom during the observed lesson than teachers with estimated measures of low teaching ability" (p. 54).

The *Framework* is an outgrowth of Praxis III: Classroom Performance Assessments, of the Praxis Series by Educational Testing Service (ETS), which was created to provide a framework for agencies making teacher licensing decisions (Danielson, 2007). Not only does the *Framework* give administrators a resource to evaluate a teacher, but the rubric design also promotes professional conversations.

The *Framework* is organized into four domains: planning and preparation, classroom environment, instruction, and professional responsibilities. Each domain is further broken down into indicators which are descriptors for evaluators to use when observing and scoring a teacher. Domains 2 (classroom environment) and 3 (instruction) are observed as the lesson is being taught while Domains 1 (planning)

and 4 (professional responsibilities) are evidenced by artifacts provided by the teacher.

Domain 1: Planning and Preparation

Domain 1 is demonstrated by a teacher's planning for instruction. Not only must a teacher understand the content he/she is expected to deliver, but there is also an expectation that he/she can organize the standards into an engaging lesson resulting in student understanding. Domain 1 encompasses not only the lesson design but also the materials that are necessary for the lesson, the strategies that will be used to teach, and the assessment that will measure the learning and expected outcomes. The components of Domain 1 (planning and preparation) are as follows:

1a. Knowledge of content and pedagogy

1b. Knowledge of students

1c. Instructional outcomes

1d. Knowledge of resources

1e. Coherent Instruction

1f. Student assessments (Danielson, 2013).

Domain 2: Classroom Environment

Domain 2 analyzes the classroom environment. These elements do not focus on content but on setting the stage for learning (Danielson & McGreal, 2000). Domain 2 focuses on interactions between the teacher and student(s) and the culture that has been created for learning. The components of Domain 2 (classroom environment) are as follows:

2a. Creating an environment of respect and rapport

2b. Establishing a culture of learning

2c. Managing classroom procedures

2d. Managing student behavior

2e. Organizing physical space (Danielson, 2013).

Domain 3: Instruction

Domain 3 (instruction) is the component that focuses on the learning that is taking place. The engagement of students and the conversations between not just the teacher and student but students with other students is the intent focus of Domain 3. Domain 3 also looks at the types of questions being asked, and the complexities of those inquiries and how assessment occurs. Components of Domain 3 (instruction) are as follows:

3a. Communicating with students

3b. Using questioning and discussion techniques

3c. Engaging students in learning

3d. Using assessment in instruction

3e. Demonstrating flexibility and responsiveness (Danielson, 2013).

Domain 4: Professional Responsibilities

Domain 4 involves the act of continuous learning and development that is required by the teaching profession. Documentation of professional learnings, communication logs and participation in professional organizations are reflected in

Domain 4. The components of Domain 4 (professional responsibilities) are as follows:

4a. Reflecting on teaching

4b. Maintaining accurate records

4c. Communicating with families

4d. Participating in a professional community

4e. Growing and developing professionally

4f. Showing professionalism (Danielson, 2013).

The components and elements of the four domains are described separately but are interconnected and are not conducted in isolation. Danielson compares the complex act of teaching to a theater-in-the-round play, with the audience sitting on the stage while the domains and components can be viewed as the lights (Danielson, 2013). To better understand the teaching, the focus can be on a particular component such as discussion techniques, expectations for learning, or monitoring of student behavior. In other words, the components are a diagnostic tool helping one understand how educators' performances can be improved in a particular area while recognizing that all components of teaching are connected to each other (Danielson, 2013).

Purpose of Evaluations

The Joint Committee on Standards for Educational Evaluation (2009) listed the following major assumption behind evaluation systems: "The fundamental purpose of personnel evaluation must be to help provide effective services to

students…personnel evaluation can and must be designed and constructed to encourage and guide evaluatees to perform more effectively" (p.3). Teacher evaluation is primarily about documenting the quality of teacher performance; then, its focus shifts to helping teachers improve their performance as well as holding them accountable for their work (Stronge, 2006). A teacher evaluation system when properly designed and implemented should support individual teacher growth and student improvement (Stronge, 2006). Marzano (2012) documented that teacher evaluations should have a clear focus on teacher learning rather than teacher competence, and instead of measuring only student achievement the should focus on teacher growth. "More can be done to improve education by improving the effectiveness of teachers than by any other single factor" (Wright, Horn, & Sanders, 1997, p. 63). Therefore, "without high-quality evaluation systems, we cannot know if we have high-quality teachers" (Stronge & Tucker, 2003, p. 3). Brown, Partelow, Konsoke-Graf (2016) wrote that "evaluation systems are not the only lever for improving teacher quality, but when they are well-designed, they can be a critical part of teacher development and support because they provide a framework from which teachers can improve their practice" (p.1). Teacher evaluation scores are also intended to help teachers improve instructional practices and help principals with hiring decisions.

Role of the Principal

Due to managerial and non-instructional tasks, "often times the principal is not able to spend an adequate or equivalent amount of time in the classroom

evaluating teachers" (Zimmerman & Deckert-Pelton, 2003, p. 34). Evaluating teachers is one of many responsibilities for principals who handle multiple tasks such as scheduling, budgeting, reporting, communicating with parents and community, and handling unforeseen circumstances that are inevitable within a school building (Fink & Resnick, 2001). Arguably, the most critical role of the principal is that of instructional leader. In that position, principals spend countless hours in classrooms evaluating teachers. Those teacher evaluations should be an indicator of student success in the classroom, and a teacher's performance rating should reflect student achievement. Research has proven that principals can indirectly have an impact on student achievement by working with teachers (Hallinger & Heck, 1998; Heck, Larsen, Marcoulides, 1990; Siens & Ebmeier, 1996). Principals, as instructional leaders, use the evaluation process as a means to improve teacher performance, whereby indirectly impacting student achievement (Tock & Rothman, 2008).

As the instructional leaders within a school building, principals regularly monitor instructional programs while also providing feedback to teachers to support teacher development (Reitzug, West, & Angel, 2008). A critical component of providing feedback occurs in the professional conversations between principals and teachers. In working to enhance teacher performance, principals also have the obligation as instructional leaders to intervene when marginal teaching exists (Kaye, 2004). During this intervention, principals assume varying roles such as mentoring and coaching when necessary; they also serve as counselors so that certain teachers are advised to move to another profession (Kaplan & Owings, 2001).

Teacher Quality

The research illustrated by such widely known educators as Marzano (2013), Hattie (2008), and Schmoker (1999) has demonstrated teacher quality to be one of the most, if not the most, important factor in student success. As Stronge and Tucker (2003) asserted, "Without capable, highly qualified teachers in America's classrooms, no educational reform process can succeed" (p. 3). An overarching study by Darling-Hammond (2000) consisted of a 50 state survey, case study analysis, and data from assessments in reading and mathematics that was administered by the National Assessment of Educational Progress. This research examined which school variables have the most influence on student achievement and the research discovered that teacher knowledge and skills had statistically significant influences on student achievement; this variable was stronger than others such as teacher experience, class sizes, or pupil-teacher ratios (Darling-Hammond, 2000). In another study, Campbell, Kyriakides, Muijs, and Robinson (2004) noted that "teacher effectiveness is the impact that classroom factors, such as teaching methods, teacher expectations, classroom organization, and the use of classroom resources have on student performance" (p. 3). These definitions of teacher quality differ in that one refers to teacher knowledge and skill while the other takes into consideration what occurs in the classroom; regardless the measure of effectiveness is still the student's performance.

Aaronson, Barrow, and Sander (2002) examined Chicago school districts for three years and found that "one semester with a teacher rated two standard deviations

higher in quality could add 0.3 to 0.5 grade equivalents, or 25 to 45 percent of an average school year, to a student's math performance" (p. 1). And in a four-year quantitative study by Jordan, Mendro, and Weershinghe (1997) Dallas school districts discovered that the average sixth-grade mathematics and reading scores were expected to increase from the 55th and 59th percentile to the 76th if students were assigned to three highly effective teachers in a row. Conversely, sixth-grade mathematics and reading scores were expected to decrease from the 57th and 60th percentile to the 27th and 42nd percentile respectively if they were assigned to a series of three ineffective teachers during the same period.

In another meta-analysis, Marzano's (2003) research indicated that an effective teacher at an effective school could increase student achievement from the 50th percentile to 96th percentile after two years. Borman and Kimball (2005) wrote that the difference between being taught by an effective teacher versus an ineffective teacher could lead to a full grade level of achievement. The core of education is teaching and learning, and the teaching-learning connection works best when we have effective teachers working with every student every day (Stronge, 2006).

Marzano et al. (2011) found "one incontestable fact in research on schooling is that student achievement in classes with highly skilled teachers is better than student achievement in classes with less skilled teachers" (p. 2). An article by Zakaria (2011) entitled "When Will We Learn?" concluded that the best investment in education should be focused on teachers because they "produce the best results for students, more than size or money or curriculum" (p. 44). This research is further

substantiated by Barber and Moushed (2007) when their research found that based on "available evidence the main driver of variation in student learning is the quality of teachers" (p. 12).

Sanders, Wright, and Horn (1997) looked at teacher and classroom effects on student achievement:

> results show that teacher effects are dominant factors affecting student academic gain and that the classroom context variables of heterogeneity among students and class sizes have relatively little influence on academic gain. Thus, a major conclusion is that teachers make a difference. (p. 59)

In addition to teacher quality, Hattie's research shows that credibility in the eyes of the students has a significant effect on student achievement. The key is the students' perception that teachers have credibility in enhancing their learning (Hattie, 2012). Students are very perceptive about knowing which teachers can make a difference to their learning and teachers who command this credibility are most likely to make the difference (Evans, 2012).

Feedback

Teacher evaluation systems hold much potential for delivering the kind of constructive feedback and aligned learning opportunities that can promote teacher improvement" (Connally & Tooley, 2016, p. 2). However, in order "for evaluation to fulfill their potential for bolstering teacher practice, ensuring a strong connection between evaluation data-particularly classroom observation feedback and targeted professional development is critical" (Connally & Tooley, 2016, p. 8). Connally and

Tooley (2016) go on to note that "evaluation systems that include frequent, accurate feedback by trained observers and signal that poor performance has consequences, can help improve teacher practice and student learning" (p. 8). To increase teacher quality and "drive improvement, evidence suggests that teachers need to receive frequent, high-quality feedback on their practice" (Connally & Tooley, 2016, p. 10).

Taylor and Tyler's (2012) research found that students of teachers in an effective evaluation program that included a plan for professional development based on evaluation results had higher achievement than students of those same teachers in years without such an evaluation plan. To have such an effect, Connally & Tooley (2016) state that the evaluation "must ensure that teachers receive frequent, targeted feedback and suggestions for how to grow their practice" (p. 2). Providing generic feedback is not enough. It must be "ongoing, high-quality, actionable feedback and learning opportunities are important for all, not just new or struggling teachers and may have the power to drive improvement at a scale where other professional development opportunities have fallen short" (Connally & Tooley, 2016, p. 9). "Multiple observations are important not only for timeliness of feedback, but also for accuracy, a key element for ensuring that the feedback provided will be useful, and for prompting teachers' trust in the use of observation data for improvement purposes" (Connally & Tooley, 2016, p. 10).

When no feedback is being given to improving teacher practices and increasing student performance, an evaluation system is ineffective, and traditionally teacher evaluation systems did not differentiate among high-and-low performing

teachers. In Chicago, for example, historically 93% of all the teachers were in the top two categories of the performance evaluation rating scale while only .3% were identified as unsatisfactory; however, 66% of schools were falling short of state standards (Sartain, Stoelinga, & Brown, 2011). This data shows an evaluation system that was broken. It was this study that prompted Chicago Public schools to adopt the Charlotte Danielson *Framework for Teaching*. Like Chicago, other states and districts have realized the need to provide feedback and professional learning based on an evaluation. So far, 20 states and the District of Columbia use teacher evaluation to shape professional development for teachers (Bidwell, 2013). Studies have found that well-designed teacher evaluation systems, aligned with professional learning and development, can contribute to improvements in the quality of teaching and raise student achievement (Looney, 2011). Teacher ineffectiveness will continue until evaluations are used to provide feedback that leads to measurable improvement in student learning.

Likewise, the former system of evaluation in Kentucky did not address the challenge of providing formative feedback not only from the administrator in charge of the evaluation but also from a peer. This lack of opportunity for specific feedback based on a common language of what good teaching looked like did little in the way of improving professional practice. Without clear goals of evaluation, such as providing feedback to teachers, mentoring, and training, student achievement could not be tied to an evaluation process. Even if an evaluation system structured to meet those needs had been used in Kentucky educational practices, the training for

principals on evaluation and effective feedback would still be lacking (Haefele, 1993). The Danielson *Framework* was designed to meet those needs.

Conclusion

Teacher evaluation is critical to student success. Kentucky has chosen to trust well-trained evaluators to use the *Framework for Teaching* to identify specific domains a teacher needs for improvement within the evaluation process. This reliance on teacher observations is based on research showing that the instructional practices of teachers are significantly more associated with student achievement growth than other factors such as teacher qualifications (Aaronson et al., 2007; Jacob, 2012; Palardy & Rumberger, 2008). According to Kane, et al. (2010), one of the roadblocks that stands in the way of linking student achievement scores to teacher evaluations for the purpose of improving teacher practice is the difficulty in replication of instructional and assessment strategies utilized by effective teachers. Therefore, we must continue to use the *Framework* to track and analyze data on educator evaluations and student achievement in order to ensure the process is working to fidelity with its intended goal of continuous improvement for both teachers and students. In order to achieve this goal, it is necessary to investigate if Danielson's *Framework* for evaluation can prove to be an effective indicator of student achievement.

How Was the Capstone Project Implemented?

What Data Were Collected?

A summative performance rating was collected for 48 high school teachers in Franklin, Madison, and Woodford County who teach classes requiring Kentucky's End of Course Assessment (EOC). In addition, each component from Domain 3 of the Danielson *Framework* was analyzed. These components include: Communicating with students, Using questioning and discussion techniques, Engaging students in learning, Using assessment in instruction, and Demonstrating flexibility and responsiveness. Student achievement data were based on End of Course exams for English 10, Algebra 2, Biology, and U.S. History. Each exam is comprised of multiple-choice questions which assess learning outlined in the ACT Quality Core Blueprint. Scores are labeled as being Novice, Apprentice, Proficient or Distinguished. Students reaching Proficient and Distinguished status are regarded as proving mastery of the content assessed.

How Were Data Collected?

Student achievement data were gathered from the state's data warehouse (SDRR). Teacher professional ratings were gathered from CIITS (Continuous Instructional Improvement Technology System), which is the state's data collection tool for PGES.

How Were Subjects Selected?

The study sample included teachers across three (3) districts in Central Kentucky: Franklin, Madison, and Woodford. The teachers were selected if they

taught a course requiring an End of Course (EOC) assessment: English 10, Algebra 2, Biology, or U.S. History. Students enrolled in those classrooms and their performance on the EOC were used to compare with corresponding teacher professional ratings. The teachers of courses that administered EOCs had their students' performance on EOC compared to their professional TPGES rating by the building principal.

Context of the Study

Franklin County. According to the 2015 Franklin County Public School District Comprehensive District Improvement Plan, Franklin County schools system is roughly 6,317 students. That population includes 76% white, 10.2% African-American, 5.7% Hispanic, 2% Asian, and 6.1% two or more races. Fifty-four percent of the students qualify for free/reduced lunch services. The district employs 378 teachers of which 98% are Caucasian. Seventy-eight percent of the teachers are female, and 22% are male.

The school system is located in the capital city of Frankfort in central Kentucky. A community that is well known for being the center of government for the Commonwealth as well as home to the Democratic and Republican Party headquarters and associations such as the Kentucky Educators Association. Franklin County has a long history of horses and bourbon manufacturing that continues to thrive to this day. The county is also home to Kentucky State University, a historically African-American University, which has transformed into a growing land-grant based institution. Franklin County Public Schools, businesses, and

community members have recently joined forces to work toward the goal of making Franklin County a "work ready" community ensuring that all future graduates will be ready for the workforce and post-secondary educational opportunities.

Student demographic data for all three participating districts are represented in Table 2. Teacher demographic data for all three participating districts is shown Table 3, while Table 4 represents demographic data for teachers specific to this research.

Madison County. According to the 2015 Madison County Schools' Comprehensive District Improvement Plan, Madison County is a rural school district in central Kentucky. The population of Madison County is approximately 86,000 people. Interstate 75 runs from the top of the county to the bottom, almost splitting the county in half. There are many large industries located in the county as well.

The Madison County School District has been identified as a *growth district* due in large part to schools' proximity to Lexington and the relocation of industry to the community. For the 2014-15 school year, the district served 11,760 students in grades preschool through 12 living in the county as well as those living in the city limits of Richmond and Berea. In addition to Madison County Schools, the county is also home to Berea Community Independent Schools, Model Laboratory Schools, and Saint Mark Catholic School with a combined enrollment of fewer than 2,000 students.

Demographically, Madison County Schools' student ethnicities include 86.7% white, 4.4% African-American, 3.9% Hispanic, 0.8% Asian, 0.2% Alaskan/Indian, and 3.8% two or more races. The district currently has a free/reduced lunch population of 54%. That population has risen gradually over the past five years, partly because of

the national downturn in the economy and partly because of our increased efforts in identifying students who qualify.

The certified teaching staff is comprised of 98.62% white and 1.38% minority. Madison County also has 35 teachers with National Board Certification. Eastern Kentucky University and Berea College are also located in Madison County which overall provides the district with qualified teacher applicants. However, similar to other districts in the nation, the pool of secondary math and science applicants is limited.

Woodford County. According to the 2015 Woodford County Public Schools' Comprehensive District Improvement Plan, Woodford County is comprised of six schools and one alternative program. The district has approximately 4,137 students enrolled P-12. Excluding preschool, enrollment slightly exceeds 3,992. Of the total enrollment, approximately 76% of students are white, 13.7% of students are Hispanic, almost 4% of students are African-American, approximately 4% of students identify with 2 or more races, and all other races comprise the remaining approximately 2% of students. Ten percent of students in grades K-12 receive special education services and 43% of students qualify for free/reduced lunch services. The total enrollment in the district has been relatively unchanged over the past several years, but the current trend is a slight increase in students from year to year.

Woodford County Public Schools employs around 550 full- and part-time certified and classified staff members. Staff demographics include 95% white, 3% African-American, and 2% all other races and ethnicities which include Hispanic,

American Indian/Alaska Native, and certified and classified employees are male.

The most recent census data shows a somewhat diverse population in the community with 86% of the county population white, 5% African-American, nearly 7% Hispanic, and all other races comprising the remaining 2% of the population.

Encompassed in the Woodford County Public Schools boundary is the county seat of Versailles, the largest town in Woodford County, with an estimated population of just under 8,874. All but one of the schools and programs are located in Versailles. Midway, the second largest town in Woodford County, is the location of the only other school, Northside Elementary. The estimated population of all of Woodford County is 25,077. Woodford County is located in central Kentucky and borders to the west the second largest metropolitan area in the state, Lexington, KY.

Table 2

Student Demographics			
	Franklin County	Madison County	Woodford County
Number of Students	6131	11412	3936
Male (%)	52	50.9	49.1
Female (%)	48	49.1	50.9
Ethnicity			
White (%)	75.6	86.0	77.2
African-American (%)	9.4	4.1	3.8
Hispanic (%)	6.5	4.3	13.8
Asian (%)	2.2	1.3	1.0
Alaskan/Indian (%)	0.1	0.1	0

Two or More Races (%)	6.2	4.1	4.1
Identified Students			
Free/Reduced Lunch (%)	55.8	51.8	46.2
SPED (%)	10.9	13.2	10.1
Gifted/Talented (%)	17.4	14.0	27.1
English Learners (%)	3.6	2.5	6.2

Table 3

Teacher Demographics			
	Franklin County	Madison County	Woodford County
Number of Teachers	376	674	236
Male (%)	21	22.5	19.5
Female (%)	79	77.5	80.5
Ethnicity			
White (%)	98	98.62	95.3
African-American (%)	2	1.38	2.5
Hispanic (%)	0	0	1.0
Asian (%)	0	0	0.5
Alaskan/Indian (%)	0	0	1.0
Two or More Races (%)	0	0	2.0

Table 4

Teachers in Research Demographics	
Number of Teachers	49
Male (%)	31.25
Female (%)	68.75
Ethnicity	
White (%)	98
African-American (%)	2
Hispanic (%)	0
Asian (%)	0
Alaskan/Indian (%)	0
Two or More Races (%)	0

When Was the Capstone Implemented?

The capstone was implemented using data from 2015-2016's summative evaluation cycle. Corresponding data from End of Course Assessments in English 10, Algebra 2, Biology, and U.S. History were collected during the same school year.

Impact of the Capstone

Results and Findings

In order to analyze the data and determine if a correlation exists between a teacher's professional growth and effectiveness rating (TPGES) and their student's achievement on End of Course (EOC) assessments, it was necessary to convert ratings and scores into a numerical value. To convert PGES ratings on Domain 3, Instruction, a score of 1 was assigned for Ineffective, 2 for Developing, 3 for

Accomplished, and 4 for Exemplary. The calculation for the average of the teacher's professional ratings on each component of Domain 3 was determined and can be found in the column labeled "Mean" of Appendix A.

To obtain a numerical value for EOC scores, calculations were based on the same formula the state of Kentucky uses when they factor for accountability. A score of Novice results in 0 points. Apprentice scores receive 0.5 points while a score of Proficient or Distinguished receive one point. In addition, bonus points are awarded for having more Distinguished scores than Novice. Therefore, the research team had to take the difference in the number of Distinguished and Novice scores and award a bonus of 0.5 for each Distinguished score that exceeded the number of Novice scores. This data is represented in the column labeled "Total Score" of Appendix A.

Summative data were not used when trying to determine if a relationship between student achievement and teacher professional rating exists due to outside factors contributing to the overall summative rating. A summative rating not only takes into consideration classroom observations but also student growth goals. Student growth goals vary district to district and are subjective. In order to provide consistency to research design, it was determined that focusing on Instruction, Domain 3, was best.

When identifying the statistical method needed, the question to be answered was "is there a relationship or correlation between the variables?" Since the numbers were continuous variables and did not fit on the ordinal scale, it was determined the Pearson correlation was the most appropriate research design (Appendix A). The

Pearson Correlation has a range of -1.00 to +1.00 which determines the degree in which the two variables are related. Using the Pearson r Correlation Coefficient, a value of zero indicates there is no association. A value greater than zero means the two variables are positively related. The closer the value is to 1, the stronger the relationship. Likewise, if the value is less than zero, it means the two variables have a negative correlation. The closer the value is to -1, the stronger the negative relationship. This was important for the research analysis when trying to determine if a teacher evaluation rating could indeed, predict student achievement scores.

Using the Pearson r Correlation Coefficient allowed for analysis of the numerical values listed and measured the direction and magnitude of the correlation relationship of EOC scores and PGES rating scores. This method generated a coefficient, denoted by *r*. Knowing the value of *r* can range from -1.0, representing a strong negative linear relationship, to +1.0, for a strong positive linear relationship, it was concluded r = .3288, resulting in a positive correlation, albeit weak. In order to create a graphic and frequency table which would be more easily visually interpreted, the score was multiplied by 100. In Appendix B, the graph titled "EOC score vs PGES ratings," illustrates the weak to moderate correlation via scatterplot and line. The scatterplot suggests a relationship between EOC scores and PGES ratings with higher scores of EOC tending to be associated with higher PGES rating scores. Due to the values being positive, the scatter plot illustrates a positive linear correlation being labeled as "weak to moderate" due to the *r* value of 0.3288.

For the analysis, it was determined the significance of the correlation by first determining the degrees of freedom. Being the research had 49 teacher subjects, the degrees of freedom was 47. When using the critical value table to find where the alpha and degrees of freedom intersected, it was determined the critical value to be 0.288. Being that r = 0.3288 is greater than the minimum requirement of 0.288, it was determined the relationship between EOC scores and teacher rating scores were significant.

In order to further analyze teacher professional rating data, a frequency chart was developed (Appendix C) to reflect teacher performance. Then to graphically represent teacher performance, the research team multiplied the mean score of teacher performance (Appendix A) by 100. For example, if a teacher's average score in Domain 3 was 3.25, once multiplied by 100 it converts to a score of 325. Scores were then organized into range values to display on a bar graph. Twenty-six of 49 teachers scored between 221-300, which is in the developing-accomplished range on the Danielson *Framework*. An additional 23 teachers scored in the 321-340 range which is the lower range of accomplished.

Based on the analysis of data, it was concluded that quality, research-based feedback provided to a teacher intertwined with specific job-embedded professional learning determined by specific PGES indicator, could lead to and be associated with, better EOC student achievement performance. Since the majority of teachers score between developing and accomplishing, there is room for teacher growth, made

possible through professional conversations and feedback. Increasing the quality of teachers will ultimately have positive impact on student achievement.

Limitations of the Study

Although the research has demonstrated a weak to moderate positive correlation between a teacher's PGES rating and student achievement on EOC, there were some noticeable limitations in our study. First, the time frame of the study was conducted within one school year. The short time span did not allow for comparison data over multiple years which may have provided a clearer correlation. The reason multiple years of data was not analyzed is TPGES has only been fully implemented for one year.

Another limitation was sample size, which again, may have affected the obtained Pearson *r*. It should be noted the small sample size was due in part to some teachers not having a summative evaluation completed at the time of the research. Only teachers who had completed a summative cycle had professional ratings available. Also, causing a smaller sample size was the fact only three high schools' data were used in the research study.

A third limitation involved student growth goals, which affects the summative rating. Each district, according to their certified evaluation plan, determined how student growth goals were written, allowing for subjectivity and differences among districts. For example, one district in the study used a national norm referenced test, while the other districts allowed the use of teacher created assessment. A teacher created assessment may have the opportunity for higher rate of

achievement by students as compared to a norm referenced assessment due to the teacher knowing exactly what was to be assessed. The outcome of student growth goals has the ability to skew a professional rating as they are used in conjunction with principal ratings to get an overall summative score.

Another limitation was the number of EOC assessments administered by each teacher. Because the EOC is given upon completion of a subject, the number of tests given per teacher varies as determined by roster and class schedule. For example, one teacher in the study had 158 EOCs scores associated with their professional rating, while another teacher only had 13 EOC scores.

Evaluator bias in teacher ratings was also a limitation in our study. Although administrators go through trainings and calibration exercises to increase rater reliability, the human factor exists when principals evaluate teachers.

Delineation of Work

Martha Jones examined End of Course scores from Woodford County Schools, along with corresponding teacher summative professional ratings. Jennifer Allen examined End of Course scores from Madison County Schools, along with corresponding teacher summative professional ratings. Jim Masters examined End of Course scores from Franklin County Schools, along with corresponding teacher summative professional ratings.

For our capstone project to be a success and lead to specific professional learning that will impact student achievement, the team realized the process lies not in the hands of one but rather the culmination of the labor of all three team members.

We realize that the more information on teacher ratings and EOC scores each provide, the greater chance for reliable data that accurately supports the effect of TPGES ratings in predicting student achievement.

To accomplish this goal, the work was designed as a synthesis–combining each element of work from three individuals to form a coherent whole. The group started with the end in mind, determining what specific problem to examine. From individual suggestions, the group brainstormed ideas ultimately coming to a conclusion.

To begin the process of developing a strong capstone, the group met with a small group of professors who provided experience and expertise necessary to challenge our idea and ensure that the problem was inclusive enough to defend effectively. Once that was achieved, the group decided the work would be based on individual research, individual and group construction of arguments, and group analysis and interpretation of the raw data leading to a conclusion.

The final component was the work of the group as a whole constructing the repository of resources (Appendix D) designed to improve student learning through effective teacher evaluation and feedback. This work was driven on the individual level based on the specific knowledge and skills of each team member. The outcome is a successful defense of the capstone that includes a repository of resources intended to maximize the effectiveness of teacher evaluations and student achievement.

Reflections

Implications for Future Research

What do you plan to do with the Findings?

The findings of our work will be beneficial to administrators, particularly high school administrators in the state of Kentucky who are familiar with both PGES and EOC assessments. We hope to publish our results in the KASA (Kentucky Association of School Administrators) tri-annual publication of *Kentucky School Leader*. In addition to presenting our findings in an article, we have developed a repository of resources which will be available to administrators to help guide and provide feedback to teachers based on their professional ratings. The repository of resources is designed to provide research based strategies for improving student learning based on a specific indicator within Domains 2 and 3. These two domains are what administrators use when conducting classroom observations. Based on those observations, an administrator should be able to provide feedback and collaborate with a teacher to enhance educational pedagogy. "Learning is an outcome of personal interactions" (Zepeda, 2012, p. 2). In order to create a culture where teachers desire growth, a principal must promote a mindset of learning and collaboration. When there is a desire to continually improve, where clear goals that are measured and celebrated when met, student learning will improve.

Who is the Capstone Meant to Impact?

This capstone is designed to impact student learning through teachers and principals in the state of Kentucky. The repository of resources is intended to help principals provide feedback and next steps during summative evaluation post conference that could have the potential to impact not only instruction but student achievement as well. Research continually points to the teacher being the most important factor in student learning. Knowing that "one-shot events have little lasting impact on adults and their learning, and even more negligible effect on student learning" (Zepeda, 2012, p. 46), we recommend using the repository of resources to generate job-embedded professional learning including but not limited to study groups, book studies, peer observations, and action research opportunities. These opportunities should focus on a specific indicator within Domain 2 or 3 and lead to more than 24 hours of learning and multiple attempts of strategies within the classroom in order to establish change within a specific domain. Change should be discussed and planned not as a single sit and get experience but rather a slow, natural development with a clear understanding of how that work will impact student learning. A principal, in collaboration with a teacher, should monitor the implementation of what is learned and measure the effect on student learning over the course of the school year. By focusing on a specific indicator within Domain 2 and 3 and embracing focused, job-embedded professional learning with monitoring and feedback on that specific indicator, a noticeable change in instructional practices can be achieved.

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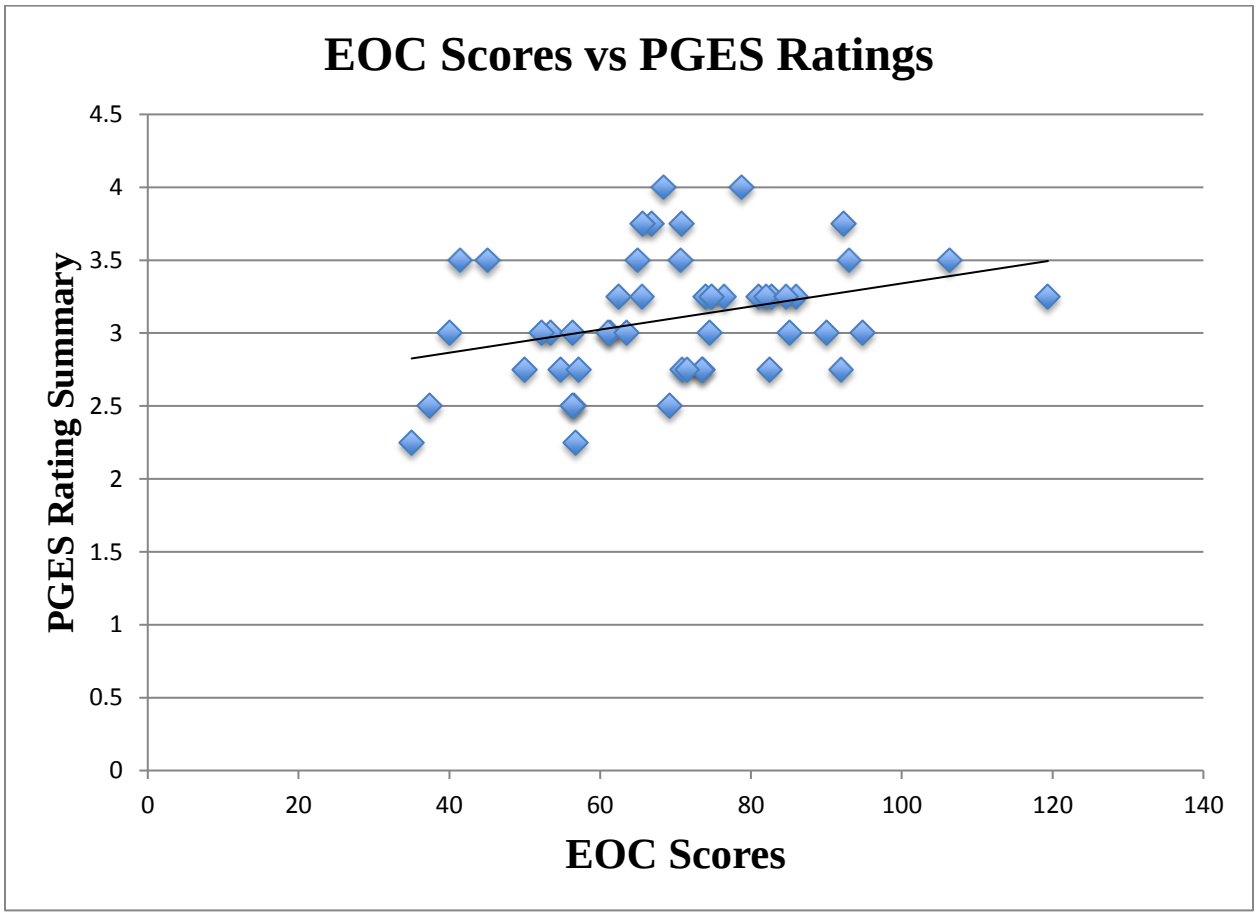
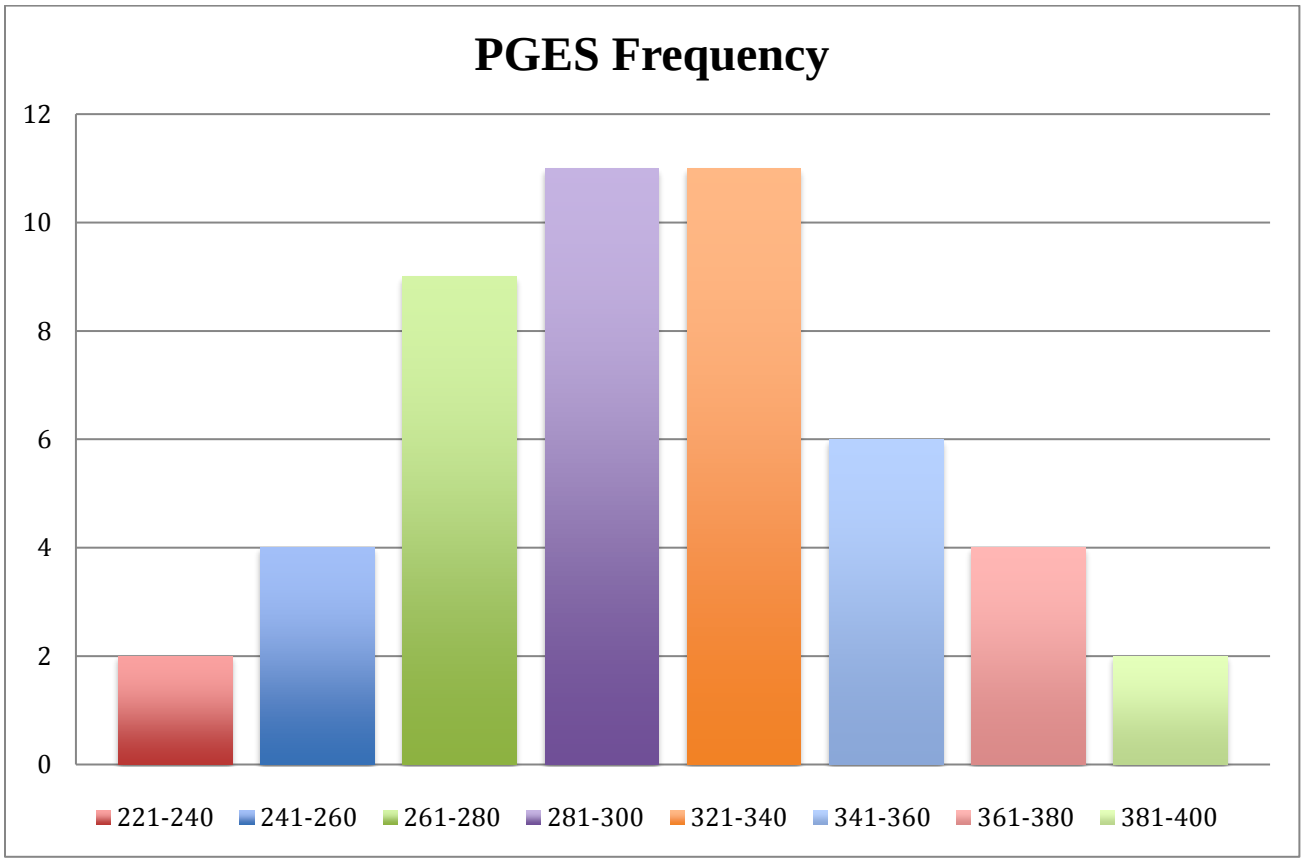
Appendix A

	EOC Scores										PGES Ratings									
Teacher	Novice	Novice Percentage	Apprentice	Apprentice Percentage	Proficient	Proficient Percentage	Distinguished	Distinguised Percentage	Total Scores		3a		3b		3c		3d		Summative	Mean
Teacher A	22	21%	25	24%	46	44%	11	11%	104	66.83	Exemplary	4	Exemplary	4	Accomplished	3	Exemplary	4	Exemplary	3.75
Teacher B	15	14%	26	24%	61	55%	8	7%	110	74.55	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher C	9	6%	16	10%	70	44%	63	40%	158	106.33	Accomplished	3	Exemplary	4	Accomplished	3	Exemplary	4	Accomplished	3.50
Teacher D	12	14%	49	58%	22	26%	1	1%	84	56.55	Accomplished	3	Accomplished	3	Developing	2	Developing	2	Developing	2.50
Teacher E	5	9%	21	36%	16	28%	16	28%	58	82.76	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher F	1	2%	18	36%	29	58%	2	4%	50	81.00	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher G	3	5%	23	42%	28	51%	1	2%	55	73.64	Accomplished	3	Developing	2	Accomplished	3	Accomplished	3	Accomplished	2.75
Teacher H	10	17%	12	20%	17	28%	21	35%	60	82.50	Exemplary	4	Developing	2	Developing	2	Accomplished	3	Accomplished	2.75
Teacher I	2	4%	24	50%	20	42%	2	4%	48	70.83	Exemplary	4	Exemplary	4	Accomplished	3	Exemplary	4	Exemplary	3.75
Teacher J	14	12%	39	34%	48	42%	14	12%	115	70.87	Accomplished	3	Accomplished	3	Developing	2	Accomplished	3	Accomplished	2.75
Teacher K	2	2%	31	36%	31	36%	23	26%	87	91.95	Accomplished	3	Developing	2	Accomplished	3	Accomplished	3	Accomplished	2.75
Teacher L	2	4%	3	6%	16	33%	28	57%	49	119.39	Accomplished	3	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher M	20	18%	9	8%	46	41%	36	32%	111	85.14	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher N	30	49%	7	11%	21	34%	3	5%	61	45.08	Accomplished	3	Accomplished	3	Exemplary	4	Exemplary	4	Accomplished	3.50
Teacher O	11	11%	31	30%	44	43%	16	16%	102	76.47	Accomplished	3	Accomplished	3	Accomplished	3	Exemplary	4	Exemplary	3.25
Teacher P	4	5%	20	27%	40	53%	11	15%	75	86.00	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher Q	14	35%	20	50%	6	15%	0	0%	40	40.00	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher R	8	19%	22	52%	10	24%	2	5%	42	54.76	Accomplished	3	Developing	2	Accomplished	3	Accomplished	3	Exemplary	2.75
Teacher S	11	25%	19	43%	14	32%	0	0%	44	53.41	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Exemplary	3.00
Teacher T	8	6%	64	46%	51	37%	15	11%	138	73.55	Accomplished	3	Accomplished	3	Developing	2	Accomplished	3	Accomplished	2.75
Teacher U	21	16%	75	56%	32	24%	6	4%	134	56.34	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher V	20	15%	66	48%	47	34%	4	3%	137	61.31	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher W	15	14%	60	57%	26	25%	4	4%	105	57.14	Accomplished	3	Accomplished	3	Developing	2	Accomplished	3	Exemplary	2.75
Teacher X	17	26%	7	11%	30	46%	11	17%	65	68.46	Exemplary	4	Exemplary	4	Exemplary	4	Exemplary	4	Exemplary	4.00
Teacher Y	15	18%	8	9%	45	53%	17	20%	85	78.82	Exemplary	4	Exemplary	4	Exemplary	4	Exemplary	4	Exemplary	4.00
Teacher Z	37	33%	14	12%	46	41%	16	14%	113	61.06	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Exemplary	3.00
Teacher A	9	19%	9	19%	19	40%	11	23%	48	73.96	Accomplished	3	Accomplished	3	Accomplished	3	Exemplary	4	Accomplished	3.25
Teacher BB	17	12%	23	17%	75	54%	24	17%	139	82.01	Accomplished	3	Exemplary	4	Accomplished	3	Accomplished	3	Exemplary	3.25
Teacher CC	19	15%	17	14%	52	42%	36	29%	124	84.68	Accomplished	3	Exemplary	4	Accomplished	3	Accomplished	3	Exemplary	3.25
Teacher DD	5	6%	14	18%	37	48%	21	27%	77	94.81	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher EE	6	29%	9	43%	6	29%	0	0%	21	50.00	Accomplished	3	Developing	2	Accomplished	3	Accomplished	3	Accomplished	2.75
Teacher FF	7	15%	22	46%	19	40%	0	0%	48	62.50	Accomplished	3	Accomplished	4	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher GG	0	0%	8	62%	5	42%	0	0%	13	69.23	Accomplished	3	Developing	2	Accomplished	3	Developing	2	Developing	2.50
Teacher HH	8	9%	59	69%	17	20%	2	2%	86	56.40	Accomplished	3	Developing	2	Developing	2	Accomplished	3	Developing	2.50
Teacher II	0	0%	18	36%	24	48%	8	16%	50	90.00	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher JJ	6	6%	12	13%	64	66%	15	15%	97	92.27	Exemplary	4	Exemplary	4	Exemplary	3	Exemplary	4	Exemplary	3.75
Teacher KK	3	7%	6	14%	25	58%	9	21%	43	93.02	Accomplished	3	Exemplary	4	Accomplished	3	Exemplary	4	Accomplished	3.50
Teacher LL	18	16%	30	26%	63	54%	5	4%	116	71.55	Accomplished	3	Developing	2	Accomplished	3	Accomplished	3	Accomplished	2.75
Teacher MM	14	35%	24	60%	2	5%	0	0%	40	35.00	Developing	2	Developing	2	Accomplished	3	Developing	2	Accomplished	2.25
Teacher NN	38	37%	53	51%	12	12%	0	0%	103	37.38	Devolping	2	Developing	2	Accomplished	3	Accomplished	3	Accomplished	2.50
Teacher OO	7	12%	28	47%	19	32%	6	10%	60	65.00	Exemplary	4	Exemplary	4	Exemplary	3	Accomplished	3	Exemplary	3.50
Teacher PP	10	24%	28	68%	3	7%	0	0%	41	41.46	Exemplory	4	Exemplory	4	Exemplory	3	Accomplished	3	Exemplary	3.50
Teacher QQ	15	41%	34	46%	20	27%	5	6%	74	56.76	Accomplished	3	Developing	2	Developing	2	Developing	2	Developing	2.25
Teacher RR	17	11%	52	42%	39	31%	17	14%	125	65.60	Exemplary	4	Exemplary	4	Exemplary	4	Accomplished	3	Exemplary	3.75
Teacher SS	28	27%	12	11%	22	21%	43	41%	105	74.76	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher TT	18	41%	6	14%	19	43%	1	2%	44	52.27	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplised	3.00
Teacher UU	24	32%	6	8%	34	46%	10	14%	74	63.51	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3	Accomplished	3.00
Teacher VV	7	16%	17	38%	19	42%	2	4%	45	65.56	Accomplished	3	Exemplary	4	Accomplished	3	Accomplished	3	Accomplished	3.25
Teacher WW	27	20%	27	20%	68	49%	16	12%	138	70.65	Exemplary	4	Accomplished	3	Accomplished	3	Exemplary	4	Accomplished	3.50
													Pearson	0.3288						

Appendix B


EOC Scores vs PGES Ratings
PGES Rating Summary
4.5
4
3.5
3
2.5
2
1.5
1
0.5
0
0
20
40
60
80
100
120
140
EOC Scores

Appendix C


PGES Frequency
12
10
8
6
4
2
0
221-240
241-260
261-280
281-300
321-340
341-360
361-380
381-400

Appendix D

Repository of Resources

Domain 2

2A: Creating an environment of respect and rapport:

Description:

- Teacher-student interactions are friendly and demonstrate caring and support.
- Students exhibit respect for the teacher.
- Interactions among students are respectful.
- Teacher responds successfully to disrespectful behavior among students- the result is polite and respectful.

Resources:

- Allen, P. A. (2009). *Conferring: The keystone of reader's workshop*. Stenhouse Publishers. Chapters 1-7
- Wormelli, Rick. (2016, September). What to do in week one? *Educational Leadership,* 10-15. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/What-to-Do-in-Week-One¢.aspx
- Scherer, Marge, (2016, September). Perspectives / How does trust happen? *Educational Leadership,* 7-7. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/How-Does-Trust-Happen%C2%A2.aspx
- Toshalis, Eric. (2016, September). Correcting our connecting. *Educational Leadership,* 16-20. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/Correcting-Our-Connecting.aspx
- Reichert, Michael C. (2016, September). Unlocking boys' potential. *Educational Leadership,* 22-26. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/Unlocking-Boys'-Potential.aspx
- Jackson, Robert. (2016, September). Helping Black and Latino males succeed. *Educational Leadership,* 38-42. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/Helping-Black-and-Latino-Males-Succeed.aspx

- Bondy, Elizabeth & Hambacher, Elyse. (2016, September). Let care shine through. *Educational Leadership,* 50-54. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/Let-Care-Shine-Through.aspx
- Hayword, John. (2016, September). Classrooms that put people first. *Educational Leadership,* 70-74. Retrieved from http://www.ascd.org/publications/educational-leadership/sept16/vol74/num01/Classrooms-that-Put-People-First.aspx
- Meadows, Michael. (2016, September). Building trust with black urban students. *The Baltimore Sun.* Retrieved from http://www.baltimoresun.com/news/opinion/oped/bs-ed-behavioral-teaching-20160911-story.html
- N.A. (N.D.). Measuring and improving teacher-student interactions. *Center for Advanced Study of Teaching and Learning.* Retrieved from http://curry.virginia.edu/uploads/resourceLibrary/CLASS-MTP_PK-12_brief.pdf

2B: Establishing a culture for learning:

Description:

- The classroom is a cognitively busy place – learning is valued and students are engaged.
- Teacher conveys that with hard work –thinking things through – the student can be successful.
- Students understand their roles as learners (protocols) and demonstrate effort to learn.
- Classroom interactions illustrate a culture of learning and understanding of quality work.

Resources:

- Ritchhart, R. (2015, March). *Creating cultures of thinking: The 8 forces we must master to truly transform our schools*. John Wiley & Sons. See Chapters 6 and 8
- Dack, Hilary & Tomlinson, Carol A. (2015, March). Inviting all students to learn. *Educational Leadership*, 10-15. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/Inviting-All-Students-to-Learn.aspx
- Cruz, Barbara C. (2015, March). The problem we still live with. *Educational Leadership*, 16-20. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/The-Problem-We-Still-Live-With.aspx
- Echevarria, Jana & Frey, Nancy & Fisher, Doug. (2015, March). What it takes for English language learners to succeed. *Educational Leadership*, 22-26. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/What-It-Takes-for-English-Learners-to-Succeed.aspx
- Gorski, Paul C & Swalwell, Katy. (2015, March). Equity literacy for all. *Educational Leadership*, 34-40. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/Equity-Literacy-for-All.aspx
- Irizarry, Jason G. (2015, March). What Latino students want from school. *Educational Leadership*, 66-71. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/What-Latino-Students-Want-from-School.aspx

- Johnson, Doug. (2015, March). Power up! The culturally proficient technologist. *Educational Leadership,* 81-82. Retrieved from http://www.ascd.org/publications/educational-leadership/mar15/vol72/num06/The-Culturally-Proficient-Technologist.aspx
- Hollins, E. R. (2015). *Culture in school learning: Revealing the deep meaning*. Routledge.
- Tomlinson, C. A. (2014). *Differentiated classroom: Responding to the needs of all learners*. ASCD.
- Darder, A. (2015). *Culture and power in the classroom: Educational foundations for the schooling of bicultural students*. Routledge.
- Rothstein-Fisch, C., & Trumbull, E. (2008). *Managing Diverse Classrooms: How to Build on Students' Cultural Strengths*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Sapon-Shevin, Mara. (2008, September). Learning in an inclusive community. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept08/vol66/num01/Learning-in-an-Inclusive-Community.aspx

2C: Managing classroom procedures:

Description:

- There is little loss of instructional time due to effective routines and procedures.
- Teachers management, transitions, materials are consistently successful.
- With minimal guidance and prompting student follow established routines

Resources:

- https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=4&ved=0ahUKEwjuj--ss-zOAhUF7B4KHfejAmcQFggvMAM&url=http%3A%2F%2Fwww.henry.k12.ky.us%2Fuserfiles%2F142%2FClasses%2F2499%2FDiscovery%2520Program%2520in%2520Humanities%2520and%2520Sociology.pptx&usg=AFQjCNGmMJPuCe08jtAAKTbY40mrWGHQrg&cad=rja
- https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=6&ved=0ahUKEwjuj--ss-zOAhUF7B4KHfejAmcQFgg7MAU&url=http%3A%2F%2Fwww.laurel.k12.ky.us%2Fuserfiles%2F859%2FDiscovery%2520Unit%2520Map(1).doc&usg=AFQjCNHEf4i72864ms_s5eotpv1KP-UqWQ&cad=rja
- Emmer, E. T., & Evertson, C. M. (2016). *Classroom management for middle and high school teachers*. Pearson.
- Murray, Bonnie P. (2002). *30 Classroom procedures to head off behavior problems*. Scholastic. Retrieved from http://www.scholastic.com/teachers/article/30-classroom-procedures-head-behavior-problems
- Cox, Janelle. (N.D.). *Classroom Management Procedures*. Retrieved from http://www.teachhub.com/classroom-management-procedures
- Young, Denise. (N.D.). *Classroom procedures and routines*. Retrieved from http://www.learnnc.org/lp/pages/735

2D: Managing student behavior:

Description:

- Student behavior is generally appropriate for learning –standards of conduct have been clearly established.
- Teacher monitors student behavior against those standards.
- Teacher response to misbehavior is consistent, proportionate, respectful and effective to students

Resources:

- Smith, S. W., & Yell, M. L. (2013). *A Teacher's Guide to Preventing Behavior Problems in the Elementary Classroom*. Pearson Higher Ed.
- Jones, V., & Jones, L. (2015). *Comprehensive classroom management: Creating communities of support and solving problems*. Pearson.
- McClowry, S. G., Rodriguez, E. T., Tamis-LeMonda, C. S., Spellmann, M. E., Carlson, A., & Snow, D. L. (2013). Teacher/student interactions and classroom behavior: The role of student temperament and gender. *Journal of research in Childhood Education*, *27*(3), 283-301.
- Emmer, E. T., & Evertson, C. M. (2016). *Classroom management for middle and high school teachers*. Pearson.
- Smith, S. W., & Yell, M. L. (2013). *A Teacher's Guide to Preventing Behavior Problems in the Elementary Classroom*. Pearson Higher Ed.
- Mendler, A. N. (2012). *When teaching gets tough: Smart ways to reclaim your game*. Alexandria, VA, U.S.A.: ASCD.
- Curwin, R. L., Mendler, A. N., & Mendler, B. D. (2008). *Discipline with dignity: New challenges, new solutions*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Ridnouer, K. (2006). *Managing your classroom with heart: A guide for nurturing adolescent learners*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Rappaport, Nancy & and Minahan, Jessica. (2012, October). Cracking the behavior code. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/oct12/vol70/num02/Cracking-the-Behavior-Code.aspx
- Boynton, M., & Boynton, C. (n.d.). *The educator's guide to preventing and solving discipline problems*.
- A. (n.d.). Student Behaviors and Teacher Use of Approval versus Disapproval. Retrieved September 10, 2016, from http://www.ascd.org/publications/researchbrief/v4n03/toc.aspx

- A. (n.d.). When Students Get Stuck: Using Behavior Agreements. Retrieved September 10, 2016, from http://www.ascd.org/publications/educational-leadership/jun11/vol68/num09/When-Students-Get-Stuck@-Using-Behavior-Agreements.aspx

2E: Organizing physical space:

Description:

- Classroom is safe and physical arrangement is appropriate for the learning activities
- Teacher makes effective use of physical resources
- The environment/design/décor of the room supports a vision for learning

Resources:

- McLeod, J., Fisher, J., & Hoover, G. (n.d.). *The key elements of classroom management: Managing time and space, student behavior, and instructional strategies*. (See Chapter 1)
- (N.A.). (N.D.) Arrangement of Furniture and Use of Physical Resources. Retrieved from http://www.ascd.org/ASCD/pdf/books/danielsonAT2009_arrangement_of_furniture_and_use_of_physical_resources.pdf
- Phillips, M. (2014). A Place for Learning: The Physical Environment of Classrooms. Retrieved September 10, 2016, from http://www.edutopia.org/blog/the-physical-environment-of-classrooms-mark-phillips
- Classroom Organization: The Physical Environment | Scholastic.com. (n.d.). Retrieved September 10, 2016, from http://www.scholastic.com/teachers/article/classroom-organization-physical-environment
- Creating an Effective Physical Classroom Environment. (n.d.). Retrieved September 10, 2016, from https://www.teachervision.com/classroom-management/decorative-arts/6506.html
- Classroom Organization: The Physical Environment | Scholastic.com. (n.d.). Retrieved September 10, 2016, from http://www.scholastic.com/teachers/article/classroom-organization-physical-environment

Domain 3

3A: Communicating with students:

Description:

- What is to be learned is clearly communicated and procedures and directions are clear.
- Explanation of content is clear and students participate in thinking via discussion/questioning.
- Teachers vocabulary is appropriate

Resources:

- Allen, P. A. (2009). *Conferring: The keystone of reader's workshop*. Stenhouse Publishers. Chapters 1-7
- City, Elizabeth A. (2016, September). Talking to Learn. *Educational Leadership*. Retrieved from http://www.ascd.org/publications/educational-leadership/nov14/vol72/num03/Talking-to-Learn.aspx
- Hintz, Allison & Kazemi, Elham. (2014, November). Talking About Math. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/nov14/vol72/num03/Talking-About-Math.aspx
- Marzano, R. J., Pickering, D., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. ASCD. (See setting objectives and providing feedback)
- Moss, C. M., & Brookhart, S. M. (2012). *Learning targets: Helping students aim for understanding in today's lesson*. ASCD.
- Brookhart, S. M., & Moss, C. M. (2014). Learning Targets on Parade. *Educational Leadership, 72*(2), 28-33.
- Moss, C. M., & Brookhart, S. M. (2012). Learning targets. *Helping students aim for understanding in today's lesson*.
- Marzano, R. (N.D.). The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction. Retrieved September 10, 2016, from http://www.ascd.org/publications/books/107001.aspx
- Danielson, C., Axtell, D., McKay, C., & Cleland, B. (2009). *Implementing the framework for teaching in enhancing professional practice*. ASCD.

3B: Questioning and discussion techniques:

Description:

- Teacher uses a variety of questions moving beyond low-level recall utilizing open-ended questions.
- Teacher engages most students in an active content discussion.

Resources:

- Ostroff, Wendy L. 2016. *Cultivating Curiosity in K-12 Classrooms.* Alexandria, ASCD. See chapter 5 (pgs. 85-108)
- Hunkins, F. P. (1989). *Teaching thinking through effective questioning*. Christopher-Gordon Publishers.
- Website: ttps://wordplay11.wordpress.com/2014/01/14/questioning-with-blooms-taxonomy/ Questioning with Blooms Taxonomy
- Harvey, S., & Goudvis, A. (2007). *Strategies that work: Teaching comprehension for understanding and engagement*. Stenhouse Publishers. See Chapter 7 pages 82-96
- http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/toc.aspx
- Wiggins, G. & Wilbur, D. (2015, September). How to Make Your Questions Essential. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/How-to-Make-Your-Questions-Essential.aspx
- Kohn, A. (2015, September). Who's Asking? *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/Who's-Asking¢.aspx
- Harris, P. (2015, September). What Children Learn from Questioning. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/What-Children-Learn-from-Questioning.aspx
- Tovani, C. (2015, September). Let's Switch Questioning Around. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/Let's-Switch-Questioning-Around.aspx
- Brookhart, S. (2015, September). Making the Most of Multiple Choice. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/Making-the-Most-of-Multiple-Choice.aspx

- William, D. (2015, September). Designing Great Hinge Questions. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/Designing-Great-Hinge-Questions.aspx
- Costa, A & Kallick B. (2015, September). Five Strategies for Questioning with Intention. *Educational Leadership.* Retrieved from http://www.ascd.org/publications/educational-leadership/sept15/vol73/num01/Five-Strategies-for-Questioning-with-Intention.aspx
- H. (2015, October). The Big List of Class Discussion Strategies. Retrieved from http://www.cultofpedagogy.com/speaking-listening-techniques/
- Socratic Seminars: Patience & Practice. (n.d.). Retrieved September 10, 2016, from https://www.teachingchannel.org/videos/bring-socratic-seminars-to-the-classroom
- A. (n.d.). Effective Classroom Discussions. Retrieved September 10, 2016, from http://www.ascd.org/publications/educational-leadership/feb10/vol67/num05/Effective-Classroom-Discussions.aspx

3C: Engaging students in learning:

Description:

- The learning tasks are congruent to a standard represented by a learning target.
- Most students are intellectually engaged in the lesson – independent and discussion.
- Pacing of the lesson reflects the work shop model (mini lesson, work time, reflection)

Resources:

- Ostroff, Wendy L. 2016. *Cultivating Curiosity in K-12 Classrooms.* Alexandria, ASCD. See chapters 1-4 and chapter 7.
- Copeland, Matt. 2005. *Socratic circles Fostering critical and creative thinking in middle and high school.* Portland, Stenhouse Publishers.
- McGregor, T. (2007). Comprehension Connections: Bridges to Strategic Reading. *Education Review//Reseñas Educativas*.
- Hoffer, W. W. (2012). *Minds on mathematics: Using math workshop to develop deep understanding in grades 4-8*. Heinemann.
- Ritchhart, R., Church, M., & Morrison, K. (2011). *Making thinking visible: How to promote engagement, understanding, and independence for all learners*. John Wiley & Sons.
- Quate, S., & McDermott, J. (2009). *Clock watchers: Six steps to motivating and engaging disengaged students across content areas*. Heinemann. See chapters 4-7.
- Jang, H., Reeve, J., & Deci, E. L. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. Journal of Educational Psychology, 102(3), 588.
- Leach, L., & Zepke, N. (2011). Engaging students in learning: A review of a conceptual organiser. Higher Education Research & Development, 30(2), 193-204.
- Furlong, M. J., & Christenson, S. L. (2008). Engaging students at school and with learning: A relevant construct for all students. Psychology in the Schools, 45(5), 365-368.
- Smart, K. L., & Csapo, N. (2007). Learning by Doing: Engaging Students through Learner-Centered Activities. Business Communication Quarterly, 70(4), 451-457.
- Jensen, E. (2013). *Engaging students with poverty in mind: Practical strategies for raising achievement*. ASCD.

- Goodwin, B. (2011). *Simply better: Doing what matters most to change the odds for student success*. ASCD.
- Tredway, L. (1995, September) Socratic seminars engaging students in intellectual discourse. *Educational Leadership*. Retrieved from http://www.ascd.org/publications/educational-leadership/sept95/vol53/num01/Socratic-Seminars@-Engaging-Students-in-Intellectual-Discourse.aspx
- Opitz, M. F., & Ford, M. P. (2014). *Engaging minds in the classroom: The surprising power of joy*. ASCD.
- Jang, H., Reeve, J., & Deci, E. (2010). Engaging students in learning activities: It is not autonomy support or structure but autonomy support and structure. *Journal of Educational Psychology*,*102*(3), 588–600.
- Ripley, A. (2010, April 19). Should kids be bribed to do well in school? *Time, 175*(15). Retrieved fromwww.time.com/time/magazine/article/0,9171,1978758,00.html
- Goodwin, B. (2012, February) Research says/make standards engaging. *Educational Leadership*, 79-81. Retrieved from http://www.ascd.org/publications/educational-leadership/feb12/vol69/num05/Make-Standards-Engaging.aspx

NOTIFICATION OF EXEMPT PROTOCOL REVIEW

Principal Investigator/Researcher:

First Name: Martha | Last Name: Collins | Title: Student-Doctoral

Campus Address: 400 Red Square Ct Richmond | Campus Phone: (859) 421-3141

E-Mail: m1121694@moreheadstate.edu

Department: Foundational & Grad Studies in Ed

CITI Training: Yes Date Completed: 06/24/2014

Co-Investigators | Other Personel:

Jim	Masters
Jennifer	Allen

Purpose:

Protocol Review Number: 16-01-47

The human subject use protocol described above has been reviewed by the MSUInstitutional Review Board for the Protection of Human Subjects in Research with the following results:

The IRB determined the project, as stated, is exempt based on federal regulation 46.101 (2)
Federal regulations require that the IRB be notified if anything in the research changes, as additional review may be necessary.

Yes Approved, may proceed as written

Begin Date 1 /5 /2016 End Date 1 /4 /2022

In accordance with new procedures instituted by the IRB, and because your study is exempt, you are not required to complete continuation or final review reports. However, it is your responsibility to notify the IRB prior to making any changes to the study. Please note that changes made to an exempt protocol may disqualify it from exempt status and may require an expedited or convened review. Your exempt protocol is approved for six years. At the end of six years the protocol will close and interaction with human subjects must cease. If you would like to continue your project, you must submit a new exemption application and have it approved before the project can continue.

Title of Project/Course: Is there a relationship between a student's achievement and a teachers's professional rating?

Funding Source/Agency: NA NA

N/A	Regulatory requirements have been met for the waiver of documentation of consent
N/A	Regulatory requirements have been met for the waiver of informed consent
N/A	Criteria for use of children has been met

Signed: _____ Date: 1/5/16

Designee, Institutional Review Board for the Protection of Human Subjects in Research

Please refer to the protocol review number in any future references to this protocol. If any revisions are made to a project or if any unforeseen risks arise during an investigation, the principal investigator must submit Form H to the IRB, fully explaining all changes or unexpected risks.

pc: Protocol File

VITA

Martha C. Jones

EDUCATION

May, 2001	Bachelor of Business Adminstration Lincoln Memorial University Harrogate, Tennessee
May, 2008	Master of Arts Educational Leadership Eastern Kentucky University Richmond, Kentucky
Pending	Doctor of Education Morehead State University Morehead, Kentucky

PROFESSIONAL EXPERIENCES

2014-Present	Director of Student Achievement Woodford County Schools Versailles, Kentucky
2012-2014	Principal Silver Creek Elementary Berea, Kentucky

VITA

Jennifer R. Allen

EDUCATION

May, 1995	Bachelor of Business Adminstration Eastern Kentucky University Richmond, Kentucky
May, 2011	Master of Arts Educational Leadership Eastern Kentucky University Richmond, Kentucky
Pending	Doctor of Education Morehead State University Morehead, Kentucky

PROFESSIONAL EXPERIENCES

2014-Present	Assistant Principal Madison Southern High School Berea, Kentucky
2005-2014	Business and Marketing Teacher Madison Southern High School Berea, Kentucky
2004-2005	Business and Marketing Teacher Edythe J. Hayes Middle School Lexington, Kentucky
1995-2002	Auditor General Motors Acceptance Corporation Indianapolis, Indianapolis

VITA

Jim Masters

EDUCATION

May, 1994	Bachelor of Arts University of Kentucky Lexington, Kentucky
May, 2000	Master of Arts Educational Leadership Eastern Kentucky University Richmond, Kentucky
Pending	Doctor of Education Morehead State University Morehead, Kentucky

PROFESSIONAL EXPERIENCES

2012-Present	Director of Middle and High Schools Franklin County Public Schools Frankfort, Kentucky
2008-2012	Principal Henry County High School Eminence, Kentucky
2007-2008	Highly Skilled Educator Kentucky Department of Education Frankfort, Kentucky
2005-2007	Assistant Princpal Georgetown Middle School Scott County, Kentucky
2003-2005	Social Studies Teacher and Head Basketball Coach Western Hills High School Frankfort, Kentucky

2002-2003	Social Studies Teacher and Head Basketball Coach Tates Creek High School Lexington, Kentucky
1999-2002	Social Studies Teacher and Head Basketball Coach Danville High School Danville, Kentucky
1997-1999	Social Studies Teacher Second Street Middle School Frankfort, Kentucky