Teacher Perceptions of Individual Professional Learning Plans

Jerry W. Ripley  
East Tennessee State University

Follow this and additional works at: https://dc.etsu.edu/etd

Part of the Curriculum and Instruction Commons, Educational Administration and Supervision Commons, and the Educational Leadership Commons

Recommended Citation

This Dissertation - Open Access is brought to you for free and open access by the Student Works at Digital Commons @ East Tennessee State University. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of Digital Commons @ East Tennessee State University. For more information, please contact digilib@etsu.edu.
Teacher Perceptions of Individual Professional Learning Plans

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment

of the requirements for the degree

Doctor of Education in Educational Leadership

by

Jerry William Ripley

May 2016

Dr. Virginia Foley, Chair

Dr. Ed Dwyer

Dr. William Flora

Dr. Don Good

Keywords: Professional learning plan, teacher perceptions, professional development
ABSTRACT

Teacher Perceptions of Individual Professional Learning Plans

by

Jerry William Ripley

The purpose of this quantitative study was to examine PK-12 teacher perceptions of an individual professional learning plan (PLP). Specifically, the researcher examined the perceived benefits of the PLP as well as the whether the PLP helped focus teacher learning. Additionally, the researcher examined teacher perceptions of learning activities within the context of the PLP, teacher intent to implement new learning, and perceived impact on teaching practice. Participants in this study were teachers from 16 schools in a single eastern Tennessee school district. All data were collected using an online survey distributed to 525 teachers resulting in a 44% return rate with 238 respondents. Data collected from 24 survey questions measured on a 4-point Likert-type scale were analyzed using single sample t tests.

Findings indicate that regardless of level of experience or grade level taught teachers have significantly positive perceptions of PLPs as well as the associated PD activities. Findings also indicate teachers have significant perceptions of the application of their learning and significant perceived impact from PD within PLPs.
DEDICATION

This work is dedicated to my family, especially my wife Sherry, who encouraged me throughout the process and allowed me the time and space to get the work completed. She has always been my biggest supporter in so many ways. To her and all the others who were patient with me during this process, I am eternally grateful.
ACKNOWLEDGMENTS

I would like to thank my committee members: Dr. Virginia Foley, Dr. Don Good, Dr. William Flora, and Dr. Ed Dwyer. Your support and help was fantastic. You were patient with me and provided me with specific, actionable advice throughout the process.

Dr. Foley, I appreciate your guidance and encouragement throughout this experience. You were always so positive and encouraging. The way you interacted with me always calmed my anxiety and reassured me that I would complete this enormous task.

I must also thank Dr. Brian Noland who encouraged me enter the program. It was your love for children that compelled me to heed your suggestion.

Finally, a special thanks goes to Dr. Vicki Kirk who more than once encouraged me to continue this process even when I had decided to give up. You’ve always provided good advice on so many occasions, and I thank you for firmly telling me to forge ahead with this endeavor.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSTRACT</td>
<td>2</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>3</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>4</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>7</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>8</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>10</td>
</tr>
<tr>
<td>Conceptual Framework</td>
<td>11</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>12</td>
</tr>
<tr>
<td>Research Questions</td>
<td>13</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>14</td>
</tr>
<tr>
<td>Definitions of Terms</td>
<td>15</td>
</tr>
<tr>
<td>Delimitations</td>
<td>16</td>
</tr>
<tr>
<td>Limitations</td>
<td>16</td>
</tr>
<tr>
<td>Summary</td>
<td>17</td>
</tr>
<tr>
<td>Overview of the Study</td>
<td>17</td>
</tr>
<tr>
<td>2. LITERATURE REVIEW</td>
<td>18</td>
</tr>
<tr>
<td>Teacher Quality</td>
<td>18</td>
</tr>
<tr>
<td>Professional Development</td>
<td>19</td>
</tr>
<tr>
<td>Professional Development Orientation and Content</td>
<td>21</td>
</tr>
<tr>
<td>Effective Professional Development</td>
<td>23</td>
</tr>
<tr>
<td>Professional Learning Communities</td>
<td>27</td>
</tr>
<tr>
<td>Individualized Professional Learning</td>
<td>29</td>
</tr>
<tr>
<td>Teacher Application of Learning</td>
<td>34</td>
</tr>
<tr>
<td>Teacher Evaluation and Feedback</td>
<td>36</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Professional Development and Student Achievement</td>
<td>39</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>41</td>
</tr>
<tr>
<td>3. METHODOLOGY</td>
<td>43</td>
</tr>
<tr>
<td>Research Questions and Null Hypotheses</td>
<td>43</td>
</tr>
<tr>
<td>Sample</td>
<td>46</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>46</td>
</tr>
<tr>
<td>Data Collection</td>
<td>47</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>47</td>
</tr>
<tr>
<td>4. FINDINGS</td>
<td>49</td>
</tr>
<tr>
<td>Respondent Demographics</td>
<td>49</td>
</tr>
<tr>
<td>Research Question 1</td>
<td>50</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>56</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>63</td>
</tr>
<tr>
<td>Research Question 4</td>
<td>69</td>
</tr>
<tr>
<td>Chapter Summary</td>
<td>76</td>
</tr>
<tr>
<td>5. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS</td>
<td>77</td>
</tr>
<tr>
<td>Summary of Findings</td>
<td>77</td>
</tr>
<tr>
<td>Conclusions</td>
<td>78</td>
</tr>
<tr>
<td>Recommendations for Practice</td>
<td>83</td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td>85</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>88</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>97</td>
</tr>
<tr>
<td>APPENDIX A: Exemption Letter from Instructional Review Board</td>
<td>97</td>
</tr>
<tr>
<td>APPENDIX B: Teacher Survey</td>
<td>98</td>
</tr>
<tr>
<td>APPENDIX C: Sample PLP</td>
<td>100</td>
</tr>
<tr>
<td>VITA</td>
<td>102</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Principals for Group Learning</td>
<td>29</td>
</tr>
<tr>
<td>2. Depth of Learning Associated with PD Approaches</td>
<td>35</td>
</tr>
<tr>
<td>3. Breakdown of Percentages by Grade Level</td>
<td>49</td>
</tr>
<tr>
<td>4. Cronbach’s Alpha Results</td>
<td>50</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Teacher Perceptions of PLPs</td>
<td>51</td>
</tr>
<tr>
<td>2. Emerging Teacher Perceptions of PLPs</td>
<td>52</td>
</tr>
<tr>
<td>3. Experienced Teacher Perceptions of PLPs</td>
<td>53</td>
</tr>
<tr>
<td>4. Elementary Teacher Perceptions of PLPs</td>
<td>54</td>
</tr>
<tr>
<td>5. Middle School Teacher Perceptions of PLPs</td>
<td>55</td>
</tr>
<tr>
<td>6. High School Teacher Perceptions of PLPs</td>
<td>56</td>
</tr>
<tr>
<td>7. Teacher Perceptions of PD in PLPs</td>
<td>57</td>
</tr>
<tr>
<td>8. Emerging Teacher Perceptions of PD in PLPs</td>
<td>58</td>
</tr>
<tr>
<td>9. Experienced Teacher Perceptions of PD in PLPs</td>
<td>59</td>
</tr>
<tr>
<td>10. Elementary Teacher Perceptions of PD in PLPs</td>
<td>60</td>
</tr>
<tr>
<td>11. Middle School Teacher Perceptions of PD in PLPs</td>
<td>61</td>
</tr>
<tr>
<td>12. High School Teacher Perceptions of PD in PLPs</td>
<td>62</td>
</tr>
<tr>
<td>13. Teacher Perceptions of Instructional Coaching</td>
<td>64</td>
</tr>
<tr>
<td>14. Emerging Teacher Perceptions of PD Application</td>
<td>65</td>
</tr>
<tr>
<td>15. Experienced Teacher Perceptions of PD Application</td>
<td>66</td>
</tr>
<tr>
<td>17. Middle School Teacher Perceptions of PD Application</td>
<td>68</td>
</tr>
<tr>
<td>18. High School Teacher Perceptions of PD Application</td>
<td>69</td>
</tr>
<tr>
<td>19. Teacher Perceptions of PD Impact</td>
<td>70</td>
</tr>
<tr>
<td>20. Emerging Teacher Perceptions of PD Impact</td>
<td>71</td>
</tr>
<tr>
<td>21. Experienced Teacher Perceptions of PD Impact</td>
<td>72</td>
</tr>
<tr>
<td>22. Elementary Teacher Perceptions of PD Impact</td>
<td>73</td>
</tr>
</tbody>
</table>
23. Middle School Teacher Perceptions of PD Impact .................................................. 74
24. High School Teacher Perceptions of PD Impact .................................................... 75
CHAPTER 1

INTRODUCTION

The call for education reform has been sounding for many years. The publication of *A Nation at Risk* in 1983 highlighted the pitfalls of American education and laws such as *No Child Left Behind* (2001) and competitive grants such as *Race to the Top* (2009) have prescriptive requirements emphasizing improved teaching and learning (Seed, 2008). Teacher professional development (PD) is a cornerstone of the reform and accountability movement that currently dominates the education landscape, hinged on the belief that high-quality PD leads to higher-quality teaching, and high-quality teaching ultimately leads to increased student achievement (Borko, 2004; Darling-Hammond, Wei, & Andree, 2010; Desimone, 2009; Smith, 2010; Smith & Desimone, 2003; Stewart, 2014).

The school environment or community of learners is impacted by the degree to which PD increases teacher knowledge and skills (Ruddy & Prusinski, 2012; Spillane, 2015). According to Spillane (2015), “Teachers’ skills and knowledge shape their performance in classrooms and ultimately what and how students learn and what they can achieve” (p.14). In 2010 through application for Race to the Top (RTTT) funding an eastern Tennessee rural school district initiated a plan to enhance teacher PD. Greene County Tennessee teachers are required to complete a minimum of 5 professional learning days for which pay is received and as many as 4 annual days within the school year where students are dismissed and teachers work at their own school or cooperatively at other schools or a central location. Historically, as in many school districts, teacher PD in Greene County Schools had been determined at the district level and “pushed out” to schools and teachers. PD activities generally consisted of large group trainings on broad topics determined through examination of district student data trends and from consultation
with building level administrators. In other instances teachers selected activities on their own from choices within and outside the district. Most teachers’ personal learning was a combination of both district-wide trainings and their own selected endeavors with few conversations centered on individual teacher learning goals or preferences. The district’s 2010 RTTT funding plan constituted a shift from this model. This change is centered on an individualized professional learning plan (PLP) developed by each teacher in cooperation with the school principal. The learning plan is the focal point for all discussions of professional learning. Each spring administrators and teachers have at least one specific discussion regarding the teacher’s plan for the summer and following year; goals are set and learning activities are planned out. Learning goals and activities for learning are articulated in the plan as well as timelines for implementation and evaluation. It is an expectation that individual PLPs will result in strengthening teacher knowledge and instructional skill.

**Conceptual Framework**

This study is grounded in the conceptual framework that when given choice in the goals and direction of their learning, teachers have greater satisfaction with their PD endeavors, particularly when teachers consult with an instructional leader (principal) to establish learning goals (Antoniou & Kyriakides, 2013; Bayar, 2014; Beckum, 2010). Additionally, when PD activities are aligned with district and school goals as well as student and teacher performance data, teachers are more engaged and have better attitudes toward their learning (Darling-Hammond, Wei, & Andree, 2010). Desimone, Smith, and Phillips (2013) suggested a core theory of action for PD that follows these steps: (1) teachers experience quality PD; (2) teachers experience a change in attitude and increased
knowledge and skills; (3) teachers apply the new skill and knowledge to their own instructional practice; and (4) the changes in teacher practice lead to increased student learning. There is a strong connection between PD and teacher knowledge (Penuel, Fishman, Yamaguchi, & Gallagher, 2007; Wei, Darling-Hammond, & Adamson, 2010); between teacher evaluation with evaluative feedback and improved teacher practice (Hinchey, 2010; Marzano & Toth, 2013; Papay, 2012); between PD effectiveness and teacher choice in PD (Bayar, 2014; Gamrat, Zimmerman, Dudek, & Peck, 2014; Lieberman & Pointer Mace, 2008; Starkey et al., 2009) and between PD and student achievement (Darling-Hammond et al., 2010; Desimone, 2009; Slater, Davies, & Burgess, 2012). This study is focused on several aspects within Desimone et al. (2013) conceptual framework: the links between teacher PD and feedback from evaluations as well as teacher input and choice in learning goals and design. The teacher’s relative autonomy to plan professional growth activities through interaction with an administrator and use of evaluation feedback have the potential to impact the teacher’s learning.

Statement of the Problem

Because teacher quality impacts student learning (Hattie, 2009; Slater et al. 2012), there is a clear need for PD to improve teacher quality (Guskey, 2000). The design of the professional learning endeavor impacts its effectiveness (Darling-Hammond & Richardson, 2009; Darling-Hammond et al., 2010; DuFour et al., 2010; Reeves, 2010; Yoon, Duncan, Lee, Scarloss, & Shapley, 2007; Zepeda, 2008). PD is also directly connected to student achievement (Desimone, 2009; Darling-Hammond et al., 2010; Smith, 2010; Yoon et al., 2007). However, extant literature has a paucity of research specifically focused on individual PD and a written plan as it relates to
teacher input and choice as well as attitudes toward teacher PD and ultimately the effectiveness of the PD. It is well documented that teacher ownership of PD and input on setting goals is important (Antoniou & Kyriakides, 2013; Beckum, 2010). This concept of individual PD plans has become more prevalent as a few states now include such plans as part of their teacher support efforts (Jaquith, Mindich, Wei, & Darling-Hammond, 2010). The Gates foundation (2015) has similar plans as one of its key recommendations for supporting teacher growth and improvement. Despite the importance for teacher input in PD opportunities, less than 50% of teachers in the United States reported that they had some influence over the content of their PD (Jaquith et al., 2010).

The choice and input given to teachers in Greene County is in stark contrast to the majority of teachers in the United States, a phenomenon worth closer examination. Despite the literature supporting teacher choice in learning and differentiation of teacher learning (Bayar, 2014; Hirsch, 2007; Joyce & Calhoun, 2010; Quick et al., 2009; Sixel, 2013; Zepeda, 2008), there is a dearth of research regarding formal learning plans, particularly within education. Some of the most notable studies of individual learning plans, or “personal development plans,” involve continuing education for individuals in medical fields (Bullock, Firmstone, Frame, & Bedward, 2007; Charlton, 2009; Cross & White, 2004). Therefore, the purpose of this study is to examine teacher perceptions of their PLP and their PD activities, teacher intent to implement their PD, and the perceived impact of PD on classroom practices in the context of a PLP.

**Research Questions**

The study was focused on following research questions:

1. Do teachers have significantly positive or negative perceptions of professional learning plans?
2. Do teachers have significantly positive or negative perceptions of their professional development activities in the context of professional learning plans?

3. Do teachers intend to apply their own learning in the context of professional learning plans?

4. Do teachers perceive professional learning plans have positively or negatively impacted their teaching to a significant extent?

**Significance of the Study**

A rural East Tennessee school district, Greene County Schools, has made improving teacher practice a priority by implementing an individual professional learning plan (PLP) for every teacher. An administrative goal for staff is to plan PD activities based on the collective goals of PLPs throughout the district. Principals have made great effort to connect classroom observations, student data, and school goals to the goals in teacher PLPs. PLPs serve as the framework for all professional learning expenditures and requests whether materials, travel, or contracted. Teachers have had the opportunity to collaborate with administrators on the direction of their own professional learning and the activities associated with reaching those goals. This represents a conceptual shift for district leaders. By examining teacher perceptions regarding the success of this concept, this study may provide beneficial research illustrating that the use of such PLPs is critical to teacher attitudes toward learning and improving practice.

To have significant impact on students teacher professional learning endeavors must be perceived positively and change teacher behavior (Guskey & Yoon, 2009). This study was intended to add to the research on teacher professional learning, particularly learning in which the teacher has a significant role in setting goals and selecting activities to meet those goals. This
investigation of professional learning in the context of teacher individual learning plans contributes to the existing body of knowledge pertaining to effective teacher PD. The existence of a PLP has the potential to affect teacher attitudes toward the learning. The teacher’s role in developing the plan and selecting the activities has the potential to help teacher learning to be realized in terms of application of new strategies. The purpose of this study is to examine the effects of the PLP as a mechanism for improved teacher attitude toward their PD objectives and activities, greater intent to implement new learning, as well as increased actual application of the learning. Essentially, this study is an examination of how a PLP impacts teacher learning.

Teacher intent to follow through with changes in practice will potentially help the district determine how well the plans are being designed and the extent to which these teachers perceive their instructional practice was enhanced through PD as well as their perceptions of the practicality of the learning activities. Essentially, there is a need to know if teachers have a positive opinion toward the existence of an individualized PLP and their PD activities and whether or not the PLP impacted teacher learning or caused teacher learning to be realized in terms of application of new strategies and impact on teaching.

Definitions of Terms
Terms specific to this study are explained in the following definitions:


2. *Professional Development (PD)*: Activity intended to improve teacher knowledge and instructional practice and student learning outcomes (Wei et al., 2010). Also termed “professional learning”.

15
3. *Professional Learning Plan (PLP)*: A document in which teacher learning activities are identified based on teacher and student data and aligned to school and district goals.

4. *Student Achievement*: Student performance as measured by teacher, district, or state administered assessments.

**Delimitations**

This study was confined by the following delimitations: The participants surveyed were restricted to those employed in one rural school district in which individual professional development plans (PLPs) have been implemented. Teachers unfamiliar with the PLP concept were excluded. A qualifying question was used to establish if each participant had a PLP in place and was generally aware of the PLP process. This was done to limit the sample to those teachers who actually have a PLP. The school district is public and in a rural setting; therefore, the student composition is limited to those enrolled in these particular public schools. A survey was designed and used for the first time specifically for this study with multiple variant survey items to capture teacher perceptions for each of the four research questions. Only closed-ended Likert scale questions were used rather than open-ended responses that might make some participants more willing to complete the survey. No neutral choice was included in the Likert scale questions order to help alleviate social desirability bias as some researchers suggest (Garland, 1991).

**Limitations**

Limitations of this study include the following: Participation in the survey was completely voluntary; therefore, participant opinions might be different from those who chose not to participate. The survey was administered at the approximate midpoint of the school year which may affect responses related to PD which occurred at different times in the year. Given my
supervisory role in the district, teachers may have been inclined to answer anticipating my preferred responses also known as social desirability bias. Care was taken to minimize the association of the survey to myself or the district central office. The survey link was emailed from a generic school email, and school principals sent the reminder emails directly to their teachers. My experience and involvement with the district’s teacher support and development might produce bias that would limit the study.

Summary

Teacher PD is important to teacher quality and student learning. Teacher attitudes toward their learning is considered a critical element to effective professional learning as is teacher autonomy in goal setting. Given that these elements are often missing from PD initiatives, the individual learning plans within the rural East Tennessee school district is unique. Within the context of these learning plans, this quantitative study was conducted to examine teacher perceptions regarding the individual learning plans as well as perceptions regarding application of the learning into their instructional practice.

Overview of the Study

The study is organized into five chapters. Chapter 1 includes the introduction, statement of the problem, significance of the study, and research questions. Chapter 1 also consists of definition of terms, delimitations, limitations, and the overview of the study. Chapter 2 reports the review of the literature related to the study. Chapter 3 explains the methodology used in the study. Chapter 4 presents the findings of the data analyses. Chapter 5 presents the summary, findings, conclusions, and recommendations for this study.
CHAPTER 2
REVIEW OF LITERATURE

Teacher Quality

For decades there has been a growing emphasis on teacher quality. The *Elementary and Secondary Education Act* of 1965 called for improvement in teacher quality. Other National reforms such as *No Child Left Behind* from 2001, as well the 2010 *American Recovery and Reinvestment Act*, included specific requirements focused on “high quality” teachers (NCLB, 2001, U.S. Department of Education Recovery Plan, 2010). These laws were established as a framework for division and school level leaders to address improving student performance including increased teacher and principal effectiveness as well as performance-based compensation systems (U.S. Department of Education Recovery Plan, 2010). A closer examination of the 2010 law reveals specific areas of focus:

We are calling on states and districts to develop and implement systems of teacher and principal evaluation and support, and to identify highly effective teachers and principals on the basis of student growth and other factors. These systems will inform professional development and help teachers and principals improve student learning. (U.S. Department of Education, 2010, p. 4).

While focused on student achievement, this most recent U.S. education reform law was an attempt to connect teacher improvement to both teacher evaluation and PD. Guskey (2000) states, “Every proposal for educational reform and every plan for school improvement emphasizes the need for high-quality professional development” (p3). Improved student achievement can only occur by improving teachers’ instructional practice and by allowing school systems to advance
The quality of a teacher matters; the individual teacher plays a direct role in student academic performance (Sanders & Rivers, 1996; Slater et al., 2012). Accountability models for student achievement are focused on teachers (Borko, 2004; Penuel et al., 2007; Visser, Coenders, Terlouw, & Pieters, 2011). A clear relationship exists between teacher quality and student achievement (Hallinger, Heck, & Murphy, 2014; Hattie, 2009; Slater et al., 2012; Kane, McCaffrey, Miller, & Staiger, 2013). The National Research Council (2011) suggested “teacher quality is considered the most critical factor affecting academic achievement…the most common measures are content knowledge, experience, pedagogical skills, and academic skills and knowledge” (p. 79). High quality, ongoing teacher professional learning is required to help teachers meet student needs (Reaves, 2010). PD is necessary for new teachers as well as veteran teachers (Starkey et al., 2009; Rogers et al., 2007), yet research has shown that many teachers lack the necessary preparation for their particular teaching position (Bayar, 2014; Palardy & Rumberger, 2008). Because of this students are often left without a teacher of sufficient quality. Hirsh (2001) reported an absence of sufficient content training for secondary teachers and a void in their preparation for the profession.

**Professional Development**

Professional development (PD) which is also termed “staff development” or “professional learning” has become a focal point in school districts across the United States including Greene County, Tennessee. Federal education funding rules for Title I allocations require schools to incorporate PD into their overall improvement and spending plans. Districts also receive Title II federal funds that are specifically earmarked for PD in the core subject areas of reading, math, science, and social studies. PD has been defined as activity “which results in improvements in
teachers’ knowledge and instructional practice, as well as improved student learning outcomes” (Wei et al., 2010, p.3). Such activities have increased over recent decades given the increased accountability and focus on teacher quality. By 2001 the percentage of teachers reporting sustained participation in content-focused PD had risen from 15% in 1993 to 52% (Smith & Desimone, 2003).

Research revealed PD is more effective for teachers when it is job-embedded and directly addresses their specific needs and concerns that makes it relevant and authentic (Flores, 2005). Under the best circumstances teacher learning is made authentic through seamless integration into each school day or when teachers see a connection between a learning experience and their daily responsibilities (Guskey, 1995; Tate, 2009). PD within the context of the school, such as coaching, mentoring, and study groups, promotes active learning and builds coherence more than traditional learning venues (Quick, Holtzman, & Chaney, 2009). In other words, job-embedded PD engages teachers in learning through their daily responsibilities and requires that they consider possibilities, try new ideas, and examine the success of their actions. Even traditional in-service or workshops when supported with follow-up activities such as projects, action research, or written reflection can increase teachers’ perceptions of relevance and authenticity of the professional learning (Tate, 2009).

The allotted time or duration of the activity is also a key element in PD. Penuel et al. (2007) studied 454 teachers who had received PD from a variety of providers and found teachers felt more prepared when provided time to discuss how to align the curriculum with their current practices and local standards. Beyond teacher perceptions of learning, research has also shown that PD sustained over time and including a substantial number of contact hours on a single focus results in increases in student learning (Wei et al., 2010).
Professional Development Orientation and Content

Much of the existing literature points to the importance of PD content or what teachers are learning, the subject matter of the activities. In a study of several science and mathematics PD initiatives Rogers et al. (2010) identified five approaches to presentation and implementation which they term “Professional Development Projects Orientation”. Their research confirmed that the design and implementation of PD is strongly influenced by presenters’ predisposed orientations to learning. Each orientation is comprised of the characteristics driving the design of a PD project including: activity-driven, pedagogy-driven, curriculum materials-driven, needs driven, and content driven (Marra et al., 2011; Rogers et al., 2010). Activity-driven orientation refers to professional developers engaging teachers in activities that they hope teachers will then use with their students. Pedagogy-driven refers to professional developers encouragement of a particular inquiry-based instructional model or strategies (e.g., white boarding, science notebooks, questioning strategies, cooperative learning groups) in order to help teachers help students learn. A curriculum materials-driven orientation includes professional developers guiding participating teachers through lessons and units from nationally or locally developed curriculum materials to help teachers learn to use those materials in their classes. A PD orientation that is needs-driven enlists teachers to establish needs, design instruction, and implement instruction. Teacher networking is a major feature in this approach. Lastly, content-driven orientation involves professional developers helping teachers learn new content or laboratory techniques to enhance teachers’ understanding of selected concepts (Rogers et al., 2010). In a subsequent study Marra et al. (2011) examined the relationship between these orientations and PD outcomes in terms of perceived improvement in teacher practice. Results indicated that different orientations produced different outcomes. Participants in PD offerings with a balanced orientation showed higher intent
to make instructional improvement as did participants in content-driven projects (Marra et al., 2011).

Research also shows effective PD is instructionally-focused with emphasis on both subject area content and how to teach it (Lieberman & Pointer Mace, 2008). Teachers consider the emphasis on subject area content and pedagogy relevant and authentic to their daily responsibilities (NSDC, 2009b). Teachers reported that their knowledge and skills grew and their practice changed when they received PD that was focused on content knowledge and involved active learning (Darling-Hammond & Richardson, 2009). Furthermore, instructionally-focused learning connects to teachers’ experiences, which is more likely to result in changed behavior (Porter, Garet, Desimone, & Birman., 2003). Wei et al. (2009) found that student achievement improved most when teachers were engaged in sustained, collaborative PD that specifically focused on deepening teachers’ content knowledge and instructional practices.

The National Staff Development Council (NSDC), the organization now known as Learning Forward, first wrote standards for professional learning in 2001 which have since been adopted by more than 40 states (Wei et al., 2010). Their standards (NSDC, 2009a) address three areas of professional learning: context, process, and content. Based on the standards for content, PD must address teacher instructional strategies and teacher’s knowledge of their content that they teach. To meet the NSDC standard the learning activity must be one that “Deepens educators’ content knowledge, provides them with research based instructional strategies to assist students in meeting rigorous academic standards, and prepares them to use various types of classroom assessments properly” (Wei et al., 2010, p 4).
Effective Professional Development

The definition of high-quality PD has been evolving over recent years based on the notion that high-quality teaching leads to student achievement (Darling-Hammond et al., 2010; Desimone, 2009; Smith, 2010; Yoon et al., 2007). The importance of PD programs for improving teaching and subsequent student impact has become accepted worldwide (Bayar, 2014). There is no single definition of what constitutes effective PD, and in the United States the design and delivery of teacher professional learning have been left to district leaders or individual teachers (Corcoran, 2007). However, several design features are repeatedly represented in the extant literature. Effective professional learning is intensive and sustained; it is directly relevant to teacher and student needs; and it provides opportunities for application, practice, reflection, and reinforcement (Reeves, 2010). The aforementioned NSDC (Learning Forward) standards for context and process call for PD design features that organize adults into learning communities and require skillful school and district leaders who guide continuous instructional improvement as well as resources to support adult learning and collaboration (Wei et al., 2010). NSDC process standards include elements that: use student data to determine adult learning priorities; incorporate multiple sources of information to guide improvement and assess impact; use research based methods and learning strategies appropriate to the intended goal; and build teacher knowledge and skills for collaboration (Wei et al., 2010).

Other research has sought to capture the definition of PD in terms of the various activities in which teacher engage. In his 2003 examination of over 1,300 lists of features associated with effective PD, Guskey (2003) distinguished 21 characteristics. The most frequently characteristic was enhanced teacher content knowledge, helping teachers better understand the subject matter they teach (Guskey, 2003). Another key feature in most lists describing effective PD is sufficient
time allowing for deepened understanding, a concept supported by other researchers (Darling-Hammond & Richardson, 2009; Darling-Hammond et al., 2010; DuFour et al., 2010; Reeves, 2010; Yoon et al., 2007; Zepeda, 2008). PD must be sustained and provide opportunities for application, practice, reflection, and reinforcement (Darling-Hammond & Richardson, 2009; Reeves, 2010).

Guskey’s (2003) work found two features prevalent in the extant literature on effective professional learning that are particularly relative to this study: evaluation and alignment as well as site-based PD planning. Effective PD frequently includes a system of evaluation and close alignment with other reform initiatives. In the context of this present study the individualized PD plans are meant to serve as a mechanism to align activities with district goals as well as teacher evaluations. Furthermore, the plans, as revisited by teachers and administrators during the year, are intended as a vehicle for monitoring progress toward the activities.

Site-based decision making allows teachers and leaders to apply the proper context to the learning. This feature is also characterized in the individual learning plans whereby principals and teachers make decisions on the scope of the work and the appropriate activities within each individual plan. Guskey (2003) points out that close collaboration between schools and district leadership would appear to be critical to the success of such site-based PD. The same author also noted the extensive reference to collegiality and collaborative exchange (Guskey, 2003). Other researchers have been consistent in their findings that collective participation among teachers within a department or school can directly impact teacher learning, particularly combined with support from the school or district administration (Banilower & Shimkus, 2004; Ingvarson, Meiers, & Beavis, 2005). Teachers from the same school who have autonomy to select their
learning objectives and who have been taught how to collaborate have been shown to have success (Mindich & Lieberman, 2012; Stewart, 2014).

Desimone (2009) defines four core approaches to PD: 1) content focus, activities aimed at improving teachers’ subject matter knowledge and how students learn content; 2) active learning, observing teachers or engaging in active feedback and discussions; 3) coherence, the extent to which PD is aligned with teacher knowledge and beliefs; 4) duration, the span of time for the activity or the number of hours involved in the activity; and 5) collective participation, group participation at the team, grade, department, or school levels.

Designs such as PD with multiple sessions or follow-up as well as professional learning such as PLCs embedded within the workplace are more effective and changing practice (Desimone, 2009). Guskey and Yoon (2009) point out that sufficient time and follow-up were also key features to the success within these well designed studies as was a clear focus on enhancing teacher content knowledge. Sufficient time, support, and structures are also requisite for job-embedded PLCs if they are to become effective problem-solving bodies for school improvement (Fogarty & Pete, 2010). More traditional PD designs include in-service sessions also known as training. These have often been maligned as less effective than more recent job-embedded models (Guskey & Yoon, 2009). Unfortunately, studies indicate brief, 1- or 2-day trainings and workshops are most common in schools (Darling-Hammond et al., 2010).

Additionally, reading or studying a resource as well as attending training are individual, passive activities that only provide awareness and build knowledge. Such Passive learning alone has not been shown to change teacher practice (Borko, 2004; Smith, 2010; Stewart, 2014; Wei et al., 2009). If sustained for 14 hours or less, PD has been shown to have little effect on students (Wei et al., 2009). However, when activities continue for 30 to 100 hours, positive effects on students
result (Darling-Hammond & Richardson, 2009; Darling-Hammond et al., 2010; Yoon et al., 2007). Programs showing the most significant positive effects were those offering between 30 and 100 hours spread out over 6-12 months (Darling-Hammond & Richardson, 2009).

When compared to the most successful school systems in other countries, most teachers in the United States do not receive such amounts of training required to affect change; and the activities consist largely of university courses, workshops, and conferences (Darling-Hammond et al., 2010). In countries like Singapore at least 100 hours of annual professional learning is required, but this is seldom the case in the United States (Darling-Hammond et al., 2010). Many of these countries provide more extensive time for teachers to work together. Time during the workday has been cited as critical to effective staff development that is job-embedded and impactful and if schools expect to break down the typical isolation within which teachers normally plan and learn. (Darling Hammond et al., 2009; DuFour et al., 2010; Reaves, 2010; Swackhamer, Koellner, Basile, & Kimbrough, 2009).

Sufficient time for sustainment is one of seven protocols for productive professional learning identified by Fogarty and Pete (2010). These protocols also include professional learning that is: a) results-oriented; b) collegial; c) interactive; and d) job-embedded. The final two protocols, integrative and practical, are particularly relevant given the nature of this present study. Integrative refers to a differentiated experience for diverse adult learners. “Diverse and varied methods of learning are as necessary for the wide and diverse population of adult learners as they are with the wide and diverse population of young learners” (Fogarty & Pete, 2010, p.2). Fogarty and Pete added “High-quality professional learning experiences differentiate …through the methods by which they are addressed — for example, book studies, action research, data analysis, collaborative planning” (p2). Individualized professional learning plans as examined
through this present study represent an effort to differentiate both the content and the mode of learning for teachers.

**Professional Learning Communities**

Teachers involved in this present study were given opportunity to work with colleagues in a variety of arrangements characteristic of a professional learning community (PLC). The concept of PLCs or teacher–to–teacher collaboration is at the heart of the NSDC standards for professional learning context and process (NSDC, 2009a, 2009b). Teachers value opportunities to learn from and with one another toward common goals such as planning instruction, analyzing student work, and peer observations (NSDC, 2009a; Quick et al., 2009). In fact, Quick et al. (2009) found that teacher-to-teacher coaching and mentoring was more likely to result in meaningful learning experiences than traditional PD activities. Teacher interaction with colleagues centered on student learning is a concept further advocated by Dufour et al. (2010) in what are termed professional learning communities. In a PLC teachers work collectively to help impact their teaching in ways that will lead to improved student performance (DuFour et al., 2010). Such PLCs, scholars contend, require the entire organization to adopt a continual learning model and provide time for teams to work together with clear purpose or common goals (DuFour et al., 2010). At the heart of this true PLC model is the idea that no program can accomplish change like a community with a growth mindset employing structured practices of collaborative cycles of inquiry (DuFour et al., 2010; Reaves, 2010). Collective participation from teachers from common disciplines or grade levels is a key element for successful PLCs that must also be afforded sufficient contact time for at least a semester and with 20 or more contact hours (Desimone, 2009; Stewart, 2014). Indeed, there has been a shift from passive and intermittent
models such as training to models based in the teaching environment, and supported by peers in a professional learning community (Stewart, 2014).

Participation in learning communities is one way the social nature of effective PD is realized. Organized by grade level, by school, or through several schools, PLCs are supported and sustained when school leadership is shared between principals and teachers (Lambert, Wallach, & Ramsey, 2007). For PD to make a difference in practice on a wide scale it must be embedded within a comprehensive system of learning and improvement that readily supports teachers’ work, and it must be sustained (Jaquith et al., 2010). PLCs are one structure providing a more sustained form of learning.

Additionally, regular feedback as provided within a PLC supports teacher learning by helping teachers build strengths, clarify ideas, and correct misconceptions (Quick et al., 2009). In their summary of research on PLCs Wei et al. (2010) described several forms of PLC work that result in changes in teacher practice including: peer observation of practice, analysis of student work, and developing study groups. In some cases studies have shown these practices within the context of PLCs can increase teacher knowledge, change their practice, and make them more effective (Sato, Wei, & Darling-Hammond, 2008; Wei et al., 2010). In addition, these activities have been associated with student achievement gains (Vescio, Ross & Adams, 2008; Wei et al., 2010). Learning communities thrive when participants are invested in the work (Stewart, 2014). A collaborative group can achieve a healthy learning environment if the appropriate principles are established as identified by Knight (2011). These principles presented in Table 1 are founded on the notion that people are more motivated by their own individual goals (Knight, 2011). PLCs with the most success are those in which teacher participants have received training on how to
collaborate and are allowed to set their own learning goals (Mindich & Lieberman, 2012; Stewart, 2014).

Table 1

<table>
<thead>
<tr>
<th>Principle</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equality</td>
<td>Teacher input in planning of activities</td>
</tr>
<tr>
<td>Choice</td>
<td>Teachers choice of learning goals and mode of learning</td>
</tr>
<tr>
<td>Voice</td>
<td>Teachers empowered by the learning</td>
</tr>
<tr>
<td>Reflection</td>
<td>Reflection as key component of learning</td>
</tr>
<tr>
<td>Praxis</td>
<td>Real-life application to practice</td>
</tr>
<tr>
<td>Reciprocity</td>
<td>Expectation of participation with feedback</td>
</tr>
</tbody>
</table>


**Individualized Professional Learning**

Many scholars report autonomy is a key human motivator (Hoy & Miskel, 2012; Mindich & Lieberman, 2012; Pink, 2009; Stewart, 2014). Given this present study’s focus on individual teacher learning plans, I performed a thorough examination of extant literature addressing professional learning plans, individual goals, as well as teacher input regarding their professional learning. Sixel (2013) contended that teachers are more receptive to learning when the learning is geared toward the assumptions of adult learning first posited by Knowles (1980). These assumptions include self-concept or the desire to be self-directed. Research shows that effective PD for teachers supports teacher motivation and commitment to the learning process. It combines individual teacher needs with school or district goals (Flores, 2005) and engages learning from teachers, paraprofessionals, and administrators (National Staff Development Council [NSDC], 2009a). Professional learning designed to address the learning needs of specific schools, classrooms, grade levels, and teachers must take into account teachers’ personal and professional needs (Flores, 2005) and accommodate their individual learning styles and preferences (Tate,
In addition, effective PD integrates teacher input regarding what and how they will learn (Lieberman & Pointer Mace, 2008) as well as teacher choice regarding learning pace and direction (NSCD, 2009a).

Implementing individual professional growth or learning plans alongside an instructional leader such as a master teacher or the principal, or as members of a professional learning community, helps teachers understand what PD opportunities they should engage in as well as to track their growth in a competency area (Croft, Coggshall, Dolan, & Powers, 2010; Cross & White, 2004). Combining individual needs with school or district goals, engaging learners from all levels of the school, and addressing teachers’ specific learning needs strengthens teacher commitment to PD and increases their motivation to learn (Quick et al., 2009). Sixel (2013) contended that schools where teachers direct their own learning are following the idea of self-concept. Another assumption of adult learning is termed readiness to learn (Knowles, 1970; Sixel, 2013). Learners learn best when the need for the learning is understood as well as how the learning fits in their own context and when learners have proper orientation to their learning (Sixel, 2013).

Professional learning designed to address the learning needs of specific schools, classrooms, grade levels, and teachers must take into account teachers’ personal and professional needs (Flores, 2005) and accommodate their individual learning styles and preferences (Tate, 2009). From their examination of the world’s most successful school districts, Darling-Hammond et al. (2010) identified teacher involvement in school decisions as a critical feature for teacher growth. Teachers have as great a need for differentiation in learning as do students (Joyce & Calhoun, 2010). PD must include customized learning opportunities (Bayar, 2014; Gamrat et al., 2014). Based on their study of technology integration among teachers, Gamrat et al. (2014)
recommended use of assessments to align teachers’ own PD needs based on their personal interests. In addition, effective PD integrates teacher input regarding what and how they will learn (Lieberman & Pointer Mace, 2008) as well as teacher choice regarding learning pace and direction (NSCD, 2009a). In a qualitative study of what teachers perceive as effective professional learning, Bayar (2014) reported:

Effective professional development activities should consist of the following components: 1) a match to existing teacher needs, 2) a match to existing school needs, 3) teacher involvement in the design/planning of professional development activities, 4) active participation opportunities, 5) long-term engagement, and 6) high-quality instructors. (p. 324).

Well planned PD must take into account individual participants and allow them to have some direction in their learning (Beavers, 2009; Starkey et al., 2009). Furthermore, the importance of teacher input in the planning of activities has been reported by researchers who recommend involving teachers in the design process as much as possible (Sandholtz & Scribner, 2006; Starkey et al. 2009).

Implementing individual professional growth plans alongside an instructional leader such as a mentor teacher or the principal helps teachers engage in appropriate PD opportunities and assess their growth (Croft et al., 2010). In fields where personal development plans are used more frequently such as medicine and dentistry both time and the lack of personalized feedback have been identified as barriers to the success of such plans (Cross & White, 2004). Bullock et al. (2007) investigated the implementation and impact of a personal development plan (PDP) for dentists. In their a randomized controlled study they found those participants who had been supported in the development of their PDP had higher short-term and long-term impact ratings for
their continuing education work. Dentists who developed a PDP, particularly when aided by a
tutor or mentor, perceived a greater benefit from their continuing PD (Bullock et al., 2007).
Charlton (2009) suggested that reflection with an educational mentor, such as a school principal,
could more accurately identify appropriate learning needs and should form the basis for a personal
development plan. Charlton also argued that such action plans should form the basis for all PD
work as they address the needs of both the teacher and the organization.

Effective professional learning does take into account district, school, and individual goals
(Bayar, 2014; DeMatthews, 2015). In a study of four high performing states Jaquith et al. (2010)
found these states required district PD goals and also required individual teacher PD plans.
Combining individual needs with school or district goals, engaging learners from all levels of the
school, and addressing teachers’ specific learning needs strengthens teacher commitment to PD
and increases their motivation to learn (Quick et al., 2009). Guskey and Yoon (2009) emphasize
PD must provide structured time and a clear purpose to be meaningful. When teachers are allowed
to design their own professional learning and they are open to change, their new learning can
make a difference in their classroom instruction and student learning (Sixel, 2013). Student
learning needs can be more closely aligned with teacher learning needs when teachers are given
choice in their PD (Morewood, Ankrum, & Bean, 2009; Sixel, 2013).

Research has shown that when adults are in charge of their own learning, they are more
motivated and more ready to put their learning into practice (Hirsch, 2007; Knowles, 1980;
several key recommendations for state, district, and building leaders:

At the beginning of the year, teachers should develop individual learning plans that
identify two or three growth areas based on evaluation data from the previous year. This
strategy signals to teachers that they can guide their own professional learning and helps
principals provide their teachers with targeted feedback (p. 2).

Other recommendations include: 1) Design and deliver evaluation-related professional learning to
teachers and principals; 2) Confer with teachers about their individual professional learning goals
for the year; 3) Monitor teachers’ progress toward their professional learning goals throughout the
year; 4) Observe teachers in the classroom and provide them with feedback related to their
professional learning goals (Gates Foundation, 2015).

For self-directed learning to meet teacher and student needs it must be carefully planned
and implemented, intensive, and sustained (Sixel, 2013). In his qualitative study of 25 high school
teachers Beckum (2010) found that teacher ownership of the change led to more complete
implementation. His research further concluded that in addition to having sufficient time for
implementation teachers who felt trusted and treated as such successfully changed their practice
(Beckum, 2010). Teacher anxiety can occur when teachers know they should be working on
something other than that which they are being asked to do (Reaves, 2010). Professional learning
must be relevant to the needs of students and teachers (Reeves, 2010). In their group
randomization study of teachers involved in the Dynamic Integrated Approach to PD, which
included the development of individual goals, Antoniou and Kyriakides (2013) found that the
program positively impacted both teaching skills and student achievement in math. Those same
authors contend that every effort must made to align training precisely to the teachers’
developmental level (Antoniou & Kyriakides, 2013). This study also indicates that reflection, a
component to many PD endeavors, is most effective when teacher priorities are identified and
when “teachers are encouraged to develop action plans which address their professional needs”
(Antoniou & Kyriakides, 2013, p.9). Furthermore, Antoniou and Kyriakides argued that reflection
should be focused to teachers’ specific needs. They suggested evaluations hold the potential to positively impact the learning process stating, “Evaluation results measuring teaching skills can supplement the process of reflection by helping teachers to determine on which skills they need to concentrate their efforts of improvement” (p. 9).

According to Charlton (2009) when involved in traditional learning such as attending lectures, learners will likely attend those in which they are comfortable and avoid or neglect areas that challenge them. A self-directed or 'learner-centered' plan helps avoid pitfalls such as what Charlton (2009) refers to as “autopilot syndrome that leads to stress and burnout” and instead “increases morale and empowers an individual [to] evolve their job and career goals” (p. 337).

Based on their study of an online mathematics PD, McMeeking, Orsi, and Cobb (2012) contended that allowing teachers to choose courses most relevant to them is more useful for changing teacher practice and increasing confidence.

**Teacher Application of Learning**

The more time teachers spend engaged in PD, the more likely their teaching practice is to improve (Boyle, While, & Boyle, 2004; NSDC, 2009b). Through broadly conducted sampling examining PD in English, mathematics, and science, Boyle et al. (2004) found PD designs involving a large number of sustained contact hours resulted in more than half of the respondents indicating changes in their planning practices, teaching style (43%), and assessment practices (40%). Increased teacher knowledge and sense of professional community were directly related to the structural factors of content focus, active learning, and follow-up (Ingvarson et al., 2005).

More recently, Banilower, Heck, and Weiss (2007) surveyed more than 18,000 teachers regarding the relationship between PD activities and teacher attitudes, preparedness, and behavior. They
found a positive correlation to the number of hours spent in PD. Teachers who spent more time in PD had better attitudes toward their own preparedness with their content and their ability to teach to standards. When PD experiences are related to school goals or state learning standards, participants perceive their learning experiences as more valuable making teachers more likely to change their teaching practice (Porter et al., 2003; Quick et al., 2009). The interactivity often results in the learners’ ownership of the new practices with real application and varied uses of the practice occurring more frequently in their classrooms (Fogarty & Pete, 2009). Smith (2010) reported the effects of professional learning activities on teacher depth of knowledge. Activities only effect teacher practice when reinforced through extended support or engagement while passive activities do not change teacher practice (Smith, 2010, See Table 2). Active learning that allows teachers to address their own specific needs has been found to improve teacher practice (Smith, 2010; Stewart, 2014). Teachers gain a more complete understanding and are more likely to change practice when allowed to experience cycles of exploration, implementation, and improvement (Stewart, 2014).

Table 2

<table>
<thead>
<tr>
<th>PD Approach</th>
<th>PD Activity</th>
<th>Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading/studying Training</td>
<td>Individual</td>
<td>Awareness</td>
</tr>
<tr>
<td>Professional Development</td>
<td>Workshop</td>
<td>Knowledge</td>
</tr>
<tr>
<td>Professional Learning</td>
<td>Multiple Sessions or workshops</td>
<td>Change practice</td>
</tr>
<tr>
<td></td>
<td>Job embedded, Communities of Learning</td>
<td>Change assumptions and theories</td>
</tr>
</tbody>
</table>

Teacher Evaluation and Feedback

Teacher evaluations should be a contributing component to the decisions within teacher learning plans developed in cooperation with building administrators (Killion, 2015). A review of extant literature on evaluations and teacher performance feedback revealed evidence of the potential value such evaluations can provide to PD efforts both in the short and long term. There has been increasing policy interest at the federal, state, and local levels in the use of expanded teacher evaluation systems to assess and reward teacher effectiveness and to support the development of teachers’ practice. To that end, nearly two thirds of U.S. states have made changes to their teacher evaluation policies since 2009 in ways that require or encourage the use of revised, standards-based multiple-measure teacher evaluation systems (Jerald, 2012; Strunk, Weinstein, & Makkonen, 2014). Standards-based evaluation methods predict teacher effect on student performance (Kane, Taylor, Tyler, & Wooten, 2011; Papay, 2012). Teacher evaluations can improve teacher effectiveness and should drive professional growth (Papay, 2012). Killion (2015) proposed a typology of nine feedback forms with increasing levels of cognitive demand from the learner. As the learner responsibility increases the feedback becomes more powerful (Killion, 2015). Evaluations alone, which represent the midpoint on the feedback typology, often fall short of the cognitive engagement required to effect change in teacher practice (Killion, 2015). However, when evaluations include subsequent analysis in which learning gaps are identified as well as future planning and supports necessary to change, the cognitive process for the learner increases and change is more likely to occur (Killion, 2015).

The scant amount of research on professional learning plans does indicate that such plans can be viewed as a mere formality in the absence of proper feedback. Cross and White (2004) found an absence of feedback as a barrier to the effectiveness of a personal development plan.
Those same researchers found more than 50% of general practitioner physicians in England viewed completing a personal development plan as a sort of “hoop-jumping.” Observations serve as a PD tool that “provides feedback on teachers’ instructional strengths and weaknesses, highlights areas for improvement, and supports teachers’ continued development” (Papay, 2012, p2). A recent report developed in cooperation of several successful teachers posits teacher evaluation should include performance assessments with a purpose of guiding professional learning throughout a teacher’s career (Accomplished California Teachers, 2015). The same authors concluded that evaluation must accompanied by feedback connected to professional development and also reviewed by evaluation teams to ensure reliability (Accomplished California Teachers, 2015). Other reports claimed a fundamental purpose of evaluation is to provide teachers with meaningful feedback to better improve the quality of instruction and subsequently student achievement (Education First, 2015; Papay, 2012). It is essential that the evaluator be both able and willing to give honest, rich, actionable feedback to teachers (Fiarman, Johnson, Munger, Papay, & Qazilbash 2009; Papay, 2012). Training for evaluators as well as the use of clear, standards-based rubrics is also supported by scholars (Fiarman et al., 2009; Papay, 2012). Taylor and Tyler (2012) claimed a dearth of individualized, specific information about performance exists for teachers, suggesting such a lack of information on how to improve inhibits individual improvement among teachers. Their research of evaluations using peer observers found that the feedback process, including scoring through evaluation, provided teachers valuable information and provided opportunities for conversations regarding effective practices (Taylor & Tyler, 2012). Regarding actual student effects from evaluation, Taylor and Tyler found teachers were more effective at raising student achievement the year of being evaluation and even more effective in the years after evaluation. Taylor and Tyler (2012) further posited that teachers who
undergo subjective performance evaluation develop skills or change their behavior in a lasting manner. Other researchers claim the process of evaluation does indeed positively affect teacher performance by fostering reflective thinking and the ability to identify areas of student need (Hinchey, 2010; Marzano & Toth, 2013). DeMatthews (2015) argued effective school leaders must create systems whereby evaluations are clearly connected to support for teachers through PD. Teacher evaluations can impact student results. Marzano and Toth (2013) suggested that teacher self-reflection as part of the evaluation process more closely correlates with student learning than do the observer ratings. Feedback from the evaluation process, whether from an observer or through self-reflection, informs teacher performance. In their study of several widely used teacher evaluation models, Kane and Staiger (2012) found that teachers who demonstrated the types of practices emphasized in the classroom observation instruments had higher student test scores than those who did not. They also found that evaluation models better identified effective teaching when combined with observations with other measures such as student growth on tests and student surveys. Kane and Staiger concluded that regardless of the teacher observation instrument being used, as teachers observation results increased, so did their students’ value-added scores. However, this research did not focus on what, if any, PD activities specifically stemmed from the evaluation process. Other research has focused on the feedback teachers require in order to be successful (Education First, 2015). Kane and Staiger (2012) reported three key elements resulting from their work: 1) multiple observations must occur in order to give the required feedback and accurately rate teacher performance. 2) When combined with measures such as student surveys and student growth data, evaluations become more powerful and accurate. 3) Providing better evidence or performance through these enhanced measurements will lead to better decisions such as professional learning decisions. Teachers need feedback in order to
improve. In the context of this present study principals provide evaluation feedback to help teachers choose learning goals and desired activities aligned with school and district goals as well as student and teacher data.

**Professional Development and Student Achievement**

It is widely accepted that quality teachers have a substantial impact on student learning (Bayar, 2014). Much research confirms that students perform better when they have a higher quality teacher (Abate-Vaughn & Paugh, 2009; Hodge & Krumm, 2009; Okoye, Momoh, Aigbomain, & Okecha, 2008; Palardy & Rumberger, 2008; Slater et al., 2012; Vogt & Rogalla, 2009). Studies have also found relationships between student learning and teacher levels of certification (Boyd et al., 2006; Desimone & Long, 2010). Although there is general agreement in the extant literature on the features of effective PD, little evidence exists on the specific features that make a difference for student achievement (Wayne, Yoon, Zhu, Cronen, & Garet, 2008). The field lacks well-designed, scientific studies of the relationship between specific professional learning and the degree of improvement in subsequent student learning (Blank, 2013). For example, Slater et al. (2012) were able to control for students’ prior academic performance and found that having a high quality teacher had a significant effect on student high-stakes science, math, and English exam scores. However, the researchers were not able to identify the specific teacher quality characteristics responsible for the improved student performance. Sanders and Rivers (1996) studied teacher quality using a multivariate longitudinal statistical analysis of nearly 4,000 Tennessee students in grades 3-5 and found that teachers had both an additive and cumulative effect on student performance on mathematics testing. In an examination of one California district Fisher, Frey and Nelson (2012) found sustained PD was a key component to
increased fidelity of teacher use of specific reading strategies and also improved student reading scores. In this example teachers received continued follow-up support from various sources including coaches while they transitioned to a new reading instruction model (Fisher et al., 2012). In an examination of three types of teacher support, Saxe, Gearheart, and Nasir (2001) found that student achievement improved when teachers were engaged in sustained, collaborative PD focused on instructional practice and content knowledge. In their review of more than 1,300 studies of the impact of PD on student achievement, Yoon et al. (2007) found that PD of more than 14 hours, particularly with follow-up support or sustained, had a positive and significant effect on student achievement. Other studies have confirmed that sustained PD with contact time ranging from 49 to 100 hours result in increases in student achievement (Johnson, Kahle, & Fargo, 2007; Wei et al., 2010). In a study involving 33 rural school districts Shymansky, Wang, Annetta, Yore, and Everett (2010) examined the relationship between K-6 science test scores and teacher participation in a multi-year PD effort. They found a significant positive relationship between the PD hours experienced by teachers and student gains on high stakes test scores. A study of planned intervention PD for humanities teachers showed significant impact on teacher self-efficacy, engagement, and growth as well significant impact on student understanding related to civics instruction (Barr et al., 2015). The study also accounted for factors such as student race and gender as well as school type and teacher background and education level. The study demonstrated causal effects of PD and student learning. In a study of a PD program in New Zealand carried out over multiple years Bishop, Berryman, Wearmouth, Peter, and Clapham (2012) found positive relationships between the implementation of the PD program, changes in teacher practice, and improved outcomes for students. Similar results are reported by researchers studying reform based teacher development (Banilower, 2002; Corcoran, McVay, & Riordan,
Wallace (2009) linked PD to teacher practices and student achievement by examining results from six databases including the 2000 *Beginning teacher Preparation Survey* from Connecticut and Tennessee as well as National Assessment of Education Progress (NAEP) mathematics and reading test results. The quantitative study involved a structural equation model that was tested using small and large national data sets. She concluded despite differences in samples, academic subjects, and assessments, PD has positive effects on teacher practice as well as student achievement (Wallace, 2009). Blank and de Al Alas (2009) conducted a meta-analysis study of the effects of PD and student achievement in an attempt to identify common elements of organization and delivery. Their analysis of more than 400 studies of PD revealed just 16 studies with significant positive effects on student learning. These 16 studies used either a design comparing a treatment group to a comparable control group or a design measuring student achievement gains compared to prior achievement. The results revealed common elements including content focus, multiple activities sustained over longer durations, and learning goals within the professional learning design (Blank & de Al Alas, 2009).

**Chapter Summary**

Research confirms that a higher quality teacher produces increased student performance (Abate-Vaughn & Paugh, 2009; Hodge & Krumm, 2009; Slater et al., 2012). U.S. education reforms emphasize teacher improvement through both teacher evaluation and PD (NCLB, 2001, U.S. Department of Education Recovery Plan, 2010). PD activities of various designs, particularly when focused on instruction or teacher content knowledge, have been shown to positively impact teacher practice (Mindich & Lieberman, 2012; Quick et al., 2009; Stewart, 2014) and student achievement (Porter et al., 2003; Wei et al., 2009). Sufficient time and follow-
up have also been identified as key features to successful PD (Darling-Hammond & Richardson, 2009, Darling-Hammond et al., 2010; Guskey & Yoon, 2009; Yoon et al., 2007). Scholars also report autonomy as a motivator (Hoy & Miskel, 2012; Mindich & Lieberman, 2012; Pink, 2009), and research has found that teacher ownership of the learning can lead to more complete implementation (Beckum, 2010) as well as improved teacher practice (Smith, 2010; Stewart, 2014).
CHAPTER 3

METHODOLOGY

The purpose of this quantitative study was to examine teacher perceptions of an individualized professional learning plan. Specifically, the researcher examined teachers’ perceived benefits of the professional learning plan as well as the whether the plan helped focus their own learning. Additionally, the researcher assessed teacher perceptions of learning activities within the context of the professional learning plan, teacher intent to implement new learning, and perceived impact on teaching practice. This chapter provides a description of the research questions and null hypotheses, the population, data collection, and data analysis.

Research Questions and Null Hypotheses

The following research questions and corresponding null hypotheses guided the study:

Research Question 1: Do teachers have significantly positive or negative perceptions of professional learning plans?

H₀₁₁: Teacher perceptions of professional learning plans are not significantly positive or negative.

H₀₁₁₂: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers with 0-5 years teaching experience.

H₀₁₁₃: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers with more than 5 years teaching experience.

H₀₁₁₄: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades PK-5.

H₀₁₁₅: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades 6-8.
H.1.6: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades 9-12.

Research Question 2: Do teachers have significantly positive or negative perceptions of their professional development activities in the context of professional learning plans?

H.21: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative.

H.22: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers with 0-5 years teaching experience.

H.23: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers with more than 5 years teaching experience.

H.24: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades PK-5.

H.25: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades 6-8.

H.26: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades 9-12.

Research Question 3: Do teachers intend to apply their own learning in the context of professional learning plans?

H.31: Teachers do not intend to apply their own learning in the context of professional learning plans to a significant extent.
Ho$_{32}$: Teachers with 0-5 years teaching experience do not intend to apply their own learning in the context of professional learning plans to a significant extent.

Ho$_{33}$: Teachers with more than 5 years teaching experience do not intend to apply their own learning in the context of professional learning plans to a significant extent.

Ho$_{34}$: Teachers in grades PK-5 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

Ho$_{35}$: Teachers in grades 6-8 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

Ho$_{36}$: Teachers in grades 9-12 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

Research Question 4: Do teachers perceive professional learning plans have positively or negatively impacted their teaching to a significant extent?

Ho$_{41}$: Teachers do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

Ho$_{42}$: Teachers with 0-5 years teaching experience do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

Ho$_{43}$: Teachers with more than 5 years teaching experience do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

Ho$_{44}$: Teachers in grades PK-5 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

Ho$_{45}$: Teachers in grades 6-8 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.
H₀: Teachers in grades 9-12 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

Sample

The sample consisted of 238 teachers across 16 schools within the Greene County School District in East Tennessee. Twelve elementary schools serve grades Pre-K through eighth grade, and four high schools serve grades 9 through 12. The researcher surveyed teachers employed in the district during the 2015-16 school year. These teachers include general education, special education, vocational teachers, art, physical education, music, and library media specialists. Administrators and nonteaching staff were not asked to complete surveys. The survey link was emailed to each teacher within the district. The sample consisted of those teachers who self-selected based on responding “yes” to the question of having an individual learning plan in place for the 2015-16 school year. Subgroups examined for this study include grade level bands (elementary, middle, and secondary) as well as experience (0-5 years, more than 5 years).

Instrumentation

The instrument used for this study was a survey consisting of 27 items. Items 1-2 were used to gather demographic information about the subject completing the survey. Question 3 required a “yes” or “no” response and was used to identify whether the subject would be included in the sample. A four choice Likert-type response format was used for the remaining items 4 – 27. According to Boone and Boone (2012) Likert-type items are single questions that use aspects of Likert’s (1932) original attitudinal measurement scale. Each item allowed participants to indicate their perception ranging from “strongly disagree” to “strongly agree”. Likert-type scale responses
are useful to gather data for measuring attitudes (Croasmun & Ostrom, 2011). To enhance validity and reliability the instrument was administered first to teachers participating in a doctoral level class at East Tennessee State University as well as nonteaching faculty (academic coaches, curriculum supervisors) within the participating school district. Modifications were made based on feedback from these pilot groups. The survey can be found in Appendix B.

Data Collection

Prior to collecting data permission to conduct research was obtained from the director of the participating school district and the Institutional Review Board (IRB) of East Tennessee State University. The survey was administered through the Survey Monkey online service with a survey link emailed directly to each teacher in the district through the school email accounts. An explanatory email was sent to all participants informing them of the nature of the survey, their voluntary participation, as well as their complete confidentiality and anonymity. Respondent anonymity was protected through the use of the online survey, and participants were advised that all responses would be confidential. The survey was made available for 5 business days and an email reminder to complete the survey was sent on the fourth day.

Data Analysis

Data from the Likert-type survey instrument were analyzed using a nonexperimental quantitative methodology. *Statistical Package for Social Sciences* (SPSS) data analysis software was used for all data analysis procedures in this study. Each research question has six corresponding null hypotheses. All questions were analyzed with a series of single sample *t*-tests (two-tailed, nondirectional) comparing calculated means with a value of 2.5 representing neutrality. Due to the relatively high number of null hypothesis (24), the initial alpha level of .05
was adjusted per the Bonferroni method. Therefore, .05 was divided by 24 resulting in testing the hypotheses at a level of .002.
CHAPTER 4

FINDINGS

The purpose of this study was to examine teacher perceptions of individualized professional learning plans, perceived benefits of learning activities within the context of the professional learning plans, implementation of new learning, and perceived impact on teaching practice. Data were collected from an online survey conducted through the www.surveymonkey.com website. The survey was developed specifically for this study and consisted of three demographic questions and 24 attitudinal statements relating to perceptions of professional learning plans and professional development activities.

Respondent Demographics

Two hundred thirty-eight teachers completed the survey indicating they had a professional learning plan (PLP) in place for the 2014-2015 school year. This figure represents 45.5% of the total teacher number of teachers in the district. Respondents completed the survey at their own leisure over a 5-day period beginning Monday, December 14, 2015, and ending on December 18, 2015. Table 3 shows the breakdown by grade levels of the teachers completing the survey.

Table 3. Breakdown of Percentages by Grade Level

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary (PK-5)</td>
<td>124</td>
<td>52.1%</td>
</tr>
<tr>
<td>Middle (6-8)</td>
<td>62</td>
<td>26.0%</td>
</tr>
<tr>
<td>Secondary (9-12)</td>
<td>52</td>
<td>21.8%</td>
</tr>
<tr>
<td>Total</td>
<td>238</td>
<td>99.9%</td>
</tr>
</tbody>
</table>

Of the teachers responding, 52 (22%) had taught fewer than 5 years while 186 (78%) had taught more than five years.
Internal reliability for each of the four research questions was assessed using the Cronbach’s alpha test with results ranging from .88 to .90 as seen in Table 4.

Table 4
Cronbach’s Alpha Results

<table>
<thead>
<tr>
<th>Question Item Group</th>
<th>N of Items</th>
<th>Reliability Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Question 1</td>
<td>6</td>
<td>.88</td>
</tr>
<tr>
<td>Research Question 2</td>
<td>6</td>
<td>.89</td>
</tr>
<tr>
<td>Research Question 3</td>
<td>6</td>
<td>.88</td>
</tr>
<tr>
<td>Research Question 4</td>
<td>6</td>
<td>.90</td>
</tr>
</tbody>
</table>

Research Question 1

Research Question 1: Do teachers have significantly positive or negative perceptions of professional learning plans?

$H_{o1}$: Teacher perceptions of professional learning plans are not significantly positive or negative.

A one-sample $t$ test was conducted for teacher perceptions of professional learning plans to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The mean of 2.91 ($SD = .47$) was significantly different from 2.5, $t(237) = 13.45, p < .001$. Therefore, the null hypothesis $H_{o1}$ was rejected. The 95% confidence interval for teachers ranged from .347 to .466. Cohen’s $d$ (0.87) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of professional learning plans. Figure 1 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o1}$. 

50
Three outliers had scores greater than 3.0 standard deviations below the mean.

H₀₁₂: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers with 0-5 years teaching experience.

A one-sample t test was conducted on responses from teachers with 0-5 years teaching experience perceptions of professional learning plans to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The mean of 2.94 (SD = .42) was significantly different from 2.5, \( t(51) = 7.63, p < .001 \). Therefore, the null hypothesis H₀₁₂ was rejected. The 95% confidence interval of the difference ranged from .324 to .555. Cohen’s \( d \) (1.06) indicated a large effect size. Overall, results indicated teachers had significantly positive

*Figure 1. Teacher Perceptions of PLPs.*
perceptions of professional learning plans. Figure 2 shows the distribution of means of participant responses on the six survey items analyzed for H₀₁₂.

Figure 2. Emerging Teacher Perceptions of PLPs

H₀₁₃: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers with more than 5 years teaching experience.

A one-sample t test was conducted for perceptions of professional learning plans to evaluate whether the mean score for teachers with more than 5 years teaching experience was significantly different from 2.5, the value representing neutrality. The mean of 2.90 (SD = .80) was significantly different from 2.5, t(185) = 11.28, p <.001. Therefore, the null hypothesis H₀₁₃ was rejected. The 95% confidence interval of the difference ranged from .328 to .466. Cohen’s d (0.82) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of professional learning plans. Figure 3 shows the distribution of means of participant
responses on the six survey items analyzed for $H_0_{13}$.

Figure 3. Experienced Teacher Perceptions of PD Impact. Three outliers had scores greater than 3.0 standard deviations below the mean.

$H_{04}$: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades PK-5.

A one-sample $t$ test was conducted for perceptions of professional learning plans to evaluate whether the mean score for teachers in grades PK-5th was significantly different from 2.5, the value representing neutrality. The mean of 2.90 ($SD = .42$) was significantly different from 2.5, $t(123) = 12.62, p < .001$. Therefore, the null hypothesis $H_{04}$ was rejected. The 95% confidence interval of the difference ranged from .398 to .549. Cohen’s $d$ (1.12) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of professional learning plans. Figure 4 shows the distribution of means of participant responses on
the six survey items analyzed for H₀₁₄.

Figure 4. Elementary Teacher Perceptions of PLPs. Two outliers had scores greater than 3.0 standard deviations below the mean.

H₀₁₅: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades 6-8.

A one-sample t test was conducted for perceptions of professional learning plans to evaluate whether the mean score for teachers in grades 6-8 was significantly different from 2.5, the value representing neutrality. The mean of 2.89 (SD = .42) was significantly different from 2.5, t(61) = 7.24, p <.001. Therefore, the null hypothesis H₀₁₅ was rejected. The 95% confidence interval of the difference ranged from .280 to .494. Cohen’s d (0.90) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of professional learning.
plans. Figure 5 shows the distribution of means of participant responses on the six survey items analyzed for H₀₁₅.

**Figure 5.** Middle School Teacher Perceptions of PLPs

H₀₁₆: Teacher perceptions of professional learning plans are not significantly positive or negative for teachers in grades 9-12.

A one-sample t test was conducted for perceptions of professional learning plans to evaluate whether the mean score for teachers in grades 9-12 was significantly different from 2.5, the value representing neutrality. The mean of 2.77 (SD = .59) was significantly different from 2.5, t(51) = 3.33, p = .002. Therefore, the null hypothesis H₀₁₆ was rejected. The 95% confidence interval of the difference ranged from .108 to .437. Cohen’s d (0.46) indicated a small to medium effect. Overall, results indicated teachers had significantly positive perceptions of professional
learning plans. Figure 6 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o16}$.

![Histogram of High School Teacher Perceptions of PLPs]

**Figure 6. High School Teacher Perceptions of PLPs**

**Research Question 2**

Research Question 2: Do teachers have significantly positive or negative perceptions of their professional development activities in the context of professional learning plans?

$H_{o21}$: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative.

A one-sample $t$ test was conducted for teacher perceptions of PD activities associated with PLPs to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The mean of 2.91 ($SD = .47$) was significantly different from 2.5, $t(237) = 13.68$, $p < .001$. Therefore, the null hypothesis $H_{o21}$ was rejected. The 95% confidence interval of
the difference ranged from .353 to .472. Cohen’s $d$ (0.90) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 7 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o21}$.

![Figure 7. Teacher Perceptions of PD in PLPs. Three outliers had scores greater than 3.0 standard deviations below the mean.](image)

$H_{o22}$: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers with 0-5 years teaching experience.

A one-sample $t$ test was conducted for perceptions of PD activities associated with PLPs to evaluate whether the mean score for teachers with 0-5 years of experience was significantly
different from 2.5, the value representing neutrality. The mean of 2.96 ($SD = .43$) was significantly different from 2.5, $t(51) = 7.72, p < .001$. Therefore, the null hypothesis $H_02$ was rejected. The 95% confidence interval of the difference ranged from .342 to .582. Cohen’s $d$ (1.07) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 8 shows the distribution of means of participant responses on the six survey items analyzed for $H_02$.

![Histogram of Emerging Teacher Perceptions of PD in PLPs]

Figure 8. Emerging Teacher Perceptions of PD in PLPs. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_02$: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers with more than 5 years teaching experience.
A one-sample *t* test was conducted for perceptions of PD activities associated with PLPs to evaluate whether the mean score for teachers with more than 5 years of experience was significantly different from 2.5, the value representing neutrality. The mean of 2.90 (SD = .47) was significantly different from 2.5, *t*(185) = 11.47, *p* < .001. Therefore, the null hypothesis $H_{o,23}$ was rejected. The 95% confidence interval of the difference ranged from .33 to .467. Cohen’s $d$ (0.84) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 9 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o,23}$.

**Figure 9.** Experienced Teacher Perceptions of PD in PLPs. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_{o,24}$: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades PK-5.
A one-sample $t$ test was conducted for perceptions of PD activities associated with PLPs to evaluate whether the mean score for teachers in grades PK-5 was significantly different from 2.5, the value representing neutrality. The mean of 2.84 ($SD = .51$) was significantly different from 2.5, $t(123) = 7.32, p < .001$. Therefore, the null hypothesis $H_0: \mu = 2.5$ was rejected. The 95% confidence interval of the difference ranged from .245 to .427. Cohen’s $d$ (.66) indicated a medium to large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 10 shows the distribution of means of participant responses on the six survey items analyzed for $H_0: \mu = 2.5$.

![Histogram of Teacher Perceptions of PD in PLPs](image)

**Figure 10.** Elementary Teacher Perceptions of PD in PLPs. One outlier had a score greater than 3.0 standard deviations below the mean.
**H₀2₅:** Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades 6-8.

A one-sample *t* test was conducted for perceptions of PD activities associated with PLPs to evaluate whether the mean score for teachers in grades 6-8 was significantly different from 2.5, the value representing neutrality. The mean of 3.02 (*SD* = .43) was significantly different from 2.5, *t*(61) = 9.69, *p* < .001. Therefore, the null hypothesis *H₀2₅* was rejected. The 95% confidence interval of the difference ranged from .418 to .636. Cohen’s *d* (1.23) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 11 shows the distribution of means of participant responses on the six survey items analyzed for *H₀2₅*.

![Histogram](image)

**Figure 11.** Middle School Teacher Perceptions of PD in PLPs. One outlier had a score greater than 3.0 standard deviations below the mean.
H₀²₆: Perceptions of professional development activities in the context of professional learning plans are not significantly positive or negative for teachers in grades 9-12.

A one-sample t test was conducted for perceptions of PD activities associated with PLPs to evaluate whether the mean score for teachers in grades 9-12 was significantly different from 2.5, the value representing neutrality. The mean of 2.96 (SD = .35) was significantly different from 2.5, t(51) = 9.43, p < .001. Therefore, the null hypothesis H₀²₆ was rejected. The 95% confidence interval of the difference ranged from .458 to .556. Cohen’s d (1.30) indicated a large effect size. Overall, results indicated teachers had significantly positive perceptions of PD activities associated with PLPs. Figure 12 shows the distribution of means of participant responses on the six survey items analyzed for H₀²₆.

![High School Teacher Perceptions of PD in PLPs](image)

**Figure 12.** High School Teacher Perceptions of PD in PLPs. One outlier had a score greater than 3.0 standard deviations below the mean.
Research Question 3

Research Question 3: Do teachers intend to apply their own learning in the context of professional learning plans?

$H_{o3_1}$: Teachers do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for teacher intent to apply learning from PD to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The mean of 2.97 ($SD = .41$) was significantly different from 2.5, $t(237) = 17.31, p < .001$. Therefore, the null hypothesis $H_{o3_1}$ was rejected. The 95% confidence interval for teachers ranged from .412 to .518. Cohen’s $d$ (1.12) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 13 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o3_1}$. 
Figure 13. Teacher Perceptions of PD Application. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_{o32}$: Teachers with 0-5 years teaching experience do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for intent to apply learning from PD to evaluate whether the mean score for teachers with 0-5 years teaching experience was significantly different from 2.5, the value representing neutrality. The mean of 2.94 ($SD = .43$) was significantly different from 2.5, $t(51) = 7.29$, $p < .001$. Therefore, the null hypothesis $H_{o32}$ was rejected. The 95% confidence interval for teachers ranged from .318 to .560. Cohen’s $d$ (1.01) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 14 shows the distribution of means of participant responses on the six
survey items analyzed for $H_{o32}$.

**Figure 14. Emerging Teacher Perceptions of PD Application**

$H_{o33}$: Teachers with more than 5 years teaching experience do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for intent to apply learning from PD to evaluate whether the mean score for teachers with more than 5 years teaching experience was significantly different from 2.5, the value representing neutrality. The mean of 2.97($SD = .41$) was significantly different from 2.5, $t(185) = 15.72, p < .001$. Therefore, the null hypothesis $H_{o33}$ was rejected. The 95% confidence interval for teachers ranged from .413 to .531. Cohen’s $d$ (1.15) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 16 shows the distribution of means of participant responses on the six
survey items analyzed for $H_0.3_3$.

Figure 15. Experienced Teacher Perceptions of PD Application. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_0.3_4$: Teachers in grades PK-5 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for intent to apply learning from PD to evaluate whether the mean score for teachers in grades PK-5 was significantly different from 2.5, the value representing neutrality. The mean of 3.05(SD = .37) was significantly different from 2.5, $t(123) = 16.41$, $p < .001$. Therefore, the null hypothesis $H_0.3_4$ was rejected. The 95% confidence interval for teachers ranged from .479 to .612. Cohen’s $d$ (1.47) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 16 shows the distribution of means of participant responses on the six survey items.
analyzed for $H_{o34}$.

Figure 16. Elementary Teacher Perceptions of PD Application. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_{o35}$: Teachers in grades 6-8 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for intent to apply learning from PD to evaluate whether the mean score for teachers in grades 6-8 was significantly different from 2.5, the value representing neutrality. The mean of 2.89 ($SD = .40$) was significantly different from 2.5, $t(62) = 7.55$, $p < .001$. Therefore, the null hypothesis $H_{o35}$ was rejected. The 95% confidence interval for teachers ranged from .284 to .490. Cohen’s $d$ (0.94) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 13
shows the distribution of means of participant responses on the six survey items analyzed for $H_03_5$.

![Histogram of Middle School Teacher Perceptions of PD Application](image)

**Figure 17. Middle School Teacher Perceptions of PD Application**

$H_03_6$: Teachers in grades 9-12 do not intend to apply their own learning in the context of professional learning plans to a significant extent.

A one-sample $t$ test was conducted for intent to apply learning from PD to evaluate whether the mean score for teachers in grades 9-12 was significantly different from 2.5, the value representing neutrality. The mean of 2.87 ($SD = .49$) was significantly different from 2.5, $t(51) = 5.38$, $p < .001$. Therefore, the null hypothesis $H_03_2$ was rejected. The 95% confidence interval for teachers ranged from .229 to .502. Cohen’s $d$ (0.75) indicated a large effect size. Overall, results indicated teachers had significantly positive intent to apply learning from PD activities. Figure 13
shows the distribution of means of participant responses on the six survey items analyzed for $H_{o36}$.

![Distribution of Means](image)

**Figure 18.** High School Teacher Perceptions of PD Application. One outlier had a score greater than 3.0 standard deviations below the mean.

**Research Question 4**

Research Question 4: Do teachers perceive professional learning plans have positively or negatively impacted their teaching to a significant extent?

$H_{o41}$: Teachers do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

A one-sample $t$ test was conducted for teacher perceptions of PD impact on teaching to evaluate whether the mean score was significantly different from 2.5, the value representing neutrality. The mean of 2.82 ($SD = .49$) was significantly different from 2.5, $t(237) = 10.19$, 

69
$p < .001$. Therefore, the null hypothesis $H_{04_1}$ was rejected. The 95% confidence interval for teachers ranged from .262 to .387. Cohen’s $d$ (0.66) indicated a medium to large effect size. Overall, results indicated teachers had significantly positive perceptions of PD impact on teaching. Figure 19 shows the distribution of means of participant responses on the six survey items analyzed for $H_{04_1}$.

![Histogram of Teacher Perceptions of PD Impact](image)

**Figure 19.** Teacher Perceptions of PD Impact. Three outliers had scores greater than 3.0 standard deviations below the mean.

$H_{04_2}$: Teachers with 0-5 years teaching experience do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

A one-sample $t$ test was conducted for perceptions of PD impact on teaching to evaluate whether the mean score for teachers with 0-5 years teaching experience was significantly different...
from 2.5, the value representing neutrality. The mean of 2.83 (SD = .50) was significantly different from 2.5, \( t(51) = 4.74, p < .001 \). Therefore, the null hypothesis \( H_042 \) was rejected. The 95% confidence interval of the difference ranged from .186 to .465. Cohen’s \( d \) (0.66) indicated a medium to large effect size. Overall, results indicated teachers had significantly positive perceptions of PD impact on teaching. Figure 20 shows the distribution of means of participant responses on the six survey items analyzed for \( H_042 \).

![Figure 20. Emerging Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations below the mean.](image)

**Figure 20.** Emerging Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations below the mean.

\( H_043 \): Teachers with more than 5 years teaching experience do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent. A one-sample \( t \) test was conducted for perceptions of PD impact on teaching to evaluate whether the mean score for teachers with more than 5 years teaching experience was significantly
different from 2.5, the value representing neutrality. The mean of 2.82 ($SD = .49$) was significantly different from 2.5, $t(185) = 8.99$, $p < .001$. Therefore, the null hypothesis $H_{o4}$ was rejected. The 95% confidence interval of the difference ranged from .253 to .394. Cohen’s $d$ (0.66) indicated a medium to large effect size. Overall, results indicated teachers had significantly positive perceptions of PD impact on teaching. Figure 21 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o4}$.

![Histogram of Experienced Teacher Perceptions of PD Impact](image)

**Figure 21.** Experienced Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_{o4}$: Teachers in grades PK-5 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.

A one-sample $t$ test was conducted for perceptions of PD impact on teaching to evaluate whether the mean score for teachers in grades PK-5 was significantly different from 2.5, the value
representing neutrality. The mean of 2.75 (SD = .52) was significantly different from 2.5, \( t(123) = 5.30, p < .001 \). Therefore, the null hypothesis \( H_{o4} \) was rejected. The 95% confidence interval of the difference ranged from .155 to .338. Cohen’s \( d \) (0.48) indicated a small to medium effect size.

Overall, results indicated teachers had significantly positive perceptions of PD impact on teaching. Figure 22 shows the distribution of means of participant responses on the six survey items analyzed for \( H_{o4} \).

**Figure 22.** Elementary Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations below the mean.

**\( H_{o4} \):** Teachers in grades 6-8 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.
A one-sample $t$ test was conducted for perceptions of PD impact on teaching to evaluate whether the mean score for teachers in grades 6-8 was significantly different from 2.5, the value representing neutrality. The mean of 2.94 ($SD = .51$) was significantly different from 2.5, $t(61) = 6.85, p < .001$. Therefore, the null hypothesis $H_{o4}$ was rejected. The 95% confidence interval of the difference ranged from .321 to .570. Cohen’s $d$ (0.87) indicates a large effect. Overall, results indicated teachers had significantly positive perceptions of PD impact on teaching. Figure 23 shows the distribution of means of participant responses on the six items analyzed for $H_{o4}$.

![Histogram of Middle School Teacher Perceptions of PD Impact](image)

**Figure 23.** Middle School Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations below the mean.

$H_{o4}$: Teachers in grades 9-12 do not perceive professional learning plans have positively or negatively impacted their teaching to a significant extent.
A one-sample $t$ test was conducted for perceptions of PD impact on teaching to evaluate whether the mean score for teachers in grades 9-12 was significantly different from 2.5, the value representing neutrality. The mean of 2.87 ($SD = .36$) was significantly different from 2.5, $t(51) = 7.4, p < .000$. Therefore, the null hypothesis $H_{o46}$ was rejected. The 95% confidence interval of the difference ranged from .267 to .469. Cohen’s $d$ (1.03) indicated a large effect size. Overall, results indicated teacher perceptions of PD impact on teaching were not significant. Figure 24 shows the distribution of means of participant responses on the six survey items analyzed for $H_{o46}$.

![Figure 24](image)

**Figure 24.** High School Teacher Perceptions of PD Impact. One outlier had a score greater than 3.0 standard deviations above the mean.
Chapter Summary

Chapter 4 provided a discussion of the data obtained through an online survey from 238 teachers in grades pre-kindergarten through grade 12. There were four research questions and 24 null hypotheses. The statistical analyses used for this study were also presented.
CHAPTER 5
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to examine teacher perceptions of individualized professional learning plans (PLP), perceived benefits of development (PD) activities within the context of the PLP, implementation of new learning, and perceived impact on teaching practice. This study was conducted in a single rural East Tennessee school district using an online survey distributed to all teachers resulting in a return rate of 45.5% or 238 respondents. Summary of the findings, conclusions, and recommendations are reviewed in the following sections.

Summary of Findings

The statistical analysis reported in this study was based on four research questions presented in Chapters 1 and 3. Each research question had six null hypotheses based on all participants as well as five subgroups of the participants. Each research question was assessed using six survey items that were tested for internal reliability. Survey results were analyzed using a single-sample t test for each of the 26 null hypotheses. The number of participants was 238. This included 52 teachers with 0-5 years of experience and 186 teachers with more than 5 years of experience. The number of teachers in grades PK-5 was 124. The number of teachers in grades 6-8 was 62, and the number of teachers in grades 9-12 was 52. Each hypothesis was tested using Statistical Package for the Social Sciences (SPSS) software. Because of the relatively large number of null hypotheses, the initial alpha level of .05 was adjusted per the Bonferroni method. Therefore, .05 was divided by 24 (the number of null hypotheses) resulting in testing the hypotheses at a level of .002. Findings indicate teachers have significantly positive perceptions of PLPs as well as the PD activities associated with these plans.
Conclusions

The purpose of this study was to investigate teacher perceptions of the PLP and the associated PD activities. This researcher also assessed teacher intentions to implement learning from their PD activities as well as perceptions of PD impact on instruction or student performance. The following conclusions were based on the findings from the data in the study:

Research Question 1

Research Question 1 was focused on teacher perceptions of professional learning plans. Results indicate there was a significant difference in teachers’ perceptions of PLPs for each subgroup except for teachers in grades 9-12. Teachers with 0-5 years of experience, teachers with more than 5 years of experience, teachers in grades PK-5, and teachers in grades 6-8 had significantly higher mean scores than 2.5 representing neutrality and alpha scores <.001 with large effect sizes. The difference was most evident for teachers in grades PK-5 with a mean of 2.97 and a large effect size \((d = 1.12)\). The lowest mean score of 2.77 \((p = .002)\) for teachers in grades 9-12 was significant tested at the .002 level with an effect size \((d = .46)\) indicating a moderate practical significance.

There are multiple factors that might contribute to lower effect scores for teachers in grades 9-12. Comments from teachers in grades 9-12 suggest district PD offerings were not always aligned to the needs of teachers at the high school level. Three participants offered the following statements:

I don't feel our PLP is as personalized as should be the case.

When the PLP is centered around your content.

If they relate to my subject.

The goals make sense, but I do not agree that it is an area that requires additional PD time.
Other comments suggest a lack of intentional communication with teachers regarding the goals and activities within the PLPs. It is also possible that high school administrators did not help teachers identify appropriate goals for content at the secondary level:

Administrators do not always understand how to evaluate my area.

The areas to focus really is not easily assessed by an administrator who is not familiar nor trained in my discipline.

Again, an agenda was in place before I even had the opportunity to discuss goals for my teaching.

To be of any value, this conversation should come at the BEGINNING of the school year, not at the end. Right now these 'conversations' seem pretty useless as they are currently being implemented.

What goals? He puts something down and I sign the paper. End of story.

If we don't adhere to the plan and the faculty doesn't know the plan, how can it be beneficial?

These comments exemplify research findings in which both insufficient time and the lack of personalized feedback have been identified as barriers to the success of such plans (Bullock et al., 2007; Charlton, 2009; Cross & White, 2004). Finally, other comments from teachers in grades 9-12 suggest a possible lack of adherence to the plan or a lack of continual communication and follow through:

There is little to no follow through & I really do not see the need for them for those who have professional licenses or who have successfully taught for more than five years.

It is really only a paperwork requirement, after my supervisor marks me for something to improve, nothing else ever comes of it.

**Research Question 2**

Research Question 2 was focused on teacher perceptions of their PD activities in the context of PLPs. Results indicate there was a significant difference in teachers’ perceptions of
PD activities for each subgroup except for teachers in grades 9-12. Teachers with 0-5 years of experience, teachers with more than 5 years of experience, teachers in grades PK-5, and teachers in grades 6-8 had significantly higher mean scores than 2.5 representing neutrality and alpha scores <.001 with large effect sizes. The difference was most evident for teachers in grades 9-12 with a mean of 2.96. The lowest mean score for teachers in grades PK-5 ($M = 2.84$) with a medium effect size ($d = .66$) suggested a moderate practical significance.

Comments shared by teachers regarding PD activities indicate some dissatisfaction with a lack of choice and autonomy identified as key factors in effective PD (Beckum, 2010; Hoy & Miskel, 2012; Mindich & Lieberman, 2012):

- Again - the ones I am able to choose to attend vs the ones I am required to attend.
- This is determined by my administration's goals, not necessarily my own goals.
- Blanket professional development activities for all in a school necessarily indicates no personalization.
- Again, if the activities had something for our grade level, subject, etc, then it's possible.
- The focus has become SO math/ELA that all non-math/ELA teachers are quickly becoming 'second tier' in terms of time & attention. This is a dangerous trend in Education in general.
- In general, my evaluator tries to allow me to align professional development with my needs, but overall it is all about whatever the district thinks we need to work on.
- Other remarks suggest a lack of content area focus found to be key to both teacher satisfaction with PD and its impact on student learning (Mindich & Lieberman, 2012; Quick et al., 2009; Stewart, 2014). A contributing factor for these remarks might be the subject specific disciplines more common to teachers in grades 9-12 making PD content connections more crucial. This could indicates a lack of enough choice in PD content within the district:
- Not always aligned
If it relates to my subject

Professional development has never focused on content knowledge since I have been an employee.

The content specific professional learning that I have sought out on my own has been very beneficial. It is very difficult to glean ideas from PD that is not related to your specialty.

The gained knowledge is from the content specific PD I searched for on my own.

Rarely does PL correlate to specific content areas. Most of what we do is irrelevant to our content area.

The perceived lack of PD relevance expressed by teachers might be partially attributed to a district focus on Response to Intervention (RTI) where much emphasis is placed on skill deficits for students in all grade levels. If many PD opportunities were focused on RTI for grade bands unaccustomed to treating skill deficits, some teachers may have believed the work to be irrelevant to their content area or grade level.

Research Question 3

Research Question 3 was focused on teacher intent to apply learning from their PD activities. Six survey items assessed teacher application of learning with statements of feeling confident enough to change practice to actual implementation of new strategies. All t tests yielded significant results indicating teachers with a PLP apply learning from their PD activities to some degree. There was a significant difference for each subgroup. Teachers with 0-5 years of experience, teachers with more than 5 years of experience, teachers in grades PK-5, 6-8, and 9-12 had significantly higher mean scores than 2.5 representing neutrality and alpha scores for each group <.001 with medium to large effect sizes for each group. The difference was most evident for teachers in grades PK-5 with a mean of 3.04 while the smallest mean of 2.87 was evident for teachers in grades 9-12.
While each subgroup had positive differences regarding their intent to use their PD learning, comments shared reveal additional insight. Again, the theme of content relevance permeated the teacher remarks:

I will use the activities that pertain to what I teach in my classroom. I cannot say that I will use everything.

I share things that I search for outside of these professional learning activities. I tend to spend my own time looking for things that are beneficial to my classroom instruction.

When relates to my subject.

The content specific professional learning that I have sought out on my own has been very beneficial.

Again, only because I seek out my own PD.

Some of the RTI in-services I had to go to had nothing to do with middle school or enrichment.

Time for teachers to practice and delve deeper into the learning is critical to successful PD with positive effects on students result (Darling-Hammond & Richardson, 2009, Darling-Hammond et al., 2010; Yoon et al., 2007). Teaching practice improves the more time teachers spend engaged in PD (Boyle et al., 2004; NSDC, 2009b). Some teacher remarks suggest a lack of time was available to help them become properly oriented to apply their learning:

We need more focused instruction. Sometimes the classes are not specific enough. For example, last year we had a class on Google Drive. It was very fast paced, and we were not allowed time to practice this. I don't remember any of it.

I can better use PD days to work on planning and collaboration with my grade band at my school.

Never enough time, also knee-jerk & reactionary to whatever hot button issue TN has signed not this year for the $. So I would have to say honestly that unless it is in my content area, most of my required PLA are of little personal value.
Research Question 4

Research Question was 4 focused on whether teachers perceive PD associated with their PLPs has positively impacted their teaching. Results indicate there was a significant difference for each subgroup regarding teacher perceptions of PD impact on instruction or student performance. Teachers with 0-5 years of experience, teachers with more than 5 years of experience, teachers in grades PK-5, and teachers in grades 6-8 had significantly higher mean scores than 2.5 representing neutrality and alpha scores <.001 with medium effect sizes. However, the difference was most evident for teachers in grades 9-12 with a mean of 2.87 and an effect size ($d = 1.03$) indicating a large practical significance.

Comments from teachers indicate possible misalignment of PD opportunities to teacher goals and lack teacher choice in selecting activities as well as failure of PD opportunities to address subject area content:

Not if the sessions are not related to my subject

Only because I seek out my own PD

The ones I choose to attend - yes. The ones I 'have' to attend; typically no.

But the things that have helped me most were NOT offered by the district. I have found them on my own.

Recommendations for Practice

Based on the findings and conclusions of this research, the following recommendations are made regarding the use of teacher professional learning plans and the learning activities associated with them:

1. Teachers and administrators must engage in a collaborative process of goal setting for professional learning in order to help teachers identify and receive the learning opportunities they need. Administrators should give earnest attention to this interactive goal setting process to
clarify expectations while being careful to safeguard teacher choice. A careful blending must occur between school and district goals and the specific needs of each teacher. Teachers should be allowed, with some degree of autonomy, to set personal goals for their professional growth and the activities they undertake. Administrators must make clear connections between the plan and school goals while balancing teacher, school, and district goals.

2. PLPs must be clearly connected to actionable feedback from evaluations. PLP goals should develop as a natural byproduct of teacher evaluations that serve as both a means to identify needs and a way to assess progress. Clear connections between evaluations and PLPs can prevent duplication of effort and make the goals of both processes aligned and more meaningful. Districts must support principals’ ability to effectively evaluate instruction, provide actionable feedback, and connect that feedback to clear learning goals in a PLP.

3. Teachers must be provided sufficient access to content related PD. The most effective PD is that which has a content focus (Darling-Hammond & Richardson, 2009; Wei et al., 2010). When developing PD initiatives, districts and administrators should not allow individual teacher content needs to become subordinate to district or school goals.

4. A variety of PD offerings must be encouraged to allow teachers to find the right activities to meet their needs. For PLPs to actually be individualized, sufficient choice in learning activities must be available. Districts must be careful to not force too many required PD events that effectively reduces teacher choice. Administrators cannot over rely on district PD that may be traditional in nature, less individualized, and less effective. Leaders must create opportunities for teachers to participate in activities that are job-embedded, intensive, sustained, and directly relevant to teacher and student needs (Reeves, 2010).

5. Sufficient time should be provided for teachers to develop their new learning from PD
work. Their PD should include opportunities for application, practice, reflection, and reinforcement (Darling-Hammond & Richardson, 2009; Tate, 2009). Job-embedded PD designs can offer more sustained support for application and reflection (Reeves, 2010).

**Recommendations for Future Research**

Although the results of this study clearly show positive perceptions of teacher PLPs and associated PD activities, there are areas of research that could greatly add to this field.

1. The interaction between administrators and teachers is a fundamental part of the development of a PLP critical to teacher success (Bullock et al., 2007; Charlton, 2009; Cross & White, 2004). Additional research needs to be conducted to assess the nuances of the administrator interactive process with teachers, the setting of goals, the selections of PD activities, and the follow-up on the progress toward the goals. Such information would allow districts to guide administrators toward proper coaching conversations required to establish and support PLPs.

2. Because these plans have the potential to be “living” documents fostering both dialogue and modifications to the direction of professional learning, a recommendation for future research includes a closer examination of how much continual discussion of the plans occurs between administrators and teachers. Such research could add insight on whether plans should be revisited and reiterated throughout the course of the year in order to be successful. A case study closely examining the teacher’s interaction with the administrator could shed light on specific elements of interaction which make for a successful PLP.

3. Because teacher evaluations with proper feedback should drive professional growth (Killion, 2015; Papay, 2012), a study is recommended to examine the degree to which
administrators connect formal evaluations to PLPs to assess the impact these connections have on teacher perceptions of PLPs and PD. Administrators need to know how best to connect the PLP to evaluations in ways that make the PLP a natural extension of the evaluation process.

4. Given the relative lack of content related PD expressed by teachers in grades 9-12 in this study, research is recommended to examine how teachers ultimately choose their activities even in the context of a PLP. More research needs to center on what activities teachers choose for their learning in the context of their PLP and whether more deliberate effort should be made to better connect teachers with meaningful choices for their learning. If the intent of the PLP is to foster better choices for PD, then such research could provide information to better understand if the PLP actually prevents the phenomenon of teachers choosing comfortable activities while avoiding areas that challenge them (Charlton, 2009).

5. This research could also be enhanced by studies of the activities within PLPs to determine if specific follow-up activities articulated within plans impact teacher application of learning or student learning outcomes. Because time is a critical key to successful teacher learning (Boyle et al., 2004; NSDC, 2009b), an examination of the number of hours within each plan should be examined. Additionally, it would be beneficial to take a closer look at how teacher work days throughout the year are incorporated within PLPs in order to effectively capture time necessary to impact teacher learning.

6. Because student outcomes can be positively impacted by effective teacher PD (Wei et al., 2010), an examination of student achievement for teachers with PLPs is also recommended. If teacher perceptions of PD in the context of PLPs is positive, the use of PLPs may also correlate with improved student performance.
School district leaders must continue to provide meaningful, sustained, job-embedded PD with goals clearly connected to teacher needs. For learning to be applied to practice and ultimately impact student performance, it is important that teachers have a role in setting personal learning goals and selecting activities related to their content. When used properly, PLPs serve as a valuable mechanism to foster such essential PD elements and increase the effectiveness of any professional learning endeavor.
REFERENCES


Beckum, I. J. (2010). *A case study of teachers' perceptions of change and change implementation at a rural public school.* (Doctoral Dissertation). Walden University, Minneapolis, Minnesota.


APPENDICES

APPENDIX A

Exemption Letter from Instructional Review Board

EAST TENNESSEE STATE UNIVERSITY
Office for the Protection of Human Research Subjects • Box 70565 • Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053 Fax: (423) 439-6060

IRB APPROVAL – Initial Exempt

December 10, 2015

Jerry Ripley

RE: Teacher Perceptions of Individual Professional Learning Plans
IRB#: C1215.4e
ORS#: ,

On December 10, 2015, an exempt approval was granted in accordance with 45 CFR 46.101(b). It is understood this project will be conducted in full accordance with all applicable sections of the IRB Policies. No continuing review is required. The exempt approval will be reported to the convened board on the next agenda.

- new protocol submission xForm, PI resume, References list, Email ICD,
  Professional learning survey

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research subjects [21 CFR 50.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 919 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely,
Stacey Williams, Chair
ETSU Campus IRB
APPENDIX B

Teacher Survey

Professional Learning Survey

This survey is being conducted for research purposes as part of a dissertation in the Department of Educational Leadership and Policy Analysis at East Tennessee State University. Participation in this survey is completely voluntary. You may refuse to participate, or you can quit at any time. Your confidentiality will be maintained to the degree permitted by the technology used. Specifically, no guarantees can be made regarding the interception of data sent via the Internet by any third parties, as is the case with emails. In other words, we will make every effort to ensure that your name is not connected with your responses. If you have any questions, please contact Dr. Virginia Foley at: folevy@mail.etsu.edu

Please respond to the following questions regarding teacher professional learning plans (PLPs) and professional learning activities.

1. Which describes the grade level you teach most. ○ PK-5 ○ 6th-8th ○ 9th-12th

2. Which best describes the number of years you have taught? ○ 0-5 years ○ more than 5 years

3. I have a professional learning plan (PLP) in place for the current school year. ○ yes ○ no

For the following questions, please select the answer that best describes your feelings using the following scale:

   Strongly Agree   Agree   Disagree   Strongly Disagree

1. Having a professional learning plan (PLP) is beneficial.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

2. The content of my professional learning activities is relevant to my current teaching assignment.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

3. I intend to use what I learned from my professional learning activities.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

4. My teaching has been positively impacted by professional learning activities.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

5. Having a professional learning plan (PLP) helped focus my learning efforts.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

6. My professional learning activities allow me to address areas important to me.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

7. I feel prepared to implement what I learned in my professional development activities.
   ○ SA ○ A ○ D ○ SD   Comments (optional):

8. I feel I teach better lessons because of my professional learning activities
   ○ SA ○ A ○ D ○ SD   Comments (optional):

9. Discussing professional learning goals with my principal was useful.
   ○ SA ○ A ○ D ○ SD   Comments (optional):
10. My professional learning activities increased my content knowledge.
   ○ SA ○ A ○ D ○ SD Comments (optional):

11. I have shared ideas from my professional learning activities with others.
   ○ SA ○ A ○ D ○ SD Comments (optional):

12. My professional learning activities enable me to plan better lessons.
    ○ SA ○ A ○ D ○ SD Comments (optional):

13. My professional learning plan (PLP) was NOT beneficial to me.
    ○ SA ○ A ○ D ○ SD Comments (optional):

14. My professional learning activities in my PLP are aligned with my needs.
    ○ SA ○ A ○ D ○ SD Comments (optional):

15. I use ideas from my professional learning activities on a regular basis in my classroom.
    ○ SA ○ A ○ D ○ SD Comments (optional):

16. Professional learning has NOT increased my effectiveness as a teacher.
    ○ SA ○ A ○ D ○ SD Comments (optional):

17. The goals in my professional learning plan (PLP) make sense to me.
    ○ SA ○ A ○ D ○ SD Comments (optional):

18. My professional learning has provided me ideas I can use.
    ○ SA ○ A ○ D ○ SD Comments (optional):

    ○ SA ○ A ○ D ○ SD Comments (optional):

20. I have changed the way I interact with students because of my professional learning activities.
    ○ SA ○ A ○ D ○ SD Comments (optional):

21. I have input into my own goals for professional growth.
    ○ SA ○ A ○ D ○ SD Comments (optional):

22. I have already implemented ideas from professional learning into my own classroom.
    ○ SA ○ A ○ D ○ SD Comments (optional):

23. I have shared ideas from my professional learning activities with others.
    ○ SA ○ A ○ D ○ SD Comments (optional):

24. I have seen evidence of increased student learning because of my professional learning.
    ○ SA ○ A ○ D ○ SD Comments (optional):

25. My professional learning experiences were NOT beneficial to me or my students.
    ○ SA ○ A ○ D ○ SD Comments (optional):
APPENDIX C
Sample PLP

GREENE COUNTY SCHOOLS
Individual Professional Learning Plan

School: ___________________ Teacher: ___________________ Position: 3rd Reg. Ed. Teacher
School Year: ___________

SCHOOL FOCUS

CODE Data: Questioning, Standards (c.c.), Thinking Problem Solving (c.c.), Data Usage/Assess.

ELA Trajectory: 93.5% Math Trajectory: 95.6%

TEACHER FOCUS (Complete appropriate subject information.)

Student Achievement
Data
ELA: 77% P&A
Math:

Student Value Added
Data:
ELA:
Math:

ELA Trajectory: 78% Math Trajectory: 82%

TEACHER AREAS OF REFINEMENT AND REINFORCEMENT (Evaluation Data)

Reinforcement: Ensure group and independent accountability for all students. Continue to display student work and change frequently. Use TCAP review time to address areas of weakness from assessments. Re-teach thoroughly. Students eliminate distracters.

Reinforcement: Excellent use of visual, modeling, whole class signaling with boards, etc. Pacing of lesson was brisk without wasted time during transitions. Respectful culture is clearly evident. Teacher consistently uses wait time and techniques to increase participation in verbal questioning.

PROFESSIONAL LEARNING PLAN

COMPETENCY GOAL #1: K-12: Students devote significant time and effort to writing, producing numerous pieces over short and extended time frames throughout the year.

<table>
<thead>
<tr>
<th>Activities/Resources/Time Frame</th>
<th>Documentation</th>
</tr>
</thead>
</table>
| Teacher collaboration with second grade.  
Common Core Training-June 25th and 26th  
Mini-Workshop “Writing in Content Areas” June 17th. | Attendance sheet and certificate  
Writing portfolios  
Attendance sheet and materials  
Evaluations, walkthroughs, and conferences  
Meeting Agendas |

COMPETENCY GOAL #2: K-5: Tier II and Tier III students are getting daily small group guided instruction by teachers in addition to daily intervention time.

<table>
<thead>
<tr>
<th>Activities/Resources/Time Frame</th>
<th>Documentation</th>
</tr>
</thead>
</table>
| Houghton-Mifflin Reading Series Orientation for Grades k-5 for Reading Teachers-June 11th, 2015.  
Running Records mini workshop on August 20th, 2015.  
Book Room workshop on Sept. 3rd, 2015.  
Biweekly collaboration with Reading Specialist to examine Running Records for struggling students. | |
Videotaped lesson for analysis and competencies reflection
Model lesson on video (Mercer)-Misty is filming a model lesson from which you may learn by viewing

**COMPETENCY GOAL #3: K-12:** Students use instructional or performance tasks to apply learning to real-world situations in order to reason abstractly, quantify data, and construct arguments.

<table>
<thead>
<tr>
<th>Activities/Resources/Time Frame</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRA Scoring and evaluating student work.</td>
<td></td>
</tr>
<tr>
<td>Common Core Training: June 25th and 26th</td>
<td></td>
</tr>
<tr>
<td>Developing in-service and workshops for Math Instructional Performance Tasks</td>
<td></td>
</tr>
<tr>
<td>to aide and mentor other teachers.</td>
<td></td>
</tr>
<tr>
<td>Mentoring other teachers in the Math area.</td>
<td></td>
</tr>
<tr>
<td>Visiting classrooms and vice versa to teach a model lesson</td>
<td></td>
</tr>
<tr>
<td>Assisting in data examinations and reports</td>
<td></td>
</tr>
</tbody>
</table>

**TEACHER & PRINCIPAL COLLABORATION**

**Initial Conference**

<table>
<thead>
<tr>
<th>Teacher Signature</th>
<th>Date</th>
<th>Principal Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

**On-Going Support** (Record date and check activity for each additional teacher/principal collaboration)

<table>
<thead>
<tr>
<th>Date:</th>
<th>Observation</th>
<th>Walk Through</th>
<th>Conference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
<td>Observation</td>
<td>Walk Through</td>
<td>Conference</td>
</tr>
<tr>
<td>Date:</td>
<td>Observation</td>
<td>Walk Through</td>
<td>Conference</td>
</tr>
</tbody>
</table>

**Summative:**

<table>
<thead>
<tr>
<th>Teacher Signature</th>
<th>Date</th>
<th>Principal Signature</th>
<th>Date</th>
</tr>
</thead>
</table>

**Competency:** (Check one)

- Achieved
- Extended

**Documentation attached as needed.**
VITA
JERRY WILLIAM RIPLEY

Education: Ed.D., Educational Leadership, East Tennessee State University, Johnson City, Tennessee, 2016
Ed. S., Education Administration, Lincoln Memorial University, Harrogate, TN, 2008
M.A.T., Education 1-8, East Tennessee State University, Johnson City, Tennessee, 1996
B.S. Political Science, East Tennessee State University, Johnson City, Tennessee, 1992
Chuckey-Doak High School, Afton, Tennessee 1988

Professional Experience: Assistant Director of Academics, Greene County Schools, 2013-present
Principal, Camp Creek Elementary School, 2011-2013
Assistant Principal, Chuckey Doak Middle School, 2009-2011
Teacher, Greene County Schools, 1997-2009

Related Professional Experience: Administrative Safety Team Chair, Greene County Schools Professional Development Pilot School, Camp Creek Greene County Schools PD Design Team Principal Academy, Knoxville, Tennessee, 2013 Aspiring Leadership Cohort, Greene County School, 2011 Assistant Principal Academy, Knoxville, Tennessee, 2011 School Testing Coordinator, CDMS, 2009-2011 School Improvement/SACS Teams, CDMS

Pi Gamma Mu National Honors Society, 1992