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Educator View of Professional Development and Perceived Influence on Practice

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Concordia University–Portland

College of Education

Doctorate of Education Program

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Educator View of Professional Development and Perceived Influence on Practice

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Concordia University–Portland

College of Education

Dissertation submitted to the Faculty of the College of Education

in partial fulfillment of the requirements for the degree of

Doctor of Education in

Instructional Leadership

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Abstract

It is an essential goal for educational institutions to create an aspect of successful and continuous school improvement utilizing high-quality professional development for educators. School and district leaders have been faced with the growing need to develop professional development opportunities that will enable educators to keep up with the ever-changing educational reform and needs of students. The purpose of this quantitative descriptive study was to determine teachers' perceptions of professional development and to examine if perception can affect what learning happens in these opportunities. Professional development, adult learning theory, and constructivist theory provided the conceptual framework for this study, which focused on how adults learn and the learning that takes place in the opportunities that are presented to educators. This study addressed three questions. First, are there differences in teachers' perceptions of professional development based on years of teaching experience? Secondly, are there differences in teachers' perceptions of professional development based on grade level taught? Third, are there differences in teachers' perceptions of professional development based on grade level taught? Data were collected through the use of a researcher-developed questionnaire based on two preexisting instruments, the Panorama Teacher Survey and the Standards Assessment Inventory. The results of the survey indicated that educators, overall, feel that they have little choice of content of opportunities, and minimal opportunities to practice skills learned. Teachers with fewer years of experience reported professional development opportunities as more useful and opportunities to develop skills learned as more prevalent.

Keywords: professional development, educational reform, professional development standards, ongoing professional development, adult learning theory

Dedication

For the last four years, I have worked harder and had more self-doubt than I have ever had in my life. I am grateful for my husband Michael, who kept reassuring me and pushing me with words of encouragement to finish my dissertation after many hours of tears, struggles, and anger. He has been my rock through all of the work and been a shining beacon of positivity through it all. To my daughter Brenna who had nothing but positivity and sweetness to share with me when I did not have time to hang out. I love you to the moon and back. To Dylan, who was always a little bit of comic relief when I was really struggling. I cannot begin to express my gratitude to my family for all of the love, support, encouragement, and prayers they have shared with me along this journey. Mom and Dad, thank you for instilling the love of knowledge in me. Thank you for showing me that no matter what hardships you go through, you can still come out on top. Dad, I hope that you are looking down and are proud of me for this accomplishment. To my sister, who taught me that I really am competitive even if it was only with her and showing me that working tirelessly is a good thing.

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Chapter 1: Introduction

Introduction to the Problem

Educational institutions throughout the United States are being faced with reform initiatives to set high goals for student learning. Increasing demands for teachers to ensure that these goals are met are present (Fischer et al., 2018). Ever-changing standards and reform with the development of initiatives such as Common Core State Standards Initiative (CCSSI) and the Next Generation Science Standards (NGSS) have made it imperative that educators stay abreast of new approaches to develop practical teaching strategies to ensure student success (Desimone & Garet, 2015). While many factors contribute to helping schools achieve these goals, professional development for teachers is an integral part of this reform. Teachers need to be up to date on learning methodologies as well as new standards in order to help students become successful. New instructional approaches, content, learning, and pedagogy for the diverse and interconnected world that exists today is a must for educators all over the U.S. Educators must have the opportunity to utilize the tools needed to develop strategies and ideas that will enable them to effect student achievement as well as be able to engage in active learning that helps to create structures that encourage the use of new ideas (Goodnough, 2019).

The No Child Left Behind Act of 2001 (NCLB) defines high-quality professional development and mandates that schools provide high-quality professional development for teachers in order to increase teacher performance and student achievement (NCLB, 2002). The standards identified by NCLB include activities that improve and increase teachers' knowledge (NCLB, 2002). This knowledge includes academic subjects, improvement of school-wide and district-wide educational improvement plans, and the knowledge and skills to help students meet challenging state academic standards. This knowledge also enables districts to improve

classroom management skills while helping to advance teacher understanding of effective

research based instructional strategies that are developed with extensive participation of teachers,

principals, parents, and administrators (NCLB, 2002). These standards also include the directive

that professional development is intensive, sustained, and classroom-focused, and should not be

one-day or short-term workshops (NCLB, 2002).

More recently, the Every Student Succeeds Act (ESSA) was signed into law by former

President Obama to replace the NCLB Act (ESSA, 2015). This new law builds on the past

legislation enabling schools and educators to focus on clear goals of adequately preparing

students for success and went into effect for the school 2017–2018 school year (ESSA, 2015).

The purpose of ESSA is to ensure public schools provide a quality education for all students. The

ESSA gives state stakeholders as well as principals and teachers a voice that allows for some

independence in decisions that will work for their schools (ESSA, 2015). This act updated the

definition of professional development to ensure personalized, ongoing, job-embedded activities

that are available to all school staff, including paraprofessionals. It also intends to make

professional development part of the broader school improvement plan. The ESSA also requires

professional development that creates teacher, principal, and school leader academies to help

meet teacher needs (ESSA, 2015). Additionally, the ESSA requires professional development to

include teacher residency programs to enhance clinical training opportunities, and must have

regular professional/ development evaluations (ESSA, 2015).

The ESSA is intended to help teachers make the most impact on student achievement

through the use of appropriate and high-quality professional development. The ESSA's focus on

professional development advocates for teachers in order to ensure that opportunities strive to

address student understanding, and deeper subject matter knowledge, all the while integrating

instruction seamlessly (ESSA, 2015). The changes that ESSA brings to education enables teachers to advocate for more personalized professional learning, deepens subject matter knowledge, uses differentiated effective instructional strategies, and integrates instruction seamlessly (Hirsh, 2017).

Recently, the lawmakers associated with the ESSA has identified professional development as being an integral part of improving student outcomes and a way to enable teachers to challenge educational standards that meet students' all-around needs (Williams & Welsh, 2017). ESSA also stresses the need for data-driven planning and professional development (Williams & Welsh, 2017). In the age of ESSA, Learning Forward, the National Commission of Teaching and America's Future, report that professional development allows teachers to build skill and professional ability and is an essential part of the profession (Calvert, 2016). In the report, teacher agency, which is the "capacity of teachers to act purposefully and constructively to direct their professional growth and contribute to the growth of their colleagues" (p. 4), is the basis of the thinking towards making professional development practical and useful for teachers to affect student achievement as well as grow in their craft (Calvert, 2016).

Background, Context, History, and Conceptual Framework for the Problem

An essential aspect of creating successful and continuous school improvement is the utilization of high-quality professional development for teachers (Baird & Clark, 2018). Over the last decade, legislation has focused on school improvement, which includes teacher qualifications and professional development as a critical component of change (Attard, 2017). In order to meet these requirements, educational leadership must focus on developing learning

opportunities for teachers that will be effective and help to build teacher pedagogy as well as enhance instruction to affect student achievement.

School and district personnel, leaders, and administrators have had to begin focusing on data and results due to recent educational reforms, thus causing institutions to review and revamp professional development in order to focus more on student achievement (Baird & Clark, 2018). Teacher learning is a complicated and essential aspect of education and seems to be at the core of the creation of different forms of professional development delivered in schools around the nation. It seems that the main objective for schools and districts is to create learning opportunities that are appropriate for the learner and enable teachers to glean the skills and knowledge needed to affect student growth (Brendefur, Thiede, Strother, Jesse, & Sutton, 2016).

While schools offer professional development to teachers, the question remains about what works and how what does works change teacher practice (Brendefur et al., 2016). Even more critical than what works is what teachers think of the opportunities offered to them and if they learn from them (Pharis, Wu, Sullivan, & Moore, 2019). Teacher perception and buy-in can seemingly change the result of the learning experience and can hurt student achievement. By looking at teacher perception, schools can be better prepared to develop programs that will ensure high levels of learning for its teachers and thus affect student achievement (McKeown et al., 2019).

Statement of the Problem

An essential key to improving the quality of education in the U.S. is the continual learning and development of teachers (Pharis et al., 2019). Research has shown that principals, teachers, and stakeholders in schools and districts are continuously focusing on data and results more now than in the past because of new educational reforms (Behari, 2014; Pharis et al.,

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2019). It is becoming essential for district personnel to build practical approaches and focus on teacher needs as they develop plans for each school year. Ongoing, high-quality professional development designed to enhance teacher's pedagogical skills has become paramount in school campus improvement plans. This professional development, along with numerous opportunities to collaborate and embed learned knowledge into their craft, are essential to ensure teacher expertise as well as student success (Darling-Hammond, Hyler, & Gardner, 2017; Pharis et al., 2019; Schachter, Gerde, & Hatton-Bowers, 2019). Researchers have found that educators are concerned with the relevance, the level of expertise of presenters, the ability to sustain the material over time, as well as the idea that content presentation is done by a presenter that shares the same experiences and needs (Desimone & Garet, 2015). Research that focuses on teachers' attitudes shows that educators find professional development to be of utmost importance to their practice (Mattherson & Windle, 2017). Current research supports the idea that professional development is significant for districts to focus on in order to meet the needs of teachers to sustain academic improvement and student success and develop effective teachers (Brendefur et al., 2016; Schachter et al., 2019). Effective teachers are those that can produce educational experiences that influence student learning outcomes (Martin, Kragler, & Frazier, 2017). Teachers must be at the center of the decision making process when institutions design professional development programs in schools. However, the issue seems to be how districts answer the question of what constitutes effective professional development and how does it influence teacher knowledge and practice in the classroom.

Districts around the country are looking to enhance professional development in order to produce programs that will enable teachers to learn pedagogy, strategies, and the newest content and standards in a way that will be useful to educators (Hoisington & Winokur, 2018).

Administrators and other stakeholders are working towards best practices for teachers as well as students. There has been a growing interest in the idea of differentiating professional development for educators based on different stages of their careers as well as scaffolding professional development in a way that enables educators to have support along the way (Fessler & Rice, 2010).

Purpose of the Study

The purpose of this quantitative descriptive study was to determine teacher perceptions, attitudes, and beliefs regarding professional development and its effect on teacher practice as well as to determine if there are differences between these perceptions based on grade level taught and years of teaching experience. The researcher utilized a Likert-type questionnaire focusing on teacher perception and open ended questions based on previous professional development presented to them as well as what their schools offer and what they feel is needed a prediction can be made as to the nature of perception. The study findings may contribute to the literature surrounding teacher's perception of professional development presented to them , which may develop into further research or increase the awareness of the importance of teacher buy in to professional development presented to them. State stakeholders and district personnel around the country are being faced with more stringent requirements as to the quality of educators in the classroom every year (Williams & Welsh, 2017). These requirements are making it a top priority for district administrators to hire quality teachers as well as develop continuing education opportunities that will enable teachers to continue to present quality lessons in the classroom. The ESSA has made it a top priority that professional development be made a part of schools improvement plans (ESSA, 2015). Understanding teachers' needs in their learning as well as perceptions of opportunities already presented to them may impact the

success of the implementation of the various programs and standards that are being required of them to ensure that every student is successful (ESSA, 2015).

Research Questions

The research questions for this dissertation focused on teacher perceptions of existing professional development opportunities afforded to them as well as the effect these opportunities have on their practice and the determination of grade-level perception. The combination of questions from the Panorama Teacher Survey (Gehlbach & Brinkworth, 2011) and the Southwest Educational Development Laboratory (SEDL) standards assessment inventory make up the questionnaire titled the Professional Development Attitudes and Experiences survey. The research questions that guided the study were:

RQ$_1$. How do teachers perceive professional development opportunities presented to them?

RQ$_2$. Are there differences in teachers' perceptions of professional development presented to them based on years of teaching experience?

RQ$_3$. Are there differences in teachers' perceptions of professional development presented to them based on grade level taught?

Rationale, Relevance, and Significance of the Study

This study intended to identify the attitudes and perceptions of educators as to the current format and presentation methods of existing professional development opportunities afforded to them as well as the differences found in perception based on grade level taught and years of teaching experience. The identification of teacher perceptions may be helpful to institutions to develop programs that will expand upon the growing body of current research that identifies long-term effective professional development as the key to improvements in student achievement

and teacher practice. The knowledge of specific grade level perception and years of teaching experience may also help institutions develop grade appropriate professional development opportunities that will affect teacher practice and overall student achievement. The literature and research on teacher professional development reviewed did not identify any specific perceptions of professional development at any specific grade level or years of teaching experience (Behari, 2014; Hardin & Koppenhaver, 2016).

This study was designed to provide information on teacher's perception of professional development being presented to them in their current positions as well as to find out what was considered useful to teachers based on years of teaching experience and grade level taught. The results from this study can help to explain the potential of high-quality professional development on teacher practice. The information gleaned from this study may help administrators develop opportunities for educators based on teacher's perceptions and attitudes, potentially contributing to positive outcomes in student achievement.

Motivation is key to any learning, whether it be children or adults, so understandably, identifying teacher motivation and focusing on perception and attitude of learning opportunities is a vital endeavor for school districts to take on. Mattherson and Windle (2017) discussed multiple factors to keep in mind as administrators begin to think about the motivation for teachers in professional development. Stimulation, affect, need, attitude, competence, and reinforcement are the keys to this motivation (Mattherson & Windle, 2017). Knowing the attitudes and motivations of teachers will be of considerable help in developing and implementing successful professional development programs. This researcher believes that this study will add to an ever-growing body of research on the knowledge in the field of high-quality professional development opportunities in educational systems around the nation.

Definition of Terms

The following terms and acronyms, listed alphabetically, were used operationally in this study.

Administrator: Administrators are those in a school setting who are responsible for providing educational leadership, and supporting, developing and evaluating policies (Learning Forward, 2011).

Adult learning theory: Adult learning theory explains that adults learn differently from children in that adults need to be involved in planning their instruction and evaluating their results (Powell & Bodur, 2019).

Andragogy: A theory of adult learning that describes how adults learn differently from children (Malik, 2016).

CCSSI: Common Core State Standards Initiative is a joint project of the National Governors Association (NGA) and the Council of Chief State School Officers (CCSSO) to develop common K–12 reading and math standards designed to prepare students for college and their careers (Evenson, 2013).

Collaborative learning: An educational approach to teaching and learning, which involves groups of people working together (Willemse, Boei, & Pillen, 2016).

Content focus: Focus on specific academic content (Sanborn, 2002).

Curriculum: The knowledge and skills that are the expected learning as students' progress through their learning (Oh & Royzycki, 2017).

ESSA: The Every Student Succeeds Act is the primary law for K–12 public education in the U.S. It replaced the NCLB Schools began seeing the impact of ESSA in the 2017–2018 school year (Hirsh, 2017).

Educational reform: Education reform comprises any planned changes in the way a school or school system functions, from teaching methodologies to administrative processes (Desimone, Porter, Garet, Yoon, & Birman, 2012).

ELL: English Language Learners are students who come from non-English speaking homes and who are learning English (National Research Council, 2013).

Evidence-based practice: Practices, strategies, or activities that researchers have evaluated and have shown improvement in student outcomes (Desimone et al., 2012).

Global Community: The close connection between the modern technology of people around the world (Bill & Melinda Gates Foundation, 2014).

Job-embedded: Refers to teacher learning that is grounded in day-to-day teaching practice and is designed to enhance teachers' content-specific instructional practices with the intent of improving student learning (Hirsh, 2017).

Learning design: Describes the educational process, not just courseware but the whole teaching/learning experience (Siko & Hess, 2014).

NCLB: The No Child Left Behind Act of 2001 (NCLB) is a U.S. Act of Congress that reauthorized the Elementary and Secondary Education Act; it included Title I provisions applying to disadvantaged students (NCLB, 2002).

NGSS: Next Generation Science Standards are K–12 science content standards that set expectations for student learning. (National Research Council, 2013).

Ongoing professional development: Tracking and documenting the knowledge, skills, and experience that an educator gains through formal and informal opportunities to enhance teaching skills and strategies (Hilton, Hilton, Dole, & Goos, 2016).

Pedagogy: The art or science of teaching, education, and instructional methods (Quick, Holtzman, & Chaney, 2009).

Professional development: Professional development is a continuum of learning and support activities designed to prepare individuals for work with and on behalf of young children and their families, as well as ongoing experiences to enhance this work (Han, 2012).

Professional development standards: Standards developed for educators for the purpose of professional learning to develop the knowledge, skills, practices, and dispositions teachers need to enhance student performance (Learning Forward, 2011).

PLC: Professional Learning Communities are groups of educators working together regularly to collaborate to improve teaching skills and review and adjust learning for students to improve student achievement (Groundwater-Smith & Mockler, 2009).

Social constructivist theory: The social constructivist theory allows educators to increase their knowledge, infuse this knowledge, become self-confident, and begin to be collaborative in their practice utilizing prior knowledge and building upon previous learning experiences (Wever, Pearman Fenton, & Kerri, 2018).

Survey Instrument: A tool for consistently implementing a scientific protocol for obtaining data from respondents (Maxwell, 2013).

Teacher efficacy: Teachers' belief in their own ability to positively affect students' achievement and learning (DeWitt & Slade, 2014).

21st century competencies: Skills, learning dispositions, and abilities that students need to attain to be successful in the 21st century society (Learning Forward, 2011).

Assumptions, Delimitations, and Limitations

  Assumptions. Assumptions are aspects of a study that are out of the control of the researcher (Simon, 2011). The Standards Assessment Inventory (National Staff Development Council, 2001) and the Panorama Teacher Survey (Panorama Education, 2015) have shown strong evidence of the validity of the result, and therefore it was assumed that both of these instruments were a reliable source of data. It was expected or assumed that the participants in the study were open about their attitudes and perceptions of professional development opportunities and student achievement. The expectation was that the participants in the study were open about their attitudes and perceptions of professional development opportunities and student achievement. The sample chosen for the research is representative of the educators, and the expectation is that they would make inferences, which is an additional assumption in this research.

  Delimitations. Delimitations are characteristics that result from the researcher's specific choices made concerning the development of the study (Simon, 2011). An initial delimitation to the study was the choice of the research topic—determining teacher perceptions, attitudes, and beliefs regarding professional development and its effect on teacher practice—which, while an issue in education today, is not the only issue facing this system. The small sample size was also a delimitation to the research as it was an avoidable researcher choice. The utilization of multiple school campuses could have yielded a much larger sample. The results of this study can only be generalizable to educators who teach Grades K−8 in the city where data collection took place. The utilization of purposeful sampling to select participants was another delimitation of this study. A further delimitation of this study was the use of a predominately closed-ended Likert-type survey.

Limitations. Constraints that are beyond the researcher's control but could affect the study outcome are considered limitations to a study (Simon, 2011). One limitation of this study was that the design only studied elementary and intermediate teachers. As such, it may not be generalizable to high school teachers. Second, a limitation of this study was the small number of participants, and the few numbers of individual schools asked to participate. In total, 124 surveys completed from five schools, three within the same school system, made up the participants of the study. These schools included an early childhood campus, two elementary campuses, and two middle school campuses. It is optimistic to believe that a study involving a larger sample would yield similar results. It is also optimistic to believe that the results would be generalizable to high school teachers. Third, the study instrument used to collect data contained only 20 questions, two of which were open-ended opinion questions. It is important to note that a survey that includes more open-ended opinion questions could yield a clearer view of teacher perception of professional development. A final limitation of the study was the specific timing the participants joined the survey. The presentation of the survey at the end of an entire school year might have given a clearer view of teachers' perceptions of professional development opportunities presented to them throughout a consecutive school year.

Chapter 1 Summary

Administrators and educators in today's school systems are working to address all of the demands set forth to improve student achievement gaps, utilize evidence-based practices, and meet goals, all the while keeping up with the changes in education and the ever-widening global economy the nation's students will be expected to succeed in. Therefore, teacher professional development must help educators meet these steep demands. Willemse et al. (2016) pointed out that professional development is a crucial mechanism for improving classroom instruction and

student achievement as well as keeping educators abreast of the ever-changing educational needs of the nation's youth. Ongoing, high-quality, professional development designed to enhance teachers' pedagogical skills along with content knowledge and numerous opportunities to collaborate and embed learned knowledge into their craft is needed to ensure teacher expertise as well as student success. Too often, educators find that the professional development offered to them, or forced upon them, is not meeting this need.

This dissertation presented the rationale for the methodology of and data associated with this study in five chapters. Chapter 1 outlined the problem investigated and the design elements for this study. In this chapter, the researcher discussed the primary research questions and research design. Also included are the rationale and relevance for the study and the assumptions, delimitations, and limitations. This chapter also defined the terms used throughout the research study. The information in Chapter 2 reviews the literature on professional development and related studies and an explanation of the literature collection as it correlates to the dissertation study. The information in Chapter 3 lists the research questions and procedural methods that were used throughout the study and covered the purpose and research design of the study, the research population, and the sampling method. In Chapter 4, the researcher summarizes the results of this study and included an analysis of the data. Finally, Chapter 5 summarizes and discusses the results of this study, which include the conclusions based on these results.

Chapter 2: Literature Review

Introduction

Today's school systems attempt diligently to address all the demands set forth to improve student achievement gaps, utilize evidence-based practices, meet goals, focus on special needs students as well as English Language Learners (ELL) students, all the while keeping up with the changes in education and the ever-widening global economy that our students will be expected to succeed in. It has become a monumental task for districts to keep up with changes in legislation and requirements that allow them to help develop success for every student. While legislation and directives are imperative for institutions to follow, it is apparent that at the core of these demands is the need for teachers to be well-prepared and highly qualified in order to help students be successful. Teachers must be prepared for the students in their classrooms and require opportunities to learn new pedagogy, techniques, strategies, and curriculums before the students arrive as well as during their tenure to stay current in their learning (Calvert, 2016). Rigorous training and requirements for licensing have also made an impact on teachers throughout the U.S. (Ingersoll & Collins, 2018).

Many current education reform initiatives are requiring teachers to meet often so they may work together in collaborative groups to plan, look at data, and assess learning (Slavin, 2018). The Act (NCLB) attempted to ensure that all states have highly qualified teachers that must meet specific state set standards to be considered highly qualified as well as providing specific funds to enhance and support ongoing professional development for all teachers (Learning Forward, 2011). The ESSA has put into law a new improved definition of professional learning and redefined professional development guidelines for schools that focus on the importance of creating highly personalized professional development programs for teachers in

Grades K–12 (Hirsh, 2017). The directives from ESSA focus on facilitation of digital integration for sustainable outcomes, encouraging in-depth and focused professional development that is comprehensive and customized, collaboration and teacher led training, job embedded-ness, data driven, classroom-focused and overall help to equip teachers for success (Birman et al., 2007).

Granger, Bevis, Southerland, Saka, and Ke (2018) discussed the importance of professional development as a fundamental component of improving student achievement. Professional development should focus on keeping educators abreast of the ever-changing educational needs of our youth in an ever-changing global community. Therefore, teacher professional development must guide educators to meet these steep demands while enhancing teacher knowledge and skills.

Study topic. In today's changing political climate and the global economy, the focus on education has become of utmost importance. School systems must begin to develop programs and processes to address these changes in order to affect student achievement and meet goals in schools across America. These changes should focus on ELL students, evidence-based best practices, and improvement of student achievement. Therefore, teacher professional development must help educators meet these steep demands. Fischer et al. (2018) pointed out that professional development is a crucial mechanism for improving classroom instruction and student achievement as well as keeping educators abreast of the ever-changing educational needs of our youth. Ongoing, high-quality professional development that enhances teachers' pedagogical skills along with content knowledge and numerous opportunities to collaborate and embed learned knowledge into their craft is essential to ensure teacher expertise as well as student success. Too often, educators find that the professional development offered to them, or forced upon them, is not meeting this need. Lampi, Dimino, and Taylor (2015) discussed that educators

are concerned with the relevance, the level of expertise of presenters, the ability to sustain the material over time, as well as the idea that professional development instructors share the same experiences and needs as participants.

Teacher learning is a complicated and essential aspect of education and seems to be at the core of the creation of different forms of professional development that schools utilize all around the nation. It seems that the main objective for schools and districts is to create learning opportunities that are appropriate for the learner and enable teachers to glean the skills and knowledge needed to affect student growth (Brendefur et al., 2016). National legislation has made it a priority of school systems to focus on teacher learning as an essential piece of our education processes. The ESSA has put forth recommendations for districts that include teachers be part of the planning of their learning, reorganization of the school day to allow for teacher learning, support for teachers, learning communities, teacher choice, and ensuring that professional learning is for growth, not evaluation (Calvert, 2016).

Significance of the study. The job of ensuring that the nation's children receive an education that will enable them to become successful in a global community is of paramount importance to educators. In an era of high-stakes, standards-based education, it is becoming increasingly more apparent to school systems that teachers must continuously develop their craft to ensure that they have a working understanding of the pedagogy and subject content which they are responsible for (Slavin, 2018). Districts across the nation require professional development in order to improve student scores as well as teacher ability to deliver curriculum and lead students to success. Teacher preparation courses are also focusing on development that is intended to allow new teachers to go into the classroom and be successful. While millions of dollars are being spent annually on professional development for the nation's teachers, there

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seems to have been no significant gains made. Too often, educators find that the professional development offered to them, or forced upon them, is not meeting this need. The Bill & Melinda Gates Foundation (2014) found that educators are concerned with the relevance, the level of expertise of presenters, the ability to sustain the material over time, as well as the idea that content should be presented by a presenter that shares the same experiences and needs. Teachers are finding themselves underprepared for initiatives presented to them and therefore it is imperative for schools to focus on teachers needs to ensure success. As school districts deem it more important to focus on student performance in the face of high-stakes testing as well as teacher preparation, many schools are looking at and evaluating data as they begin to plan teacher training in order to improve practice (Lai & McNaughton, 2016). It is becoming increasingly crucial for districts to develop professional development that meets the needs of the teachers in order to sustain academic improvement and student success (Calvert, 2016). It is important to understand the needs and feeling of educators in order to develop programs that teachers will buy into. It is just as important to understand how educators obtain the skills need to keep up with new reform requirements as well as new curriculum and student standards. However, the issue seems to be how to answer the question of what constitutes effective professional development. Even more important it is important to know how professional development affects teacher knowledge and practice in the elementary, middle school, and high school classrooms. The information in this literature study will indicate the methods, techniques, and strategies school systems use to positively impact student success through the use of various programs and preparation programs and curriculum. This review of literature focused on educational reform, professional development content focus, learning design, and job-embedded

opportunities and development standards, the structure of professional development, and the overall impact on student achievement.

Organization of the chapter. In this chapter, the existing literature was reviewed and will include the current research and data relating to teacher professional development in education and teacher practice. The conceptual framework was developed after an examination of theoretical, empirical, and experimental literature that explored professional development for educators and its effect on teacher practice and adult learning theory. This literature review utilized three research questions for direction:

RQ_1. How do teachers perceive professional development opportunities presented to them?

RQ_2. Are there differences in teachers' perceptions of professional development presented to them based on years of teaching experience?

RQ_3. Are there differences in teachers' perceptions of professional development presented to them based on grade level taught?

The first section addressed personal interest as well as topical research on the topic of professional development. The following sections pertained to educational reform, professional development content focus, learning design of professional development, and job-embedded professional development. In the theoretical framework, delivery, as well as successes of specific professional development, was reviewed. Finally, the review of the current literature, as well as methodological literature that focuses on professional development standards, the structure of professional development, and student success, was viewed as a foundation for this review of the literature.

Conceptual Framework

A conceptual framework provides a synthesis of the research process and informs the purpose of the research. Systems of the concepts, expectations, beliefs, and assumptions that inform this research are present in the framework. It included items such as the researcher's interest, lens, and purpose. It also provided the context, the empirical research, and the theoretical tenets guiding the research (Ravitch & Riggan, 2017). This study focused on professional development, adult learning theory, and constructivist theory. Professional development can be described in many different ways and discussed through several different lenses. While there are many theories related to professional development, they all have a similar goal: to facilitate teacher change and to affect student achievement. Recent legislation has made it clear that there needs to be increased attention given to, and discussion about the fundamental role of purposeful, high-quality professional development for teachers (Slavin, 2018). The researchers attempted to analyze and discuss professional development by looking at delivery as well as success.

The foundational theoretical frameworks of adult learning theory and the social constructivist theory underscore the premise of this research. A goal of adult learning theorists is to understand adult learners and apply this knowledge to adult learning (Zepeda, Parylo, & Bengtson, 2014). Knowles explains that adults learn differently from children in that adults need to be involved in planning their instruction and evaluating their results (Powell & Bodur, 2019). Adult learning theory focuses on the idea that adults are motivated differently than children in that they are more interested in experiences that focus on life situations and have a deep need to be self-directed as well as individualized to each specific learners needs (Merriam & Bierema, 2014). Adult learning theorists emphasized that 70% of adult learning is self-directed, and as

such, schools and institutions should consider this when planning learning opportunities (Merriam & Bierema, 2014). This learning also focuses on the subjects' self-concept, experience, and readiness to learn, as well as orientation and motivation to learning and translates easily into the development and sustainment of professional development. As discussed by Knowles, Holton, and Swanson (2005) adults have very diverse life experiences, learning styles and needs and therefore should be viewed as different as children in their needs. The idea behind adult learning theory also views professional development as needed to reflect less of a focus on children and more on adults as adults due to their different motivations and various life experiences making the needs of adults substantially different than that of children (Merriam & Bierema, 2014). The focus for professional development should consider the adult learning theory and the idea that adults are responsible for their learning (Powell & Bodur, 2019). Adult learning theorists also attest that while adults have very diverse life experiences, learning styles and needs considerations must be made when developing a professional development learning process (Powell & Bodur, 2019). These opportunities must reflect the institutional knowledge of adult learning theory in order to change teacher practice as well as affect student learning.

The literature reviewed recognizes that professional development is an essential focus for school systems and must be an integral part of the planning and ongoing learning for school faculty members. Professional development is essential to enable teachers to attain the skills needed to affect student learning and ultimate success. Ongoing professional development and opportunities for educators to work closely with colleagues are essential to keep teachers current on strategies, standards, curriculum resources, and new research in the field. Professional development viewed through the lens of social constructivist theory should allow educators to increase their knowledge, infuse this knowledge, become self-confident, and begin to be

collaborative in their practice utilizing prior knowledge and building upon previous learning experiences (Wever et al., 2018). This learning for teachers is formative and is learning that relies on a knowledge base already in place. This learning also has to focus on the teacher thinking about their own learning. This focus is based on the idea that learning is a personal and social construction of meaning (Wever et al., 2018). The idea is that professional development viewed through the lens of constructivist theory must provide teachers with the opportunity to construct their own learning as well as interact with data. The topics for professional development steeped in constructivist theory include topics that emerge from teacher interest and develop precise measurement and evaluation of goals and teaching targets (Wever et al., 2018).

As a teacher for over 20 years, it has become obvious that the key to quality education for every child is outstanding instruction by high-quality competent teachers. Hiring practices have had to be changed as well as requirements for personnel in the face of new reform. Districts around the nation have set up requirements that enable them to find and hire educators that whom they have determined as highly qualified in order to keep up with the ever-changing educational system as well as ensure that our nation's youth has access to high-quality education. There have been numerous research studies over the last 5–10 years that have linked teacher effectiveness to student achievement and success (Skourdoumbis, 2017). Furthermore, it is becoming increasingly clear to educators that teacher quality or a lack thereof can impact students for years to come, even several years after contact with specific teachers (Skourdoumbis, 2017).

Developing effective professional development for educators is a critical step in the education of our nation's youth and the achievement and success of all children. Understanding the intricacies involved in the development of these programs, while seemingly insurmountable,

will help to define a view of professional development that recognizes it as a vital component of our educational system as well as preservice systems. Professional development that is thoughtfully developed by qualified educators, as well as highly trained and highly successful administrators and specialists in conjunction with an implementation that includes useful feedback and review, can ensure that institutions meet teachers' learning needs (Ingersoll & Collins, 2018). These teachers must then be held to the highest standards of practice while utilizing their new knowledge and skills in their classrooms. They must show intent and practice of new learning in order to collect data as to what works and where changes must be made (Ingersoll & Collins, 2018).

It has also become highly essential that educators understand the importance of collecting and evaluating student data in order to continuously develop learning opportunities that will ensure that each child grows. It is important to understand that the intent of any professional development should be to affect student achievement and teacher growth. Focus for professional development program development in schools should also focus on summative as well as formative data, which can ensure a better understanding of student performance while attempting to keep up with education reform and district needs (Skourdoumbis, 2017).

Topical research. Educators have gone to extensive efforts over the last decade to determine what constitutes adequate teacher professional development and ways to implement effective professional development. The literature surveys applications for and the success of many different professional development programs as well as the student success rate and teacher expectations and outcomes. This information led educators to many discoveries in the educational field that schools can employ as standards for program ideas as well as standards for professional development programs for the educational systems.

Professional development that ignores teaching best practices, as well as relevant content, is at the forefront of educators' desire to determine new platforms for professional development. It is also apparent in the research that professional development that does not focus on student achievement and changes in curriculum and teaching processes that affect student achievement is an imperative part of the reform happening in the nation (Ingersoll & Collins, 2018). While there are many forms of professional development that leave teachers disengaged, the idea of educator best practices includes cross-curricular planning, coaching, and collaborative study (Schwartz, 2019). Educators believe that policies must be in place to ensure that professional development aligns with new educational reform (Darling-Hammond & McLaughlin, 2016). Educational reform has driven educators to a paradigm shift in the view of professional development that is required of and offered to classroom teachers in order to affect teacher practice as well as student achievement (Schwartz, 2019).

Educational reform. Educational reform affects change and upheaval in the system. Current research is no different. In the recent past, educators have begun focusing on, among other things, training models of professional development for educators looking primarily at expanding educators' storehouse of classroom practice knowledge as it has found that it is substandard (Baird & Clark, 2018; Donnell & Gettinger, 2015). Researchers have found that the overwhelming message of current accountability reform is that, while student achievement matters most in a school building, the processes for real success are in question (Donnell & Gettinger, 2015). In a study done by the Gates Foundation, researchers found that little has changed on the front of professional development over the years (Bill & Melinda Gates Foundation, 2014). Christenson (2016) argued that the aim of school systems and preservice systems should be to strive to aim higher in the development of programs that develop high-

quality, effective teachers that will positively affect student achievement.

Teacher agency has become a focus in educational reform as well as its effect upon professional development. Teacher agency focuses on the teachers' engagement in and the use of learning opportunities in the classroom (Imants & Van der Wal, 2019). Teacher agency in professional development looks at the approach that the individual takes in professional development opportunities: active or passive (Imants & Van der Wal, 2019). Research as shown that the role of teacher agency can be used as a tool to identify and develop professional development opportunities that work to enrich teacher learning that will change student achievement and can be utilized to evaluate opportunities before, during and after such professional development opportunities based on reform requirements (Imants & Van der Wal, 2019).

In a study looking at teacher participation in professional development in an era of school reform, Imants and Van der Wal (2019) discussed the importance of the teacher as an active and accepting participant in the process and programs presented to them in professional development. The outcomes of said processes and programs are dependent upon the individual, group, and organization, and are affected by school reform directives and the perception of expected classroom outcomes. Imants and Van der Wal (2019) discuss the characteristics that integrate professional development and school reform. These characteristics include teachers taking an active role in opportunities, positive and communicative relationships in the institution, the development of mutual working relationships among different grade levels and areas, the development of cyclical programs, and the institution of professional development content that includes school reform directives (Imants & Van der Wal, 2019).

Professional development content focus. Researchers have demonstrated that there are specific vital features that, when utilized in professional development, can be viewed as effective in improving teaching practice in schools (Darling-Hammond & McLaughlin, 2016; Foster, 2017; Schwartz, 2019). These essential features or structural features include intentional focus, active learning, collaboration, effective practice, coaching, feedback, and observation, as well as sustained duration (Foster, 2017). Research shows that professional development opportunities are successful if they include a supportive atmosphere, opportunities that are job-embedded, an instructional focus, and are collaborative and ongoing (Barlow, Frick, Barker, & Phelps, 2014; Foster, 2017). These researchers found that effective professional development that utilizes all of these aspects could translate into meaningful learning experiences and enhance teacher effectiveness (Barlow et al., 2014; Darling-Hammond & McLaughlin, 2016; Foster, 2017).

Researchers have discussed that student achievement should be the ultimate goal of improvement in professional development; educators must, therefore, have exposure to in-depth knowledge of their subject matter as well as specific strategies and skills (Siko & Hess, 2014). Professional development that utilizes specific content and the "how-to" of teaching the material, as well as an understanding of teaching methodology and pedagogy, is an effective process for student success (Behari, 2014). This focus should be present in any program for teacher preparation or continuing teacher development (Behari, 2014; Darling-Hammond et al., 2017).

Learning design. Researchers have focused on the idea that professional development structured in such a way that allows teachers to build strategies that will enhance their classroom practice will be more productive and useful to their practice (Aguilar, 2014). Such structures include educators as active participants as opposed to passive learners (Aguilar, 2014). Research has shown that changes in classroom practice are directly related to active learning on the part of

the teacher participating in high-quality professional development opportunities (Aguilar, 2014; Foster, 2017). The researchers focused on the development of knowledge and skills of teachers to create a shared vision. A clear vision of what measures success in the classroom should be present in professional development opportunities for educators. Effective professional development experiences for teachers should contain content knowledge and pedagogy within the framework of a teacher's and the school's vision for the classroom.

Lampi et al. (2015) discussed that professional development provided for teachers should mirror the methods expected for students. These researchers focused on the idea that for a teacher to implement a particular curriculum, they need to be exposed to that curriculum by experiencing the lessons/units themselves (Lampi et al., 2015; Zepeda et al., 2014). Behari (2014) reported that the typical form of professional development given to educators often stops at the explanation phase of new information, which does not provide enough information to be helpful in the classroom.

Job-embedded. Job-embedded professional development is a method for learning that is grounded in the teachers' day-to-day practice and is content-specific and focuses on student achievement (Althauser, 2015). Professional development presented in such a way has proven to be more effective than traditional experiences because it better addresses the needs of adult learners (Althauser, 2015; Siko & Hess, 2014). Professional development should consist of collaborative learning structured in such a way that it allows for teachers and staff to build an environment of initiative and mutual accountability within the organization.

Research has shown an ever-growing focus on professional development that engages teachers in designing specific content for professional development experience offered on-site that matches goals and needs (Althauser, 2015; Hilton et al., 2016). This type of job-embedded

professional development benefits teachers as it helps to increase their use of effective classroom strategies and develop a deeper understanding of pedagogy that, in turn, affects student achievement.

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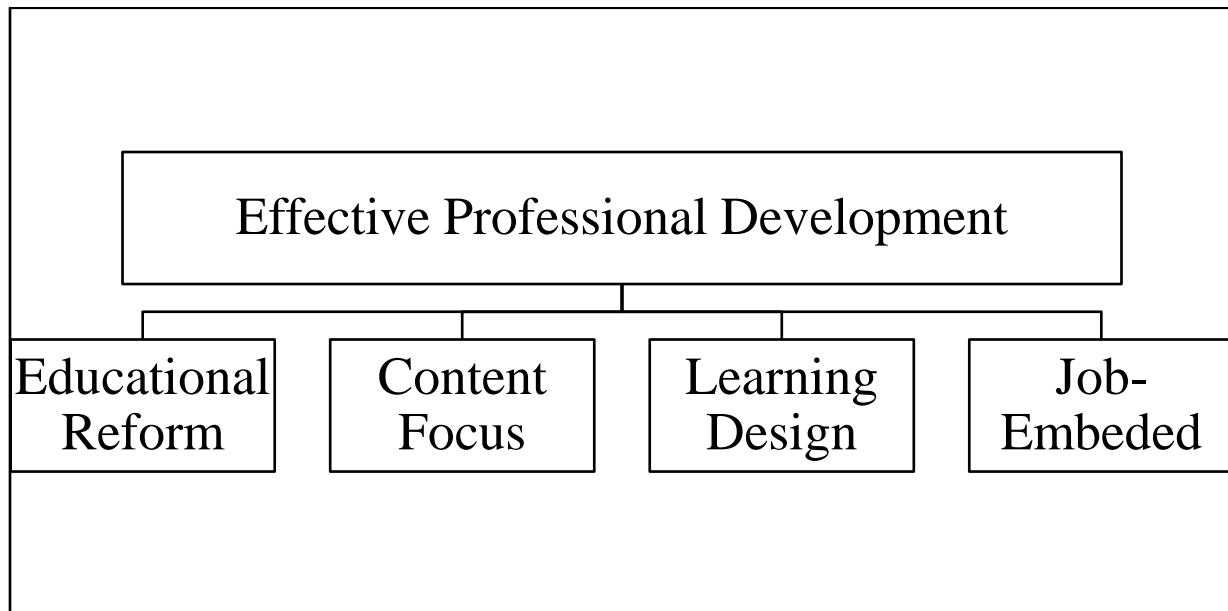
Figure 1. Effective professional development conceptual framework. Adapted from "Effective Teacher Professional Development" (Darling-Hammond et al., 2017).

The model in Figure 1 includes the four concepts of effective professional development discussed in the research. The first level, educational reform, represents the overarching concern of all educational institutions and, thus, the foremost topic when faced with developing professional learning for teachers. The second level, content focus, represents the need for a focus on specific input for teachers that represents pedagogical content knowledge as well as opportunities to learn and utilize instructional strategies. The third level, learning design, focuses on the knowledge and skills needed to reach every student by focusing on an array of learning designs that lead to improved teaching. The fourth level, job-embedded, represents the idea of

teacher learning that is grounded in day to day teaching practice and designed to enhance content-specific instruction (Demonte, 2013).

Review of Research Literature and Methodological Literature

An extensive literature search included various peer-reviewed journals, as well as books and websites. Keywords allowed for the location of literature: *professional development, professional learning communities, effective instruction, student achievement, teacher training, teacher professional development, adult learning theory, social constructivist theory, teacher agency, andragogy, educational evaluation, student performance, educational reform, preservice professional development, student data,* and *elementary professional development*.

The focus of this literature review is effective professional development for elementary and middle school teachers and influences these opportunities have on teacher practices and student achievement in the elementary and middle school classroom. The literature review was made up of four subsections: (a) The educational reform subsection consists of six principles of professional development including subject matter teaching, assessment, equity, school organization, and the professionalization of teaching; (b) The professional development content focus subsection includes the emphasis on building teachers' content knowledge and their knowledge about content-specific pedagogy through professional development opportunities; (c) The learning design subsection contains the various designs of existing professional development opportunities and their success or failure; and (d) The job-embedded subsection contains the importance of the connection between an educator's work in the classroom and the professional development they receive.

While there are many theories related to professional development, they all have a similar goal: to facilitate teacher change and to affect student achievement. Current literature has shown

that there is an increase in attention to and discussion about the fundamental role of purposeful, high-quality professional development for teachers (Darling-Hammond et al., 2017). Darling-Hammond et al. (2017) have defined effective professional development as "structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes" (p. 2). Many researchers of the current literature attempt to analyze and discuss professional development by looking at its delivery as well as its success. Currently, most professional development opportunities presented to educators are via seminars or online, on-demand courses (Shaha & Ellsworth, 2013). Seminar-type professional development opportunities are a traditional and overused method of learning in which educational institutions present material to teachers that are designed to enhance educator skills as well as impart new standards and strategies (Dewes, Henderson, & Mouza, 2018). On-line, on-demand professional development is a technology-based platform that allows teachers to learn more conveniently, allowing for workday time constraints to be overlooked (Shaha & Ellsworth, 2013). Research has shown that while presentation is essential to professional development, experience, colleagues, and teacher knowledge is a contributing factor as well (Brown & Weber, 2016).

The research reviewed recognizes that professional development is an essential focus for school systems and must be an integral part of the planning and ongoing learning for school faculty members. Researchers reveal that professional development viewed through the lens of social constructivist theory should allow educators to increase their knowledge, infuse this knowledge, become self-confident, and begin to be collaborative in their practice utilizing prior knowledge and building upon previous learning experiences (Zepeda et al., 2014). This learning for teachers is formative and is learning that relies on a knowledge base already in place. The

topics for professional development steeped in constructivist theory include topics that emerge from teacher interest and develop precise measurement and evaluation of goals and teaching targets (Wever et al., 2018; Zepeda et al., 2014).

Heafner, Handler, and Journell (2016) and McKeown et al. (2019) focused on the need for effective professional development. Numerous research studies are available to inform school systems as to the ways to develop and sustain professional development that affects teacher success as well as student achievement. Many studies have come about due to the criteria set up by No Child Left Behind (No Child Left Behind Act, 2002). The No Child Left Behind Act of 2001 mandated that schools provide high-quality professional development for teachers in order to increase teacher performance and student achievement (Abodeeb-Gentile, Pedro, & Tapper, 2016). More recently, the ESSA Act (2015) came about to build on past legislation enabling schools and educators to focus on clear goals that enable teachers to ensure the preparation of students for success adequately. These two acts set up fundamental mechanisms for improving classroom instruction and student achievement through professional development (Baird & Clark, 2018). This study thematically organizes a multitude of studies relevant to effective professional development. These themes included standards of professional development, the structure of professional development, and student success (Abodeeb-Gentile et al., 2016; Baird & Clark, 2018).

Professional development standards. Research concerning professional development standards, the research topics, as well as methodologies vary. Many researchers focused only on the qualitative aspects of changing professional development standards present in different school systems (Barrett-Tatum & Smith, 2018; O'Brien, 2016). The researchers in these studies sought to discover the correlation of higher standards for teacher preparation and professional

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growth to the introduction of new standards (Barrett-Tatum & Smith, 2018). The researchers offered a critical view of the findings pertinent to current professional development standards in current usage.

Wieczorek (2017), the author of both qualitative and quantitative studies, have focused on the alignment of professional development programs to NCLB professional development provisions established for the development of substantial professional development opportunities. Price (2018) focused on the paradigm shift of professional development in recent years that has led to the continued study of the context and content of professional development and its focus on high-quality and efficient programs that are research-based, focusing on precisely blended learning environments. Other researchers have sought to find a correlation between NCLB as well as ESSA provisions and collaborative planning (Hirsh, 2017; Wieczorek, 2017). Both qualitative and quantitative studies developed a focus on the alignment of professional development programs to NCLB and ESSA professional development provisions that were have been set forth for the development of substantial professional development opportunities (Quinn, 2013; Wieczorek, 2017). These studies have focused upon the paradigm shift of professional development in recent years that led to the continued study of the context and content of professional development its focus upon high-quality and effective programs that are research-based (Lampi et al., 2015). Other studies aim to find a correlation between NCLB provisions and collaborative planning and interconnection between professionals utilizing successfully established standards (Price, 2018).

Brown and Weber (2016) and The Vermont Department of Education (2011) relied solely on qualitative data to analyze their research questions and used a variety of data collection tools to find patterns in institutions and their use of state and federal standards. Brown and Weber

(2016) examined findings from a qualitative study of professional development presented to early childhood teachers who engaged in action research projects that reflected professional development standards. Desimone et al. (2012) created a longitudinal study that focused on the evaluation of professional development programs that utilized the NCLB provisions and an infusion of culturally responsive work during each phase of the assessment process. Quinn (2013) included a mixed-method analysis of the alignment of professional development programs for Title I schools based upon the NCLB research provisions focusing on student success. This study focused on K–5 teachers in Title I Achieving elementary schools; approximately 150 teachers participated in the mixed methods study (Quinn, 2013). Quinn's (2013) study findings indicated a positive relationship between teacher perception between Title I elementary schools' professional development opportunities and the NCLB professional development provisions. These findings support teachers' positive perceptions of professional development opportunities offered in Title I schools but is limited to K–5 teachers and does not extend to upper grades or school that are not Title I showing that there is more information needed to understand the perceptions of a more significant number of teachers. Current research, while extensive, is lacking in focus on teacher perception and teacher use of professional development.

Structure of professional development. Darling-Hammond et al. (2017) have recommended that professional development structure should focus on activities that enable teachers to develop an in-depth knowledge embedded in practice that drives student success. Lampi et al. (2015) found that professional development opportunities that begin with an analysis of content and student needs and focused on adult learner modalities will help institutions to meet state and local standards.

While many researchers focus on qualitative data, other research studies utilize only objective quantitative data (Hanson, 2017). Several studies focused on teacher satisfaction and attitude change while looking at the structure and success of specific professional development programs as opposed to student achievement (Hanson, 2017). Researchers of qualitative studies discuss the transformation of instructional practice, as well as curriculum delivery by educators that have attended high-quality professional development opportunities (Barlow et al., 2014; Hardin & Koppenhaver, 2016; Lampi et al., 2015). The researchers discuss that these high-quality professional development opportunities have described goals and a framework for defining success (Barlow et al., 2014; Hardin & Koppenhaver, 2016; Lampi et al., 2015).

In research utilizing survey data, Gore et al. (2017) focused on various programs and pathways to presenting professional development that affects change in school systems. Abodeeb-Gentile et al. (2016) and Behari (2014) discuss professional development as the foundation for improving the quality of teachers and show the need for investment in reform initiatives as well as the importance of developing programs that drive success. Much of the survey data collected by the researchers focused on the methods of presentation of professional development and reviewed the perceived success of and pitfalls inherent in the different models of professional development programs (Abodeeb-Gentile et al., 2016).

Student success. Current literature shows that professional development's effects on student achievement are especially relevant in current educational reform (Anderson & Palm, 2017; Molinare, 2017; Whitworth & Chiu, 2015). Many studies include new standards for educators, intended to improve education, which, when utilized, help teachers become effective in the face of today's climate of education reform. Graham (2017) found that leaders feel that it is of high importance that teacher proficiency efforts should be consistent across institutions.

Graham (2017) found that follow-up was of high importance after the completion of a professional development opportunity in order to implement new practices as well as develop teacher craft.

Allen and Penuel (2015) focused on an attempt to understand and evaluate student success while also focusing on opportunities that build content for teachers through professional development opportunities available. These researchers presented a sound understanding of the existing literature available on the subject. These consist of current knowledge, including substantive findings, as well as theoretical and methodological contributions to the topic of professional development effects on student success. Darling-Hammond et al. (2017) found higher levels of student achievement when teacher engagement, active use of methodology, and utilization of professional development application is present.

Many researchers focused their efforts on a mixed-method model that presented a balanced overarching picture of the argument and supporting research (Garet, Heppen, Walters, Smith, & Yang, 2016). Darling-Hammond et al. (2017) focused on recommendations for professional development and calls for the structure of these opportunities to be such that they ensure teachers develop an in-depth knowledge embedded in practice that drives student success. Professional development that begins with an analysis of content and student needs that present in a way that focuses upon adult learner modalities coupled with ongoing assessment of student performance allows an institution to meet state and local standards (Lampi et al., 2015).

Review of Methodological Issues

An exploration of methodological literature has provided insights into the strengths and weaknesses found in the different methodological approaches used for previous research on the research topic of professional development in the educational setting. These approaches,

thematically organized, should help to clarify the literature review. The researchers of this literature utilized many methods for obtaining data (Dogan, Pringle, & Mesa, 2016; Lampi et al., 2015; Rodman, 2018; Trust, Krutka, & Carpenter, 2016). The most common method for obtaining data is the utilization of surveys, online and written. The research literature also includes literature reviews, interviews, and focus groups, and quantitative, qualitative, or mixed methods as well.

Surveys. Dogan et al. (2016) found, through survey data, that specific policies connected to excellence in professional development define strategies used to implement successful programs. These policies are related to leadership and infrastructure, while the strategies related mostly to professional learning communities. Darling-Hammond et al. (2017) also found, through survey data, that there are essential characteristics of professional development that can impact teachers' knowledge and practice. Rodman (2018) utilized other studies aimed to determine how districts were doing regarding building personalized professional learning climates and uncovered best practices and obstacles related to those climates. The surveys contained in the research were in the forms of face-to-face interviews, online questionnaires, and telephone interviews.

In the literature reviewed, issues found with surveys as the mode of data collection deal with the problem of being able to identify the correct population of interest and the reluctance of the respondents to share true feelings to questions (Dogan et al., 2016; Rodman, 2018). Respondents may be reluctant to share depending on the viewed importance of the questions asked as well as the entity conducting the survey. Another issue with this methodology is the low response rate that cannot be accounted for at the beginning of the research study (Rodman, 2018).

Literature review. Numerous studies that focus on professional development and its effect on student achievement give a summary of the currently available literature and are a resource base for future research to build on. Trust et al. (2016) focused on foundations as well as new and differing visions for professional development that is individually owned by teachers and not a singular experience. Darling-Hammond et al. (2017) found that there is much to learn about the factors that influence the work of teachers and their experiences with professional development opportunities. Research has also scrutinized the current themes in learning for professional educators (Darling-Hammond et al., 2017).

Interviews and focus groups. The use of interview and focus groups are a predominate mode of collecting data in social science research (Maxwell, 2013). Interviews enable researchers to gather rich, in-depth information, while focus groups deliver a more conservative view of respondents while being more closely linked to active experimentation (Nyumba, Wilson, Derrick, & Mukherjee, 2018). Researchers utilize focus groups as a practical research tool in that they allow for a view of responses that illicit a more reliable response of participants (Maxwell, 2013). These two forms of research can also have adverse effects in that they both may inhibit respondents who prefer anonymity to participate (Maxwell, 2013).

The New Teacher Project (TNTP, 2015) conducted interviews held in person or via telephone to obtain information about the study of effective professional development for teachers. This method allows for some measure of convenience for the research or the participant, however, requires efficient coordination within the process (TNTP, 2015). It was found, however, that interviews cannot always be considered as a neutral conversation and can create bias depending on who conducts the interview (Maxwell, 2013). Many interview processes allow for the discovery that administrators and teachers alike had comparable attitudes

about the optimal professional learning experience, including learning that is hands-on and sustained over time (TNTP, 2015). Stover, Kissel, Haag, and Shoniker (2011) found through focus groups that educators feel professional learning driven by the participant's desire to learn is more apt to ensure learning, and that professional development opportunities should enable teachers to incorporate the curriculum into practice in the classroom.

Analysis of qualitative, quantitative, and mixed-method designs. Many of the researchers of the current literature available utilized quantitative, qualitative, or mixed-method for research. (Hardin & Koppenhaver, 2016; Lampi et al., 2015; Ratts et al., 2015). Several studies were mixed methods with triangulation of qualitative and quantitative data to assess professional development. Ratts et al. (2015) attempted to understand the factors influencing teachers' use of professional learning communities and creating effective school improvement plans through professional development. By examining the statistically analyzed quantitative data, and the qualitative data, which uses the opinions, observations, and feelings of teachers and leaders in schools, an understanding of the needs and requirements for professional development programs that affect student achievement emerged for the researchers (TNTP, 2015).

Synthesis of Research Findings

Professional development influences teacher practice and, to a greater extent, student success. Researchers have indicated that current research on professional development fits into three main areas of study: professional development practices, reform, and student success (Ratts et al., 2015). Professional development practices are an important focus for institutions in today's reform fueled climate. Students' success should be and is at the forefront of institutions campus improvement plans as well as decisions when hiring teachers and developing programs to enhance teacher practice.

Professional development practices. Many of the researcher's work reviewed focused on the fundamental elements of high-quality professional development practices as set forth by educational stakeholders (Hardin & Koppenhaver, 2016; Lampi et al., 2015). While there are many different approaches to professional development, Lampi et al. (2015) found that for professional development to be effective, it must include a focused practice that incorporates a broad range of practices, such as collaborative learning, peer-assisted learning, independent learning, professional learning communities, and teacher-as-student approaches (Hardin & Koppenhaver, 2016; Lampi et al., 2015; Quinn, 2013). Lampi et al. (2015) found that effective models of professional development must include current knowledge and attitudes of educators to develop programs that are successful (Lampi et al., 2015). Goldring, Huff, and Preston (2012) focused on the suggestion that successful professional development practice should include measures that are aligned with actual school content and align closely with the hypothesized theory of change.

Educational reform. Reform in education is a never-ending and all-encompassing process. Reform in professional development has recently emerged as a significant part of educational success. Behari (2014) found that the development of state and national standards have had an impact on professional development that has begun to affect success in schools. Behari (2014) and Darling-Hammond and McLaughlin (2016) indicated that professional development should be continuous, intensive, and high-quality, based upon well-developed standards that will ensure that learning brings about changes in an educational system. Researchers suggested that professional development reform should be utilized to create a continuum and lay a solid groundwork for the future of education and be an integral part of improving the educational system in the U.S. (Behari, 2014; Pharis et al., 2019). Researchers

show that NCLB has had a direct impact on professional development practices in the U.S., and its intention to help teachers develop their new expertise to improve students' instruction has come to fruition (Pharis et al., 2019).

Student success. Student success is a primary focus of much of the current literature on professional development. Many researchers discussed that professional development is the most powerful way to raise student achievement (Lane, Oakes et al., 2015). Much of the research established the idea that as students' learning abilities change, educator methods must keep up with students' needs to affect student achievement positively (Behari, 2014). There are a significant amount of researchers that focus on linking student assessment results to systematically develop and align professional development to modify classroom instruction (Behari, 2014; Pharis et al., 2019). There is a movement of institutions that are requiring educators to rethink practice and roles and focus on student success in a whole new light (Schoales, 2019).

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Critique of Previous Research

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Ratts et al. (2015) produced credible data used to inform this study about the use of specific practices for professional development in educational systems and teacher's perceptions and experiences of these practices. The initial findings from these researchers supported that professional learning community, as well as on-site and off-site conferences and workshops, generated better results in student learning based on the school-wide assessment. Popp and Goldman (2016) used one-on-one interviews to discover that professional learning communities offered a robust infrastructure for teachers to engage in dialogue that allowed them to reflect and improve classroom instruction; however, the small test group did not ensure that this is a useful choice for professional development. A more extensive study group could have built a more

convincing understanding of the use of PLC's in professional development. On and off-site conferences and workshops proved as a useful professional development practice in an educational setting. Darling-Hammond et al. (2017) found that lectures and workshops facilitated by presenters to educators in the school setting or off-site changed teacher and student learning outcomes through monitoring from administrative staff with substantive feedback.

A review of previous research also revealed a focus on educational reform in professional development. Educational reform, as discussed by Imants and Van der Wal (2019), supports that policies aimed at building capacity and expanding professional development that advance instruction and school improvement should be of the highest priority. These researchers focused on four states that have had success with improving professional development by enhancing standards and practices. While these researchers found successes with reform in professional development, the use of only four states limits the findings. Imants and Van der Wal (2019) reviewed the literature that focuses on professional development standards, induction, and mentoring programs for beginning teachers. Programs reviewed support that policy efforts developed with professional development associations and organizations were of critical importance. Imants and Van der Wal (2019) argument is robust in that it focuses on practices developed by the entities that will be affected by professional development. However, due to the study's use of a limited number of states, it is hard to determine if the same results would be the same across states or school systems.

Lane et al. (2015) showed the potential for improved professional development standards and programs to affect student achievement positively. Garet et al. (2016) found that professional development that is content focused has a moderate effect on changing teacher practice and, in turn, affecting student success. Although all of these researchers found some positive results in

student achievement when professional development was prescribed to meet specific standards, the results are only adequate for this research. Due to the small number of students and schools utilized and the different standards and programs utilized, data may be limited.

The research has shown that teacher perception is an essential part of the picture when preparing and evaluating professional development (Fairman & Mette, 2017). However, research that focuses on a more significant number of participants could help to more clearly define teacher perception, as well as help administration, develop opportunities that are more useful to teachers and students alike. The specific knowledge of the perception of professional development per grade level could even further strengthen the opportunities that institutions can develop to enhance teacher practice and student achievement.

Chapter 2 Summary

The literature review centered on educational reform, content focus, learning design, and teacher learning grounded in day-to-day teaching practice and design of professional development in education. Researchers who focused on the idea that professional development standards are an essential part of teacher preparation have shown a correlation between higher standards for teachers and their growth (Behari, 2014). The discussion of professional development standards as being an essential element of comprehensive teacher and school improvement has shown to be a central theme in much of the literature (Behari, 2014; Lane et al., 2015).

A discussion of the structure of professional development that drives student success is a significant portion of the literature review and is the driving focus for professional development throughout. The researchers included in the literature review focused on educational reform and the impact on teacher practice and student achievement. The chapter ended with a critique of

previous research, which again focused on overall student achievement as affected by professional development for teachers.

This unique conceptual framework was based on a review of literature using educational reform, content focus, learning design, and job embedded-ness in order to understand professional development for teachers. An investigation examining the impact and perception of professional development on teacher practice is warranted and would yield socially significant findings in the field. In addition, the literature review presents limited research on studies relative to teacher professional development perceptions based on grade level taught or years of teaching experience (O'Brien, 2016). The body of research focused on teacher perception of professional development opportunities offered to them based upon grade level taught, and years of teaching experience is inadequate (Fischer et al., 2018). This gap in the existing literature has enabled this researcher to identify the need for pursuing a research project to answer the following three research questions:

RQ$_1$. How do teachers perceive professional development opportunities presented to them?

RQ$_2$. Are there differences in teachers' perceptions of professional development based on years of teaching experience?

RQ$_3$. Are there differences in teachers' perceptions of professional development based on grade level taught?

The next chapter included a methodological overview of this quantitative descriptive study. Reviewed in the chapter were the methodology research design as well as the purpose and design of the study. Included is a review of the research questions, target population, sampling method, instrumentation, data collection, and data analysis procedures. Also discussed in the

chapter are the methods used to address validity and reliability, confidentiality, and ethical

issues.

Chapter 3: Methodology

Introduction to Chapter 3

According to Desimone and Garet (2015), a crucial step in transforming schools and improving academic achievement is to improve professional learning for educators. Changing standards and reform with the development of initiatives such as CCSSI (Common Core State Standards Initiative) and the NGSS (Next Generation Science Standards) have made it a top priority that educators stay abreast of new approaches to develop practical teaching strategies to ensure student success (Desimone & Garet, 2015). While many factors contribute to helping schools achieve these goals, professional development for teachers is an integral part of this reform. In an attempt to determine what constitutes useful professional development, a review of current research focused on what constitutes high-quality professional development and teachers' attitudes towards these opportunities.

The purpose of this quantitative descriptive study was to examine these experiences and attitudes concerning professional development and its influence on teacher practice. In an era of educational reform, an essential aspect of creating successful and continuous school improvement is the utilization of high-quality professional development for teachers (Baird & Clark, 2018). According to Nassaji (2015), the utilization of quantitative descriptive research can ensure that researchers gain a deep understanding of the perspectives and opinions of individual participants. This chapter discloses the procedures and methods of the study. This chapter includes the purpose of the study, research questions, research design, and methodology, as well as participants and demographics, identify instrumentation, data collection and analysis, and ethical considerations. This chapter also discusses attributes, limitations, and delimitations, validity, expected findings, and ethical issues.

Purpose and Design of Study

Appropriate design is crucial to the successful outcome of any research (Adams & Lawrence, 2015). A descriptive study met the needs of the research for this topic. Descriptive studies have been discussed as especially useful to describe or explain relationships among phenomena, situations, and events as they occur (Thyer, 2001). This research design allowed for an in-depth understanding of teacher attitude toward professional development opportunities afforded to them as well as the effect on student achievement.

The purpose of this quantitative descriptive study was to examine what educators feel constitutes effective professional development as well as the perceived influences professional development opportunities have on teacher practice. The study also focused on teacher opinions based on years of experience as well as grade level taught. This study was an evaluation focusing on identifying the perceived influences of professional development opportunities on teacher practice. Participants evaluated current practices in professional development via an online survey. The survey enabled participants to evaluate their experiences with professional development and the effects on practice, and the researchers identified what participants find lacking in current opportunities.

In the U.S., an average of $2.6 billion is spent on professional development at the state and federal levels, while an average of $8,000 to $12,000 is spent per teacher at the district level (Calvert, 2016). Educators in modern educational institutions must be abreast of the ever-changing standards and requirements as well as changes in student populations. The need for high-quality professional development, as shown by the monies spent, is an integral part of the teaching initiatives in the nation's schools. As a result, the purpose of this study was to investigate the perspectives of teachers in kindergarten to eighth-grade classrooms in the

southwest area of the U.S. in order to get an understanding of how teachers feel about the professional development presented to them and if they feel it is meeting their needs as they work towards meeting national, state, and district requirements. To date, there has been limited research addressing the exact opinions and perceptions of professional development presented to them especially focusing on years of experience and grade level taught Therefore, this quantitative research study explored the perceptions of educators in order to gain an understanding of what teachers actually feel about these opportunities. The findings from this study have the potential to inform districts of the exact needs and feelings about professional development presented to teachers in order to provide a better understanding of what will be beneficial to teaching practice.

Research Questions

  This quantitative descriptive study focused on professional development and its effect on teacher practice and student achievement. More specifically, this study investigated the following questions:

    $RQ_1.$ How do teachers perceive professional development opportunities presented to them?

    $RQ_2.$ Are there differences in teachers' perceptions of professional development presented to them based on years of teaching experience?

    $RQ_3.$ Are there differences in teachers' perceptions of professional development presented to them based on grade level taught?

Research Population, Sampling Method (power) and Related Procedures

  For the purposes of this study, the population that made up the sample came from educators in kindergarten through Grade 8 classrooms. Approximately 124 kindergarten through

Grade 8 educators in several public and private schools within the southwest participated. Data utilized for the study came from a public elementary and an intermediate school (School A and School B), as well as a private early learning center (School C), a private elementary school (School D), and a private intermediate school (School E). School A has an approximate enrollment of 700 students, mostly limited English proficient Hispanic students and a teaching staff of approximately 50. School B has approximately 600 students, mostly English Language learners, with a teaching staff of 50. School C has approximately 120 students and a teaching staff of 10. School D has approximately 400 students with a teaching staff of 50. School D has approximately 800 students and a teaching staff of 60. Schools C, D, and E have an international population representing over 60 countries and a broad ESL population. School A has a 20:1 student/teacher ratio; School B has a 25:1 student/teacher ratio.

Purposive sampling was utilized for this quantitative descriptive study. The design was intended to allow for specific grade levels to be selected. Each of the teachers were chosen based on the grade level taught and put into subgroups: Grades K–2, Grades 3–5, Grades 6–8, and other. The teachers were then put into subgroups based upon the years of teaching experience including 1–2 years of experience, 3–5 years of experience, 6–10 years of experience, 11–15 years of experience, 16–20 years of experience and 21 plus years of experience.

The participants in this study evaluated the new professional development opportunities presented to them in their current institutions. This study targeted educators' perceived influence of their learning from professional development opportunities on personal practice. Qualified participants for this study included 124 classroom teachers currently teaching in Kindergarten to Eighth-grade classrooms in the participating institutions.

Before beginning the study, it was made clear that participation was voluntary and that there would be no adverse consequences if they decided not to participate. The researcher also informed qualified participants that all identifying information and answers would be confidential and that individual results would be combined with responses from other survey participants and may be presented at educational meetings or published in educational journals. Lastly, the participants were informed that, by submitting their answers to the survey, they are giving their consent and agreeing that they have read and understood the nature of their participation, which was included in an invitation via email.

Instrumentation

This quantitative descriptive study utilized a researcher-developed questionnaire based on two preexisting instruments to provide data related to educators' perception of professional development opportunities present in their institutions. The questionnaire is a Likert-type (see Appendix A) survey. Gall, Gall, and Borg (2007) stated that the "use of questionnaires and surveys are used extensively in educational research to collect data about phenomena that are not directly observable" (p. 222). The Likert-type survey that was utilized is a combination of seven professional development questions from the Panorama Teacher Survey (Panorama Education, 2015), which is free and open-sourced and 11 questions, two of which were open-ended, from the Standards Assessment Inventory (SAI) developed by the National Staff Development Council and the Southwest Educational Development Laboratory. This survey was delivered to the participants through Qualtrics (National Staff Development Council, 2001); the two remaining questions were demographic. The participants conducted an assessment of their perception of the professional development opportunities that they have been either required to attend or have chosen for their learning.

Panorama teacher survey. The Panorama Teacher Survey (Panorama Education, 2015) is a survey that gathers quantitative feedback from teachers about their perceptions of their professional learning opportunities available to school faculty. The Panorama Teacher Survey is an open-sourced instrument that was developed by UC Santa Barbara associate professor Hunter Gehlbach and the research team of Panorama Education (2015). Panorama Education (2015) has developed various surveys that help institutions understand and engage the whole school community. These instruments help schools learn about teacher engagement and perception, students' social-emotional learning, students' academics, attendance, and behavior (Panorama Education, 2015). Panorama Education (2015) has created four unique survey instruments. These instruments include a student survey, a social-emotional learning measures survey, a family-school relationships survey, and a teacher survey. These instruments can be used together or in isolation in order to look at one aspect of the school or more. For the current research, only the teacher survey was utilized; this survey is grounded in advanced survey methodology and practice and is free to educators. Specifically, seven questions were taken from the instrument for the current study. It was created to gather feedback from faculty and staff about perceptions of their professional learning opportunities and relationships with colleagues, families, and leadership.

The Panorama Teacher Survey was developed through a six-step design process developed by Gehlbach and Brinkworth (2011). The six steps include literature review, interviews and focus groups, synthesis of indicators, item creation, expert review, and cognitive pretesting and interviewing (Panorama Education, 2015). Through the use of pilot samples conducted in school districts in the southeastern U.S. and vast, diverse schools in the southwestern U.S., three main properties of validity were distinguished (Panorama Education,

2015). These properties include reliability, structural validity, and convergent/discriminant validity (Panorama Education, 2015). Panorama Education (2015) believes that through the use of multiple studies data will be accumulated over time that will give "potential users increasing amounts of faith that the survey scales measure what they purport to measure, and may be used with confidence for specific purposes, in specific contexts, and for specific populations" (p. 4).

Panorama Education (2015) has developed a survey design checklist that enables users to improve an existing survey or choose a new one using research-based approaches (Panorama Education, 2015). The checklist is designed to allow users to avoid measurement error and helps mitigate problems with survey data (Panorama Education, 2015). The checklist is also intended to "facilitate item-writing and survey administration" as opposed to developing a survey instrument (Panorama Education, 2015, p. 1).

Standards assessment inventory. The SAI was developed by Learning Forward, a professional association dedicated to educator professional development (Learning Forward, 2011). The Standards Assessment Inventory measures the alignment of an institution's professional learning with the Standards for Professional Learning (National Staff Development Council, 2001). The SAI is a commercially available instrument. As previously mentioned, 11 questions from the SAI were used in the current study.

The Standards Assessment Inventory was field-tested and used in multiple studies (National Staff Development Council, 2001). Instrument reliability had been established through three pilot studies that show consistent and high results (Learning Forward, 2011). Upon review, the instruments psychometric analysis reflected acceptable to strong reliability for the overall instrument and strong criterion validity with regards to expert ratings of professional

development (Learning Forward, 2011). Cronbach's alphas for overall instruments reliability were consistent and high for all three pilot studies ($a =. 98$).

The validity of the Standards Assessment Inventory has been studied at length. Through the use of a factor analysis in over 400 primary schools in Georgia, construct validity was determined (Vaden-Kiernan, Jones, & McCann, 2009). The Cronbach's alpha was reported as .992, and the variance was explained as 79.1% (Vaden-Kiernan et al., 2009).

Combined survey instrument. The survey for this study, a combination of questions from each of the previously discussed instruments, included questions that involve the rating of professional development opportunities as well as the relevancy of these opportunities. The survey also asked participants to describe the positive aspects of professional development at their institution as well as how they feel their institution's' current program could be changed to be more successful. The survey consisted of 20 questions, seven from the Panorama Teacher Survey, 11 from the SAI, and two demographic questions. Questions one through seven on the survey are taken from the Panorama Teacher Survey (Panorama Education, 2015), while questions 8 through 18 were taken from the Standards Assessment Inventory (Learning Forward, 2011). Table 1 is representative of the questions that comprised the survey employed for this research.

Table 1

Survey Question Composite

	Panorama Teachers Survey Questions	**Standards Assessment Inventory Questions**
SQ1	At your school, how valuable are the available professional development opportunities?	
SQ2	How often do your professional development opportunities help you explore new ideas?	
SQ3	Are the professional development opportunities presented to you on campus relevant to the content that you teach?	
SQ4	Are your colleagues' ideas helpful for improving your teaching?	
SQ5	Do you have input into individualizing your own professional development opportunities?	
SQ6	Do you feel that your school has been supportive of your growth as a teacher?	
SQ7	Do you feel you learn about your profession from the leaders at your school?	
SQ8		At our school, teachers can choose the types of professional development they want to receive (e.g., study group, action research, observations).
SQ9		Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.
SQ10		We design evaluations of our professional development activities prior to the professional development program or set of activities.
SQ11		We have opportunities to practice new skills gained during staff development.
SQ12		The professional development that I participate in models instructional strategies that I will use in my classroom.
SQ13		We use students' classroom performance to assess the success of teachers' professional development experiences.
SQ14		We make decisions about professional development based on research that shows evidence of improved student performance.

Table 1 (continued)

Panorama Teachers Survey Questions	Standards Assessment Inventory Questions
SQ15	My school structures time for teachers to work together to enhance student learning.
SQ16	Our school's professional development helps me learn about effective student assessment techniques.
SQ17	What are the most positive aspects of professional development at your school? Please give specific examples
SQ18	If you could change anything about the professional development opportunities at your school, what would you change? Please give specific examples that you would like to see happen at your school

In order to answer RQ1, RQ2 and RQ3, questions one through seven, taken from the

Panorama Teachers survey (Panorama Education, 2015), were intended to find the perceptions of

the amount or quality of professional growth and learning opportunities available to school

faculty. These questions focus on teachers' opinions of opportunities asking teachers if they feel

these opportunities are valuable, relevant, and improve teaching in the classroom. Questions 8

through 18 were taken from the Standards Assessment Inventory (Learning Forward, 2011) were

also used to answer RQ1, RQ2, and RQ3. Questions seven through 16 asked teachers to respond

to questions on a Likert-type scale that relate to the presence of professional development

behaviors at the school level. Questions 17 and 18 asked open-ended questions focusing on the

positive aspects of professional development offered to them and changes they would like to take

place in their professional learning. Demographic questions (19 and 20) included grade level

taught and years of teaching experience.

Data Collection

Before gathering any data in this study, recruitment letters were emailed to the selected

institution's Department of Research, inviting the institution to participate in the study. These

were then forwarded to the institution's Institutional Review Board (IRB) for approval. Institutions were then asked to access Qualtrics to verify their choice to participate by filling out the consent form (see Appendix B). Institutions were then asked to forward participation emails to their teachers. This email explained the purpose of the study and explained that future and current educational institutions may utilize this information. It also advised in writing that participation in the quantitative descriptive study was completely voluntary. Emails were sent to the teachers from each school and were invited to participate if they met the following criteria: full-time teacher with at least 6 contact hours with students per day and have had professional development experience in their teaching past.

Teachers were assigned a numerical value to ensure the confidentiality of records. The Qualtrics survey invitation was sent via email. The sampling frame (Gall et al., 2007) consisted of a list of e-mail addresses of all certified teachers in each institution that fit the requirements of full time teacher with at least 6 contact hours with students per day, which was obtained from each institution's Technology Department. A second email was sent to invite all non-responders 2 weeks after the initial mailing.

The Qualtrics survey was completed online in the allotted time frame of one calendar month. The responses to the demographic survey, Likert-scale items, and open-ended questions from the survey were collected via Qualtrics utilizing the export tool available to export the data as pdf files. These files were saved on an external USB drive. The data were also entered, by hand, into Microsoft Excel in order to group the demographic data. All data from the demographic as well as Likert-scale items and open-ended questions were then analyzed through the use of frequency distribution to organize and summarize the data for RQ1, RQ2, and RQ3.

Identification of Variables

To focus on the purpose of this research, the variables were identified. The variables are the characteristics of an individual, group, educational system, or the environment that is of interest in the study. These variables can be straightforward and easy to measure or more complex and challenging to measure. For this research, the question is posed as to what constitutes effective professional development for teachers and the influence of these experiences on teacher practice. The first variable that is important to note for this research is the length of teaching time for the teachers questioned. Teachers who have been teaching in the classroom for one or more years were chosen for this study. The length of time a teacher has been in the classroom and has had opportunities for professional development influences teacher practice. Each survey question was grouped into one of three variables, including professional development content and choice, peer interaction during and after professional development, and effects of professional development on practice. Teachers in this study were broken down into six groups, including 1–2 years of experience, 3–5 years of experience, 6–10 years of experience, 11–15 years of experience, 16–20 years of experience and 21 plus years of experience. Grade level taught was also a variable in this research. Teachers in grade levels kindergarten through Grade 8 were chosen for this study. Teachers in this study were broken down into four groups, including Grades K−2, Grade 3−5, Grade 6−8, and other teachers. The grade level taught by a teacher can determine what professional development may be required. Teacher experience and grade level taught were the independent variables for this study. The dependent variable for this research study was the teacher's perception of effective professional development as measured by the researcher created Likert-survey and two open-ended questions.

Data Analysis Procedures

The collected data from the Likert-type surveys were analyzed through descriptive statistics to answer the research questions of what educators perceive constitutes effective professional development based upon teacher awareness, attitudes, and experience, as well as its effect upon student achievement and teacher perception by grade- level and years taught. Teachers were collapsed into groups according to grade level: Grades K−2, Grades 3−5, and Grades 6−8, in order to examine the relationship between grade level and perception of these experiences. Teachers were also collapsed into groups according to years of teaching experience: 1–2 years, 3–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years of teaching experience, in order to determine if there is a relationship between years taught and perception of these experiences.

Descriptive statistics were utilized to provide a simple summary of the sample used for this study (McPherson, 2001). Descriptive statistics involve the summarizing and organizing of data so that it can be easily understood (Nassaji, 2015). The 5-point Likert-type scale used for this study was analyzed in terms of each research question and was presented in text and tables to discuss teacher perception of effective professional development and perceived influences on teacher practice. Teachers' perception of professional development were discussed based on grade level taught as well as years of teaching experience. For the purposes of this study, the mean, median, and mode were used as the measure of central tendency for the dataset of questions 1 through 16 (Creswell, 2003).

Frequencies such as mean, ranges, percentages, based on the individual questions were utilized to determine if there is any difference in the perception of professional development as it pertains to the four subsets of grade-level teachers in the study (Creswell, 2003). Likert-type data

are commonly used to measure attitude, providing a range of responses to a given question or statement (Creswell, 2003). To analyze the responses of the whole sample and to determine the perceptions of the participants based upon grade-level and years of teaching experience, the IBM Statistical Package for the Social Sciences (SPSS) was utilized. For RQ_1, "How do teachers perceive professional development opportunities presented to them?" the mean was utilized to determine perception as well as an analysis of open-ended responses. Open-ended responses were carefully read and analyzed to identify themes. For RQ_2, "Are there differences in teachers' perception of professional development based on years of teaching experience?" and RQ_3, "Are their differences in teachers' perception of professional development based on grade level taught?" the mean was utilized to determine the perception of participants.

In order to determine teacher perceptions of professional development presented to them, responses from the open-ended survey questions were put into an Excel spreadsheet, and a priori and emergent coding strategies were used to determine categories when analyzing the two open-ended survey questions. The answers were then read through and manually coded into themes according to emerging patterns found by the researcher. Themes of professional development choice, student-centered opportunities, outside offerings of professional development, and teacher-driven professional development opportunities were identified from SQ18. Themes of teacher input, frequency, content, and structure of professional development were identified and analyzed from SQ19. The data from these questions were utilized to answer RQ_1.

Missing data is imperative to understand in research (Graham, 2009). Missing values must be addressed in order to ensure accurate inferences are being made. For the purposes of this study, missing values were addressed by creating composites of the items by averaging them together into a new variable. These new variables were then be analyzed through SPSS as

Pairwise deletions (Graham, 2009). Missing values were addressed three times in order to ensure proper analysis.

Limitations and Delimitations of the Research Design

Limitations in research are described by Creswell (1994) as extraneous variables that can influence a study by threatening reliability and validity but are beyond the researcher's control. One such limitation is that the data produced are likely to lack details or depth (Creswell, 1994). Another limitation can be participant drop out or an absence of reliability and validity data for survey measures (Creswell, 1994). The quantitative research method involves a structured questionnaire with closed-ended questions, which can lead to limited outcomes (Creswell, 1994).

Another limitation of this study is that the design only focused on early childhood, elementary, and middle school teachers. As such, it may not be generalizable to high school teachers. Second, a limitation of this study may be the small number of participants, and the few number of individual schools asked to participate. It is optimistic to believe that a study involving a larger sample would yield similar results. A third limitation is the study instrument used to collect data. The use of an instrument utilizing more open-ended opinion questions could yield a clearer view of teacher perception of professional development.

A final limitation of this study is the combination of two existing surveys in order to develop the insturment. The use of the entire Panorama Teacher Survey (Panorama Education, 2015) and the teacher portion of the SAI (National Staff Development Council, 2001) in combination is a limitation in that the reliability and validity of the created survey has not been evaluated even though each has been evaluated separately. The measure of the accuracy and consistency of the compiled research insturment could be a limitation in that it may not be able to rely of the previously established norms.

Delimitations are characteristics that result from specific choices made by the researcher concerning the development of the study (Simon, 2011). Delimitations can restirct questions answered and inferences that can be made from the data collected (Simon, 2011). The initial delimitation of this study is the choice of the problem, as there are many other related issues in education to date that could have been addressed. Another boundary for the research is the researchers' decision to focus on the small number of institutions chosen. The delimitation created by the sample size was avoidable by choosing to utilize more schools in the sample. Another limitation of this study is that the results of this study could only be generalizable to educators who teach kindergarten through eighth grade in a city in the southwest. A final delimitation to the study is the use of an online survey as opposed to utilizing interviews to obtain teacher perception. It is expected that the use of interviews could bring a much richer understanding of teacher perception by allowing for direct contact with participants, but the researcher's choice to keep the survey anonymous is a definite delimitation.

Internal and External Validity

The data were collected from multiple sources, five educational institutions that cater to kindergarten through eighth grade. The Likert-type survey is a combination of two separate surveys, The Panorama Teacher Survey (Panorama Education, 2015) and the Standards Assessment Inventory (National Staff Development Council, 2001). Utilizing Qualtrics helped to eliminate human error in data collection as well as exclude the possibility of loss of survey forms, thus making the instrument valid and reliable.

The Panorama Teacher Survey, as well as the Standards Assessment Inventory, have both demonstrated good content validity and are reliable and published surveys. Each survey utilized expert advice on the clarity and relevance of the characteristics of each question (National Staff

Development Council, 2001; Panorama Education, 2015). The Panorama Teacher Survey

utilized pilot samples within the U.S. to establish reliability. The Panorama Student Survey,

which is similar to the Panorama Teacher Survey in questioning and content, determined

convergent/discriminant validity through the use of several statistical and correlational tests

(Panorama Education, 2015). The publishers of this survey has conducted two large-scale pilot

administrations, as well as smaller targeted studies, and have found that the survey rates high in

its levels of reliability and demonstrates strong evidence of validity with a coefficient alpha for

every scale of .70 or higher on the survey scale (DeVillis, 2003; Panorama Education, 2015).

The Standards Assessment Inventory was developed to measure the alignment of an

institution's professional learning with the Standards for Professional Learning (Learning

Forward, 2011). The publishers of The Standards Assessment Inventory conducted a large scale

psychometric study to evaluate the reliability and validity of this survey. Instrument reliability

has been established through pilot studies that show consistent and high results through

participating educators from 121 diverse schools (Learning Forward, 2011). The validity was

established through an expert Cronbach's alpha review, and through the use of a factor analysis

of over 400 primary schools, construct validity was determined with the Cronbach's alpha

reported as .992 and the variance 79.1% (Vaden-Kiernan et al., 2009).

Creswell (2003) stated that validity is to determined when a meaningful and justifiable

inference can be drawn from scores on an instrument. Internal validity can be threatened by

history, maturation, testing, instrumentation, selection biases, among others (Vogt, Gardner, &

Haeffele, 2012). For this study, it was taken into consideration that selection bias may affect the

outcomes and therefore, an email was sent to the chosen institutions for participation and it was

made clear that participation was voluntary. Selection bias may have tampered the outcome in

that the researcher was a member of the staff at the time of the project and was the professional development coordinator for one of the school districts during the time the survey was completed. Instrumentation could be a threat to internal validity in that the survey items were taken from two separate survey instruments and combined for the document. However, the survey questions were taken from two instruments that were not changed from the original items that were tested for reliability and validity. The combination of the two survey's may affect response patterns and therefore it is unknown if the validity and reliability have been affected by the combination of these two surveys. This is considered a limitation to the study.

Expected Findings

Student achievement gaps concern educators at all levels. The threats these gaps pose to education quality and equity are essential to focus on, but there is an equally threatening gap in education with consequences just as serious that are largely ignored. This is the one between educator beliefs about the characteristics of sufficient professional development gap, and the evidence research has shown to validate those beliefs (Whitworth & Chiu, 2015). In order to evaluate the impact of professional development, it is first necessary to evaluate the mechanisms by which professional development involvement can impact teachers, students, and schools (Ratts et al., 2015). Based on a review of the literature themes and previous studies specifically focused on professional development and student achievement, an expectation is that little continuity exists among professional development programs offered or mandated and teacher perception that increases teacher practice and student academic performance. Further the expectation that educators from different grade levels and differing years of experience have a perception of different needs for professional development presented to them are present.

Ethical Issues

According to the IRB standards for conducting research, the social sciences lists five general principles: beneficence and non-maleficence, fidelity and responsibility, integrity, justice, and respect for people's rights and dignity. In order to protect participants of this study as well as follow the IRB standards, the researcher, first did not engage in any deception throughout the course of the study. Second, the researcher minimized shared experiences that may lead the participants. Third, the researcher did not reveal the names or identities of participants or schools in which they are employed. Fourth, the researcher stored all hard data in a locked cabinet and destroyed such data after completion of analysis. Fifth, the researcherstored all electronic data on a computer requiring password access. Sixth, the researcher received approval through the Human Subjects IRB. In order to receive IRB approval the researcher sent the Research Description Form to the appropriate office. The reseacher thn completed the human subjects training followed by submitting the IRB Application to the appropriate office. Once these requirements were completed the information was sent to the district office of participating schools A, B, and C to conduct the study (included and labeled appropriately in the Appendix B). Additionally, invitations were sent to all subjects to participate, and principal consent forms assured their protection, in order to participate (see Appendix C). Further protection of participants was assured by the care taken throughout the teacher participant process. Identities remained confidential throughout the study, and all data were downloaded from Qualtrics and stored on external drive to be retained for a minimum of 3 years.

Teachers' confidentiality was respected at all times, and all information provided remained confidential. During the data analysis phase, participant privacy was maintained. Teacher names were not included in this study. Participants were coded by letter, thus

eliminating the use of personal information. This study posed minimal risks to all participants and potentially benefits the field of education, especially for elementary and intermediate schools.

Chapter 3 Summary

The purpose of this study was to explore teachers' perceptions of professional development presented to them and to understand if there was a difference in perception between educators years of experience or grade level taught. This chapter listed the research questions and procedural methods that were used throughout the study. This chapter covered the purpose and research design of the study; the research population and sampling method. The instrumentation and data collection methods were listed. Identification of attributes, terms relevant to this study, were defined. The data analysis procedures the limitations of the research design, as well as the validation, credibility, and dependability of this study, were discussed. The research was a quantitative descriptive study addressing teachers' view of professional development opportunities and perceived influence on practice, as well as perception based on grade level taught and years of experience. This study explored the view of educators' professional development experiences and their perceived effect on teacher practice. It was the intent of the researcher by conducting a quantitative descriptive research study to gain insight into the view of educators in order to add to the body of research on professional development.

Introduction

The purpose of this quantitative descriptive study was to examine the experiences and attitudes of educators concerning professional development and its influence on teacher practice. The study provided information on teachers' perceptions of professional development offered to them in order to understand whether the perceptions of these opportunities are relevant and useful to teacher practice as well as the differences in perceptions of teachers at different grade levels and years of teaching experience. To determine teachers' perception of professional development, descriptive data were collected. The teacher sample consisted of educators in kindergarten through eighth-grade classrooms in the southwest area. A purposive sampling method was used to choose the teachers based on experience and grade level taught.

This researcher utilized a Likert-type questionnaire survey and two open-ended questions developed by combining the Panorama Teacher Survey (Panorama Education, 2015) and the Standards Assessment Inventory (National Staff Development Council, 2001). A combination of these surveys made up the research tool by utilizing questions one through seven from the Panorama Teacher Survey (Panorama Education, 2015) and the remaining questions from the Standards Assessment Inventory (National Staff Development Council, 2001). Two questions from the Standards Assessment Inventory are open-ended, and the two final questions on the survey were control questions of demographics. Participants engaged in a 10–15-minute survey to assess their perception of the professional development opportunities that they have been either required to attend or have chosen for their learning. The survey also included two personal response questions that asked teachers to discuss positive aspects of professional development and what they would change about professional development opportunities at their school.

The Likert-type questionnaires were analyzed through descriptive statistics to answer RQ1 as to what educators perceive constitutes active professional development presented to them. The researcher analyzed each open-ended question answers for RQ1. The open-ended questions were carefully read and analyzed to identify themes. The Likert-type questionnaires were then analyzed again using the data as analyzed through the grade level taught categories and then again through the years of teaching experience to examine the relationship between the groups and the perception of professional development experiences. This chapter provided a summary of the research questions, a description of the sample utilized for the research, research methodology, and analysis, and finally, a summary of the results.

Findings from this study provided insight regarding teacher perceptions of professional development presented to them based on years of teaching experience as well as grade level taught. The main purpose for this research study was to discover teacher perception of professional development presented to them and the perceived effectiveness of professional development opportunities they have been required to attend.

Research Questions

This study was guided by the following three research questions:

RQ_1. How do teachers perceive professional development opportunities presented to them?

RQ_2. Are there differences in teachers' perceptions of professional development presented to them based on years of teaching experience?

RQ_3. Are there differences in teachers' perceptions of professional development presented to them based on grade level taught?

Description of the Sample

The target population consisted of classroom teachers in the southwest U.S. in Grades K−8, totaling 124 participants. The surveys included Likert-type questions as well as personal response questions that asked teachers their perception of professional development that they have completed in the past. The teacher sample was made up of educators in kindergarten through eighth-grade classrooms from both private and public schools (see Table 2).

Demographic analysis of the sample resulted in a sample that spans teaching careers from 1 year to 20 years. The data reflected teachers' years of experience broken down into six groups: 1–2 years, 3–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years of experience (see Table 3). Teachers with the smallest amount of years of experience were the group of teachers that reported teaching 1−2 years with only seven teachers (5.75%) in this group. The group of teachers reporting that they had been teaching 11–15 years was the next with 15 participants (12.30%) in this group. Next, teachers with 3–5 years of experience included 21 participants (17.20%). The next group included teachers reporting teaching 16–20 years with 24 participants (19.70%). The next group of teachers in size was 25 teachers reporting 6–10 years of teaching experience (20.50%). The educator group with the most participants in the study was teachers reporting 21+ years of teaching experience with 32 teachers (25.80%) in this group.

The data were recorded for descriptive statistics to reflect teachers' grade-level taught as well and were broken down into four groups: Grades K−2, Grades 3−5, Grades 6−8, and other (see Table 2). Of the 124 teachers, the majority came from the Grades 3−5 with 37 participants (29.84%), and Grades 6−8 with 36 participants (29.03%). The group labeled other was next with 30 participants (24.19%). The smallest group with four participants (17.13%) came from Grades K−2 (see Table 2).

Table 2

Grade Level Totals

Grade Level Taught	*n*	%
Grades K–2	4	17.13%
Grades 3–5	37	29.84%
Grades 6–8	36	29.03%
Other	30	24.19%
Totals	124	100.00%

Table 3

Teaching Experience Totals

Years Taught	*n*	%
1–2 Years	7	5.70%
3–5 years	21	17.20%
6–10 years	25	20.50%
11–15 years	15	12.30%
16–20 years	24	19.70%
20+ years	32	25.80%
Totals	124	100.00%

Research Methodology and Analysis

For this study, the researcher utilized a quantitative descriptive survey method to explore teachers' perceptions of professional development and then again based on grade level taught as well as years of teaching experience. To determine teachers' perceptions, the researcher used a survey with a five-point Likert-type scale ranging from never to always. The survey included two open-ended questions as well as two demographic questions. Each of the teacher participants completed the online Qualtrics survey. The IBM Statistical Package for the Social Sciences (SPSS) enabled the researcher to analyze the responses of the participants on all the surveys. Each of the open-ended questions was exported to an Excel spreadsheet and analyzed to

determine themes and make conclusions. RQ1 was analyzed through the use of mean and standard deviation. RQ1 was also analyzed through the use of the two open-ended questions by reviewing responses manually coded them by emerging themes. RQ2 and RQ3 were analyzed by utilizing the mean of the responses.

Summary of the Results

The study began during the final semester of the school year, allowing participants to have completed several professional development opportunities before completing the survey. Each survey question was considered from a holistic perspective, and then each question was grouped into one of three variables, including professional development content and choice, peer interaction during and after professional development, and effects of professional development on practice. The responses were broken down into groupings that focus on the length of teaching time as well as grade level taught for the teachers questioned. Teachers who have been teaching in the classroom for one or more years were chosen for this study.

The data were downloaded from the Qualtrics website into the IBM-SPSS version 25 file. The data were examined, and 15 partially completed surveys were removed. In total, 124 surveys were utilized in the analysis. There were three potential participants that did not agree to participate and were, therefore, not included in the evaluation. Each question answered was sorted by three variables, and an Excel sheet was created for each group, and comparisons were made. During data analysis, Likert scale data for each question measuring a specific dependent variable was summarized using the median of all items for research questions 2, and 3. A Data Management Plan shown in Table 4 summarizes the data analysis.

Table 4

Data Management

Research Question	Measure(s)	Analysis Method
How do teachers perceive professional development opportunities presented to them?	Survey Items: All items 1–16 plus written responses.	*Descriptive Statistics *Open-ended question analysis
What are the teachers' perception of professional development opportunities presented to them based on years of teaching experience?	Survey Items: All items 1–16.	*Descriptive Statistics
What are teachers' perception of professional development opportunities presented to them based on grade level taught?	Survey Items: All items 1–16.	*Descriptive Statistics

RQ1 was analyzed utilizing descriptive statistics utilizing mean. This analysis also included an analysis of open-ended questions. SQ18 and SQ19 responses were exported into an Excel spreadsheet and manually coded by emerging themes. The themes of professional development choice, outside offerings, and opportunities to connect to colleagues emerged while analyzing SQ18. The themes of teacher input, content, structure, and frequency of professional development opportunities emerged while analyzing SQ19.

Descriptive results for each survey question were sorted by the indicated variables and include the percentage of response, mean, and standard deviation (see Appendix C). The number of participants who responded with "frequently" and "always" to the questions were combined into one group to evaluate the surveys. A quantitative descriptive study met the needs of the research for this topic. Descriptive studies have been discussed as especially useful to describe or

explain relationships among phenomena, situations, and events as they occur (Thyer, 2001). This research design allowed for an in-depth understanding of teacher attitude toward professional development opportunities afforded them.

The responses evaluated under the variable content and choice indicate that only 28 or 34.6% of teachers feel that professional development helps them explore new ideas in their classroom. Of the teachers surveyed, 32 (39.6%) also feel that the professional development opportunities available to them are valuable. Twenty-eight of the teachers (36.7%) feel that the professional development opportunities offered them model in-class instruction allowing for teacher practice. Twenty-one of the teachers (26.7%) reported the ability to choose the types of professional development they attend. Twenty-five (33.1%) of the teachers surveyed believe that professional development opportunities presented to them are relevant to the content they teach. Thirty-two (38.9%) of the teachers feel that they have input into individualizing their own professional development, and 34 (41.7%) feel they have opportunities to practices skills gained during professional development opportunities. 10 (20.9%) teachers report designing evaluations of professional development activities before the event or program.

The variable of student effect found that in regards to utilizing students' classroom performance, 14 (23.5%) teachers agree that they use this information to assess their own professional development experiences. Fifteen (27.2%) teachers surveyed feel that the professional development offered helps them to learn about effective student assessment techniques. Sixty-two (54.3%) of the teachers feel that their schools structure time for teachers to work together to enhance student learning. Forty-six (40%) of teachers feel that their school makes decisions about professional development based on research that shows evidence of improved student performance.

While reviewing the data in the variable of peer interaction, 66% of the teachers surveyed feel that their colleagues' ideas help improve their teaching. 53.50% of the surveys indicated that teachers feel they learn about their profession from leaders at their campus. Again, 76 (68.7%) of the educators surveyed feel that their school has been supportive of their growth as a teacher. Thirty-three (48.7%) of the teachers surveyed felt that their fellow teachers, trainers, facilitators, and consultants are available to help implement new instructional practices.

Detailed Analysis

Research question 1. The first research question of the study sought to determine teachers' perceptions of professional development opportunities presented to them. For this research question, years of teaching experience and grade taught were excluded from consideration when compiling and analyzing the responses. Determining teacher perceptions required a comparison of survey questions answered, and descriptive statistics were used to evaluate the data. A review of the open-ended questions included in the survey and common ideas were noted and utilized in the analysis (see Appendix C).

When asked if they were able to explore new ideas through professional development opportunities, 29 (32.6%) teachers indicated that they had this experience. The participants overall felt that they had little ability to choose professional development they attend with 21 (26%) reporting that they can choose their own professional development. Of the teachers surveyed, 28 (36.7%) of the teachers revealed that the professional development that they participate in modeled their own classroom instruction when they did attend mandated trainings. Findings indicated that 32 (16.6%) of the teachers felt that they have little input into the choice of content and feel that most of what they attend as professional development is a one-off training and is not followed up on or revisited.

When analyzing open-ended SQ18, data shows that a majority of teachers felt that teacher-driven opportunities, as well as choice, are a positive aspect of the current offerings of professional development in their institutions (see Table 5). One teacher indicated that the positive experiences at their school with professional development was due, in part, to teacher to teacher professional development. Another participant commented:

> We have been having a teacher to teacher professional development every week, and I found that to be very beneficial to my growth. Teachers get to choose what they present on, and every teacher can personalize with the presenter since he/she is a classroom teacher within our building. I have appreciated the opportunity to learn from my fellow employees and learn from what works in their classrooms.

Another participant stated:

> My school offers a great deal of teacher choices for professional development. They trust and encourage us to learn more in areas where we feel we need to grow. Additionally, our school also has a vision and wants each of us to learn more about that topic in order to meet a campus goal based on student data.

Another educator stated, "Learning from other teachers who have taught longer than I have, or who have different ideas on how to teach a topic or materials to use," is a positive aspect of current professional development in place. In agreement, another participant conveyed, "learning from other teachers who have taught longer than I have, or who have different ideas on how to teach a topic or materials to use is a positive aspect of our ProD." Another teacher stated:

> Teachers are encouraged to attend ProD outside the school environment, and opportunities are frequently presented to do so, Zoo, and Museum of Natural Science. I

enjoyed the opportunity to visit other classrooms (classes not in session) to get ideas to

use on my own.

Teachers reported that the ability to choose and utilize professional development opportunities

that were helpful to them in smaller numbers than expected but there were positive reactions to

the questions.

SQ18 also revealed that teachers find professional development useful if they are given a

choice. One respondent stated, "My school allows me the freedom to pursue what I am

passionate about and the opportunity to share what I have learned with the staff," when

describing the positive aspects of professional development. Also, a respondent stated

My school offers a great deal of teacher choices for professional development. They trust

and encourage us to learn more in areas where we feel we need to grow. Additionally, our

school also has a vision and wants each of us to learn more about that topic in order to

meet a campus goal based on student data.

Another participant stated:

I like that [professional development opportunities] are often set for evenings or

weekends to allow teachers to attend without missing class. Most are hosted by other

teachers in the district with actual experience with the students we teach.

One participant stated:

We have a reading specialist who comes in once a month and leads staff development in

new literacy techniques. Each month, she gives us specific ideas and asks us to use them

and then checks in the next month.

Table 5

Survey Question 18 Sample Response–Choice in Professional Development

Theme	Sample Response
Choice in Professional development	Freedom to pursue what I'm passionate about and the opportunities to share what I've learned with the staff
	We have a reading specialist who comes in once a month and leads staff development in new literacy techniques. Each month, she gives us specific ideas and asks us to use them and then checks in the next month.
	My school offers a great deal of teacher choices for professional development. They trust and encourage us to learn more in areas where we feel we need to grow. Additionally, our school also has a vision and wants each of us to learn more about that topic in order to meet a campus goal based on student data.
	Variety of choices: online, in person
	I like that they are often set for evenings or weekends to allow teachers to attend without missing class. Most are hosted by other teachers in the district with actual experience with the students we teach.
	Teachers are encouraged to attend ProD outside the school environment, and opportunities are frequently presented to do so - Zoo, and Museum of Natural Science. I enjoyed the opportunity to visit other classrooms (classes not in session) to get ideas to use on my own.

When evaluating the open-ended question SQ18, "What are the most positive aspects of professional development at your school?" the data shows that very few participants felt that professional development has any effect on student achievement. Several respondents stated that professional development helped them with student engagement, while others view the professional development presented to them focuses on student data. One teacher stated that "learning how to use testing data to help students and communicate with parents" is a positive aspect of professional development at their school. Another teacher declared:

The most positive aspect of professional development at my school is that it truly is student centered and student focused. Almost all of the professional development we do is based off of student data or teacher concerns for changing something that deals with students for the better

Table 6

Survey Question 18 Sample Responses–Student Driven Professional Development

Theme	Sample Response
Teacher Driven Professional Development	The most positive aspect of professional development at my school is that it truly is student centered and student focused. Almost all of the professional development we do is based off of student data or teacher concerns for changing something that deals with students for the better. Professional development supports teachers' effort to engage students.
	Learning how to use testing data to help students and communicate with parents

The open-ended questions also revealed that many teachers, almost half of those that answered reported that they would change their professional development to include more teacher input, frequency, content, and structure. SQ19 revealed that many respondents would like to see teacher input take a more significant role in professional development (see Table 7). One respondent stated:

I would like for my school to determine professional development based on teacher input. They do ask for teacher input, but I don't believe the actual development opportunities necessarily reflect the results of those surveys.

Teacher input was also an essential aspect for another teacher who stated:

I would like the opportunity to suggest ProD topics that interest me and would be geared specifically towards my area of instruction. I would like the chance to observe mentor teachers at work to gather ideas and strategies to use in my own classroom. I would like my small group breakout sessions to learn new technology and/or teaching techniques.

Another teacher added:

> I wish I didn't have to sit in all the training that mean absolutely nothing to my job. It is a
> waste of time. I teach special education and when a general education training thinks they
> can tell me how to do my job, they are highly mistaken. They don't know how my kids
> learn. They assume it is the same way their kids learn. I would like to see teachers get to
> work on their subject or specialty. I would also like to see general education teachers
> learn how to teach students that don't fit into the box. I'm finding that the teachers don't
> understand how to work with special education kids.

Additionally, a teacher communicated, "I would like to choose how I develop as a professional and would also like to spend more time in collaboration with my team and other teams to share knowledge, technique, and ideas."

Table 7

Survey Question 19 Sample Responses–Professional Development Teacher Input

Theme	Sample Response
Professional Development Teacher Input	More teacher input about the types and frequency of PD
	I wish I didn't have to sit in all the training that mean absolutely nothing to my job. It is a waste of time. I teach sped and when a general ed training thinks they can tell me how to do my job, they are highly mistaken. They don't know how my kids learn. They assume it is the same way their kids learn. I would like to see teachers get to work on their subject or specialty. I would also like to see general ed teachers learn how to teach students that don't fit into the box. I'm finding that the teachers don't understand how to work with sped kids
	Give us more input on how professional development should be planned and assessed.
	I would like for my school to determine professional development based on teacher input. They do ask for teacher input, but I don't believe the actual development opportunities necessarily reflect the results of those surveys.
	I would like the opportunity to suggest ProD topics that interest me and would be geared specifically towards my area of instruction. I would like the chance to observe mentor teachers at work to gather ideas and strategies to use in my own classroom. I would like my small group breakout sessions to learn new technology and/or teaching techniques.
	I would like to choose how I develop as a professional. I would also like to spend more time in collaboration with my team and other teams to share knowledge, technique, and ideas.

Participants' perceptions of professional development and its effect on student achievement varied. Overall, 109 (75.8%) of the teachers surveyed answered that they do not have a significant amount of professional development that allows them to look at student classroom performance in order to adjust teaching. The data shows that 96 (72.7%) of the teachers feel that they do not have enough opportunities to learn about effective assessment in order to drive instruction based on student improvement. Overall, the responses from SQ19 did not focus on student achievement. Teachers surveyed did not discuss student achievement when focusing on professional development. The responses were focused more on the delivery of opportunities and types of materials covered.

When examining peer interaction during professional development opportunities, overall, teachers felt much stronger about their experiences. Fifty-four of all teachers surveyed reported

that they find their colleagues' ideas helpful during training, and they are able to learn from their peers. Seventy of the teachers indicated that they feel that their school is supportive and feel that they have adequate access to trainers and facilitators after and during the implementation of information learned. Overall, the teachers indicated a positive perception of their interactions with and support of their peers and supervisors.

While responses were overall positive on the Likert-type questions, only a third of participants stated in the open-ended questions that they feel they would like to have more opportunities to learn from their peers (see Table 8). One educator stated, "I would like the chance to observe mentor teachers at work to gather ideas and strategies to use in my own classroom." Another teacher replied, "I would like to choose how I develop as a professional. I would also like to spend more time in collaboration with my team and other teams to share knowledge, technique, and ideas.

Table 8

Survey Question 19 Sample Responses–Professional Development Content

Theme	Sample Response
Professional development Content	More teacher input about the types and frequency of PD I wish I didn't have to sit in all the training that mean absolutely nothing to my job. It is a waste of time. I teach sped and when a general ed training thinks they can tell me how to do my job, they are highly mistaken. They don't know how my kids learn. They assume it is the same way their kids learn. I would like to see teachers get to work on their subject or specialty. I would also like to see general ed teachers learn how to teach students that don't fit into the box. I'm finding that the teachers don't understand how to work with sped kids. I would like for my school to determine professional development based on teacher input. They do ask for teacher input, but I don't believe the actual development opportunities necessarily reflect the results of those survey s Give us more input on how professional development should be planned and assessed. I would like the opportunity to suggest ProD topics that interest me and would be geared specifically towards my area of instruction. I would like the chance to observe mentor teachers at work to gather ideas and strategies to use in my own classroom. I would like my small group breakout sessions to learn new technology and/or teaching techniques. I would like to choose how I develop as a professional. I would also like to spend more time in collaboration with my team and other teams to share knowledge, technique, and ideas.

Research question 2. The second research question in this study was intended to address the differences if any, in the perception of teachers' professional development based on years of teaching. The data were recorded for descriptive statistics to reflect teachers' years of experience. Years of experience was broken down into six groups: 1–2 years, 3–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years of experience (see Table 2). The small majority of teachers 25 (20.5%) reported teaching for a total of 6–10 years, while teachers with 1–2 years of experience was the smallest group with 7 teachers (5.7%).

The mean perception score ($M = .669$, $SD = .235$) was highest for teachers with 1–2 years of teaching experience. The second highest mean perception score ($M = .44$, $SD = .146$) was for teachers with 6–10 years of teaching experience, followed by teachers with 16–20 years of

teaching experience ($M = .437$, $SD = .142$). Next, teachers with 3–5 years of teaching experience ($M = .407$, $SD = .114$) expressed the next perception score. Teachers with 11–15 years of teaching experience showed the next to the lowest mean perception score ($M = .402$, $SD = .148$). The mean perception score was the lowest for teachers with 21+ years of teaching experience ($M = .31$, $SD = .137$).

Descriptive results for each survey question were sorted by years of teaching experience and indicated themes and are represented by a percentage of response in Table 9. Responses of frequently and always from the scale were combined and utilized to evaluate the surveys. The purpose of the second research question was to uncover if there is a difference in perception of professional development based on years of teaching. Data revealed that teachers with fewer years of teaching report a higher instance of positive experiences with professional development.

Table 9

Percentages of Teachers' Responses Based on Years of Experience

Survey Question	1–2 Years 7	3–5 Years 21	6–10 Years 25	11–15 Years 15	16–20 Years 24	21+ Years 30
How often do your professional development opportunities help you explore new ideas?	71.50%	42.10%	50%	46.70%	40%	26.90%
At your school, how valuable are the available professional development opportunities?	71.50%	47.40%	41.60%	33.30%	58%	50%
The professional development that I participate in models instructional strategies that I will use in my classroom.	71.50%	47.40%	45.80%	53.40%	54.50%	23%
At our school, teacher can choose the types of professional development they want to receive.	42.90%	31.60%	33.30%	40%	27.30%	26.90%
Are the professional development opportunities presented to you on campus relevant to the content you teach?	57.20%	36.90%	45.80%	26.70%	36.30%	42.30%

(continued)

Survey Question	1–2 Years	3–5 Years	6–10 Years	11–15 Years	16–20 Years	21+ years
Do you have input into individualizing your own professional development opportunities?	28.60%	52.60%	45.80%	53.40%	45.50%	50%
We have opportunities to practice new skills gained during staff development.	71.50%	57.90%	62.50%	46.70%	59.10%	26.90%
We design evaluations of our professional development activities prior to the professional development program or set of activities.	28.60%	26.30%	25.00%	20%	27.20%	7.60%
Student Effect						
We use students' classroom performance to assess the success of teachers' professional development experiences.	28.60%	36.80%	16.70%	20%	31.80%	15.30%
Our school's professional development helps me learn about effective student assessment techniques.	71.50%	42.10%	25.00%	20%	22.70%	16%
My school structures time for teachers to work together to enhance student learning.	100%	42.10%	65.20%	33.40%	59.10%	50%
We make decisions about professional development based on research that shows evidence of improved student performance.	71.40%	36.90%	37.50%	40.00%	36.30%	42.30%
Peer Interaction						
Are your colleagues' ideas helpful for improving your teaching?	85.70%	73.70%	62.50%	60%	68.10%	61.50%
Do you feel you learn about your profession from the leaders at your school?	100%	47.30%	62.50%	50%	63.60%	34.60%
Do you feel that your school has been supportive of your growth as a teacher?	71.50%	68.50%	70.80%	73.30%	72.70%	61.60%
Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.	100%	36.80%	50%	40%	59.10%	38.50%

The data show that seven (71.5%) teachers with one to two years of teaching experience find that professional development opportunities help them explore new ideas and are highly valuable to their teaching. This group also had seven teachers (71.5%) with one to two years of teaching experience report a high positive response to having opportunities that model classroom instruction and opportunities that are relevant to the content taught in the classroom (four teachers, 57.2%). Teachers with less teaching experience report being able to practice new skills gained during staff development (5 teachers, 71.5%). However, the teaching group of 6–10 also reported a high percentage of responses in the affirmative (12 teachers, 50%) for helping to explore new ideas and eight teachers (53.04%) responding that the opportunities offered to them model instructional strategies used in the classroom. Teachers with less experience indicate that they have input into individualizing their own professional development opportunities and have opportunities to practice new skills gained during staff development. However, 13, half of the teachers with 21+ years of experience indicate that they have input into individualizing their own professional development opportunities. Interestingly, all subgroups of teachers approximately 24 report low percentages of positive experiences with designing evaluations of professional development activities before the experience.

Survey questions associated with student effect, again show that teachers with fewer years of teaching show a positive perception of professional development. More than half (five of the seven) of the participants in the 1–2 years of experience group found that professional development opportunities help them learn about effective assessment techniques. All of the teachers with 1–2 years of experience (100%) and 15 teachers with 21+ years of experience (50%) found that their school structures time for them to work together to enhance student learning. Again, teachers with the least amount of teaching (5 teachers, 71.4%) experience

reported being able to make decisions about professional development based on research that shows evidence of improved student performance, while each other group reported low percentages of agreement with this statement.

Survey questions associated with peer interaction show a positive perception of professional development with teachers of all teaching experience. The question responses associated with colleagues' ideas as being helpful for improving teaching practice were above 60% as positive for each teaching group with the teachers with 1–2 years of experience reporting six of the seven teachers (85.7%) responding with a positive perception. Teachers with 1–2 years all (seven) reported that they learn about their profession from their leaders, along with teachers with 6–10 (15, 62.5%) and 16–20 (14, 63.6%) years of experience. Teachers of all groups show a positive perception of their school being supportive of their growth as a teacher with all subgroups reporting over 60% positive responses. Eleven of the 15 teachers with 11–15 years of experience reported the highest percentage (73.3%). All seven of the teachers with 1–2 years of experience responded positively to the statement that fellow teachers, trainers, and consultants are available to help implement new instructional practices. Teachers with 6–10 years (14 teachers) and 16–20 years (12 teachers) of experience report half of responses as positive to this question as well.

Overall, teachers with fewer years of teaching have more positive experiences with professional development, as reported in the survey. This group has a much higher positive response to professional development choice and content, and almost every teacher surveyed in this group reported professional development as valuable and useful in their practice as well as having the opportunity to practice new learning at their schools. Teachers in this same group reported a high positive response to professional development, helping to drive student

assessment techniques as well as being able to work together to enhance student learning. All of the groups surveyed reported positive responses in relation to peer interaction, with a majority of all teachers responding positively to their colleagues' ideas as being helpful, learning about their profession from peers, and feeling supported by their school.

Research question 3. The third research question in this study was intended to address the differences if any, in the perception of teachers' professional development based on grade level taught. The data were recorded for descriptive statistics to reflect teachers' grade level taught. Grade levels were broken down into four groups: Grades K−2, Grades 3−5, Grades 6−8, and other (see Table 2). Of the 124 teachers, the majority come from the Grade 3–5 (37), Grade 6–8 (30) groups. The smallest group at 17.13% (20) came from Grades K−2. Descriptive results for each survey question were sorted by grade level taught and indicated themes and are represented by the percentage of response (see Table 10). Responses of frequently and always from the scale were utilized to evaluate the surveys. The purpose of the third research question was to uncover if there is a difference in perception of professional development based on grade level taught. Data revealed that teachers in Grades 3–5 report a higher instance of positive experiences with professional development.

When viewing the data through the lens of grade level taught, the mean perception score ($M = .508$, $SD = .129$) was highest for teachers in Grades 3–5. The second highest mean perception score ($M = .434$, $SD = .118$) was for teachers in Grades 6–8. Next, teachers in grade levels Grades K–2 showed the next to the lowest mean perception score ($M = .34$, $SD = .162$). The mean perception score was lowest for teachers in the group of teachers in the other grouping ($M = .323$, $SD = .1409$).

Table 10

Percentages of Teachers' Responses Based on Grade Level Taught

Content/Choice Survey Question	Grades K–2 20	Grades 3–5 37	Grades 6–8 36	Other 30
How often do your professional development opportunities help you explore new ideas?	36.80%	42%	45.40%	40.70%
At your school, how valuable are the available professional development opportunities?	26.40%	52.80%	54.50%	48.10%
The professional development that I participate in models instructional strategies that I will use in my classroom.	42.10%	47%	42.40%	44.40%
At our school, teacher can choose the types of professional development they want to receive.	47.40%	39%	39.40%	22.20%
Are the professional development opportunities presented to you on campus relevant to the content you teach?	84.20%	58.30%	39.40%	29.60%
Do you have input into individualizing your own professional development opportunities?	42.10%	53%	54.60%	33.30%
We have opportunities to practice new skills gained during staff development.	26.30%	67%	54.60%	40.70%
We design evaluations of our professional development activities prior to the professional development program or set of activities.	10.50%	31%	21.20%	14.80%
Student Effect Survey Question	Grade K–2	Grade 3–5	Grade 6–8	Other
We use students' classroom performance to assess the success of teachers' professional development experiences.	21.10%	38.50%	27.30%	11.10%
Our school's professional development helps me learn about effective student assessment techniques.	26.30%	36.00%	33.40%	7.60%
My school structures time for teachers to work together to enhance student learning.	36.80%	66.70%	56.30%	48.10%
We make decisions about professional development based on research that shows evidence of improved student performance.	31.60%	47.20%	45.40%	29.60%
Peer Interaction Survey Question	Grade K–2	Grade 3–5	Grade 6–8	Other
Are your colleagues' ideas helpful for improving your teaching?	84.20%	66.70%	60.70%	59.30%
Do you feel you learn about your profession from the leaders at your school?	44.50%	58.30%	60.60%	44.40%
Do you feel that your school has been supportive of your growth as a teacher?	57.90%	75.00%	72.70%	62.90%
Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.	47.40%	56.00%	51.60%	37.00%

The data show in the survey questions associated with content and choice that almost half of the teachers in Grades 6–8 feel that professional development opportunities help them explore new ideas. A majority of teachers in Grades 3–5, 19 teachers (52.8%), and teachers in Grades 6–8, 18 teachers (54.5%) responded positively that professional development opportunities are valuable. Overall, each grade level grouping responded positively, only 40% of the time when asked if the professional development that they participate in models instructional strategies they will use in the classroom. 47.4% (4) of teachers in Grades K–2 responded that they are able to choose the types of professional development they attend. Almost all of the teachers (4) in Grades K–2 reported professional development presented to them as being relevant to the content they teacher while half (21) of the teachers in Grades 3–5 responded positively also. Half (18) of the teachers in Grades 6–8 feel that they have input into individualizing professional development and the ability to practice new skills gained during staff development. However, 67% of teachers (24) in Grades 3–5 feel they have opportunities to practice new skills gained during staff development. Overall, all of the teachers responded negatively to the statement that they design evaluations of professional development activities prior to the program, with only 31% of teachers (11) in Grades 3–5 responding positively.

Survey questions associated with student effect, overall show teachers in Grades 3–5 responding more positively than fellow teachers. While numbers are low, teachers in Grades 3–5 (11 teachers) responded positively to the survey statement that they do use students' classroom performance to assess the success of professional development, and 36% or 13 teachers report that their school's professional development helps them learn about effective student assessment techniques. While both of these categories show a low percentage of positive responses, they are both considerably higher than other grade levels. Over half of the teachers in Grades 3–5 (24)

and Grades 6–8 (18) feel positively that their school structures time for teachers to work together to enhance student learning. Roughly 40% (17) of teachers in Grades 3–5 and Grades 6–8 (15) answered positively when presented the statement that they are able to make decisions about professional development based on research that shows evidence of improved student performance.

Survey answers associated with peer interaction had overall higher results across all grade levels included. High percentages of teachers in Grades K–2 (84.2%, 16 teachers), Grades 3–5 (66.7%, 24 teachers), Grades 6–8 (60.70%, 20 teachers) and other (59.3%, 16 teachers) responded positively to the question related to colleagues' ideas as being helpful for improving teaching. A majority of teachers in Grades 3–5 (27) and Grades 6–8 (24) feel that they learn about their profession from leaders at their school and feel that fellow teachers, trainers, and facilitators are available to help implement new instructional practices. All grade levels had a relatively positive response, over 50% (61), to the question referring to their school being supportive of their growth as a teacher.

Overall, teachers in Grades 3–5 responded with a higher percentage of positive responses across the survey. Teachers in Grades 6–8 also responded with high percentages. Teachers in Grades 3–5 surveyed responded positively to questions about content and choice, showing high percentages in being able to practice new skills and feeling that professional development opportunities are relevant to the content they teach. Teachers in Grades 3–5 also responded positively to questions about student effect. Over half of this group reported that their school structures time for teachers to work together to enhance student learning. The group also had higher percentages of a positive outcome in response to using student classroom performance to assess professional development experiences as well as the fact that their school's professional

development helps teachers learn about effective student assessment techniques, although percentages were somewhat low at 38%. Teachers in Grades K–2 and the group "others" scored relatively low in each category surveyed.

Chapter 4 Summary

The design of this study was to determine teachers' perceptions of professional development presented to them, and if there is a difference between these perceptions based on years taught and grade level taught. A total of 124 elementary and middle school teachers from southwestern U.S., participated in the study. The study consisted of a survey of 16 Likert-type questions with two open-ended questions. After the survey responses were collected, the utilization of descriptive statics helped to determine differences in perception based on the groups.

Overall, participants' perceptions of professional development showed that a small number of participants feel that professional development helps them in the classroom, allowing them to explore new ideas or are valuable to their craft. A small number reported being able to individualize their learning or to practice skills learned. A small percentage of participants felt that professional development rarely allows them the opportunity to learn about effective student assessment techniques, but the majority of participants reported structured time for teachers to work together to enhance student learning.

Research question two found that teachers with fewer years of teaching reported a more positive perception of professional development opportunities. Data shows that the group with 1–2 years of experience feel that they find professional development valuable and useful and driving student assessment techniques. All of the groups surveyed reported positive responses in

relation to peer interaction, with a majority of all teachers responding positively to their colleagues' feelings supported by their school.

Research question three found that teachers in Grades 3–5 responded with a more positive perception of professional development opportunities. This group showed a positive response to the feeling that professional development opportunities presented to them allow them to practice new skills and are relevant to what they teach. This group relayed that they do have the time to work together to enhance student learning. Teachers in Grades 6–8 also responded with higher percentages throughout the survey. Teachers in Grades K–2 and the group "others" scored relatively low in each category surveyed.

Chapter 5 summarized the research and discussed the results based on content and choice, student effect, and peer interaction. It also discussed the results in relation to literature. Limitations and implications of results for practice will be discussed as well. Chapter 5 also draws conclusions concerning institutional context, and further discussion of results based on current research, implications for practice and limitations.

Chapter 5: Discussion and Conclusion

Introduction

The purpose of this quantitative descriptive research study was to examine teachers'

perceptions of professional development and its perceived influence on practice. As noted in the

literature, approximately $18 billion is spent each year in the U.S. on professional development,

and the typical educator is likely to spend more than 60 hours a year in some professional

development activity (Boston Consulting Group, 2014). The format of most of these

opportunities does not allow for continuity of learning or practice after the session (Beltyukova,

Czerniak, Haney, & Lumpe, 2011).

Research has shown that administrators and educators in our nation's schools and

districts are continuously focusing on data and results more now than in the past because of new

educational reform present (Darling-Hammond et al., 2017). As administrators and educators

look at this reform, professional development is coming into question as a means to have a real

effect on student achievement. It is becoming essential for districts to build practical approaches

and focus on teacher needs as they develop plans for each school year (Boston Consulting

Group, 2014). Ongoing, high-quality professional development designed to enhance teacher's

pedagogical skills, along with the ability to apply these new skills, are essential to ensure teacher

expertise as well as student success (Douglas, Carter, Smith, & Killins, 2015). Educators are

concerned with the relevance, the level of expertise of presenters, the ability to sustain the

material over time, as well as the idea that content presentation is done by a presenter that shares

the same experiences and needs (Kennedy, 2016).

This chapter included a discussion of the results of the quantitative descriptive study of

teachers' perceptions of professional development and its effect on practice. It included a

discussion of the results and their relation to the literature, limitations, implication of the results for practice, policy, and theory, recommendations for further research. Data from this study are also synthesized with current research to enhance the understanding of teachers' perceptions of professional development and its effect on practice. This chapter also focused on potential opportunities for future research to obtain data on the subject of teacher professional development.

This chapter presents a summary of the quantitative descriptive study of the responses of 124 educators and their perception of professional development offered to them and taken by them. A discussion of the results and their relation to the literature, limitations, and implications of the results for practice, policy, and theory are also included. This chapter concludes with recommendations for further research regarding teachers' view of professional development and perceived influence on practice.

Summary of the Results

The purpose of this quantitative descriptive research study was to explore teacher perceptions of existing professional development opportunities afforded to them as well as the effect these opportunities have on their practice. This study also focused on these perceptions in relation to grade-level taught as well as years of teaching experience. Three research questions guided this research:

RQ$_1$. How do teachers perceive professional development opportunities presented to them?

RQ$_2$. Are there differences in teachers' perceptions of professional development based on years of teaching experience?

RQ3. Are there differences in teachers' perceptions of professional development based on

      grade level taught?

Researchers, in the last several years, have indicated that the nation's reform agenda is making it a priority to focus on and rethinking professional development in order to affect teacher practice and student learning (Barlow et al., 2014; Pharis et al., 2019). Teachers across the nation are required to participate in professional development by school systems as well as to grow in their personal profession (Kisa & Correnti, 2015). This high stakes, standards-based education, is making it increasingly more apparent to school systems that teachers must continuously develop their craft to ensure that they have a working understanding of the pedagogy and subject content which they are responsible for (Slavin, 2018). Districts across the nation require professional development in order to improve student scores as well as teacher ability to deliver curriculum and lead students to success. As school districts center on student performance in the face of high-stakes testing, many schools are viewing data as they begin to plan teacher training in order to improve practice (Slavin, 2018) The desire to understand teachers' perceptions of professional development offered to them in order to understand whether the opportunities were perceived as relevant and useful to teacher practice prompted the research questions that framed this study.

A quantitative descriptive research design was used for this study. This type of research model was utilized in order to describe what teacher's perceptions of professional development is and therefore survey tools were utilized to gather data (Maxwell, 2013). Participants were chosen for the study based on the criteria that they taught grade levels Kindergarten through eighth grade as well as special pull out teachers in the chosen schools. The data were collected from five educational institutions that cater to kindergarten through eighth grade. The

participants utilized a Likert-type survey that was a combination of two separate surveys, The Panorama Teacher Survey (Panorama Education, 2015) and the Standards Assessment Inventory (National Staff Development Council, 2001), which included questions about their perceptions of the professional development they have attended and their experiences. Data were collected and analyzed, focusing on the variables presented, which included: professional development content and choice, effects of professional development on practice, and peer interaction during and after professional development opportunities.

Research question 1. Survey answers were collected and analyzed, focusing on the overall perception of professional development. Appendix C provided data depicting the percentages of teachers' responses, the mean for survey questions. When evaluating the data based on the variable of professional development content and choice, only 32.6% of teachers stated that they had the ability to explore new ideas when attending required professional development. Of the teachers surveyed, a small amount reported they had the ability to choose their own professional development opportunities, and only 36.7% felt that the professional development that they attend models their own classroom instruction. The data indicates that only very few teachers surveyed felt that they have little input into the choice of content.

When viewing data associated with participants' perceptions of professional development and its effect on student achievement, over half of teachers surveyed responded that they do not have a significant amount of opportunities that allow them to review student achievement in order to adjust teaching practices and another large amount feel that they do not have enough opportunities that help them learn about effective assessment in order to drive instruction based on student improvement. Educators seem to feel that the opportunities presented to them do not prepare them to change or affect student achievement.

The data collected in association with questions about peer interaction during professional development opportunities, teachers felt much stronger about their experiences. Of the 124 participants surveyed, over half indicated that their school is supportive and that they have access to trainers and facilitators after and during the implementation of information learned. This seems to indicate that educators are comfortable with their school setting and feel that they can ask questions and find answers when they are needed. The data also showed that over half of teachers feel that their colleagues' ideas are helpful to them in improving their teaching methods, which seem to indicate that they feel that they are in a supportive environment of continuous learning and support. Half of the teachers surveyed indicated that they learn about their profession from school leaders, which helps build reports as well as a supportive working environment.

When the data were collected and analyzed from open-ended question SQ18, it was found that over half of the teachers who answered felt that teacher-driven opportunities, as well as choice, are a positive aspect of the current offerings of professional development in their institutions. Even more specifically, a respondent indicated that their school succeeds in the offering of professional development due, in part to teacher to teacher experiences where educators can collaborate with others in their specialty. SQ18 also revealed that teachers felt that learning from tenured teachers or those that have had different experiences helps them feel that the professional development offered to them is more useful to their craft.

The evaluation of SQ18 also indicated that teachers find professional development useful if they are given a choice. It was found that teachers are much more likely to feel positive about their experiences if they have the freedom to attend learning opportunities that they find passionate. Many respondents relayed that the school they are in offers teacher choice most of

the time when they are required to attend development opportunities. The idea of professional development that allows teachers to find training that helps them learn more in the areas they feel they need to grow.

Finally, when evaluating the responses from SQ18, it was discovered that teachers did not relate many of their responses to professional development and its effect on student achievement. There were three responses that alluded to student data, student engagement, and student achievement as being a positive aspect of professional development at their school, but there were no other responses that mentioned students at all. The findings from this survey do not show much concern on the part of teacher as to their learning that focuses on students specifically. These data are illustrated in Appendix D.

It was found that many teachers, almost half of those that answered the open-ended questions reported that they would change their professional development to include more varied opportunities and choice. The responses to SQ19 revealed that teachers surveyed would like to see teacher input become a more prevalent structure to professional development. Also, the ability to suggest professional development subject matter was deemed important. Teachers also stated that they would like the ability to direct the way they develop as a teacher by allowing them to spend more time collaborating with other teachers and share information and learn new techniques that they feel they need. Overall, the teacher responses to the two open-ended questions support the finding that most teachers do not feel they are able to explore new ideas in professional development.

Teachers' responses to SQ19 were varied when analyzing the data when referencing the idea of having opportunities to learn from their peers. Teachers overwhelmingly responded that they would like the opportunity to observe other teachers during instruction and spend more time

collaborating with their team members as well as other teams. Surprisingly, the data collected

from SQ19 showed varied responses to the idea of professional development and its effect on

student achievement. There was a pronounced lack of discussion as to the use of professional

development and its focus on student achievement. These data are reflected in Appendix E.

      Research question 2. To draw conclusions about Research Question 2, what are

teachers' perception of professional development opportunities presented to them based on years

of teaching experience, survey answers were again analyzed. Years of experience was broken

down into six groups: 1–2 years, 3–5 years, 6–10 years, 11–15 years, 16–20 years, and 21+ years

of experience (see Table 2). The small majority of teachers (20.5%, 12) reported teaching for a

total of 6–10 years, while teachers with 1–2 years of experience was the smallest group (seven).

      The data show that seven of teachers with fewer years of teaching have a positive

perception of professional development. The opinion of this same group reflects that five feel

that the opportunities they attend model classroom instruction, and four of this group feel they

have had opportunities that are highly valuable to their teaching., five of the teachers with fewer

years of experience, also reported being able to practice new skills gained during staff

development. However, the teaching group of 6–10 years of experience also reported positive

responses, 12 for helping to explore new ideas and eight of responses that indicate that the

opportunities offered to them model instructional strategies used in the classroom. Of the

teachers with 21+ years of teaching experience, 13 indicated that they have input into

individualizing their professional development opportunities. Interestingly, all subgroups of

teachers report low percentages of positive experiences, two teachers with 1–2 years of

experience five teachers with 3–5 years of experience, six teachers with 6–10 years of

experience, three teachers with 11–15 years of experience, six teachers with 16–20 years of

experience, and two teachers with 21+ years of experience, with designing evaluations of

professional development activities prior to the experience

Survey questions associated with student effect, again show that teachers with fewer

years of teaching show a positive perception of professional development. Five of the

participants in the 1–2 years of experience group found that the professional development

opportunities help them learn about effective assessment techniques. Teachers with 1–2 years of

experience (seven) and teachers with 21+ years of experience (13) found that their school

structures time for them to work together to enhance student learning. Again, teachers with the

least amount of teaching (five) experience reported being able to make decisions about

professional development based on research that shows evidence of improved student

performance, while each other group reported low percentages of agreement with this statement

(seven teachers with 3–5 years of experience, nine teachers with 6–10 years of experience, five

teachers with 11–15 years of experience, eight teachers with 16–20 years of experience, and 11

teachers with 21+ years of experience). The data from the survey evaluated by years of teaching

experience is presented in Appendix F.

Research question 3. To analyze Research Question 3, what are teachers' perceptions of

professional development opportunities presented to them based on grade level taught,

participants grade level was analyzed. The data show in the survey questions associated with

content and choice that almost half, 45.4% (15) of the teachers in Grades 6–8 feel that

professional development opportunities help them explore new ideas. A majority of teachers in

Grades 3–5 (52.8%, 19) and Grades 6–8 (54.5%, 18) responded positively that professional

development opportunities are valuable. Overall, each grade level grouping responded positively,

only 40% of the time when asked if the professional development that they participate in models

instructional strategies they will use in the classroom. Of the teachers in Grades K–2, four responded that they could choose the types of professional development they attend. Almost all, 84.2% (four) of the teachers in Grades K–2 reported professional development presented to them as being relevant to the content they teacher while half (58.3%, 21) of the teachers in Grades 3–5 responded positively also. Half (54.6%, 18) of teachers in Grades 6–8 feel that they have input into individualizing professional development and the ability to practice new skills gained during staff development. However, 67% (24) of teachers in Grades 3–5 feel they have opportunities to practice new skills gained during staff development. Overall, the teachers in Grades K–2 (89.5%, 19), Grades 3–5 (69% 26), Grades 6–8 (78.8%, 29) and the group other (85.2%, 26) responded that they rarely have the opportunity to design evaluations of professional development activities prior to the program with 31% (11) of teachers in Grades 3–5 responding that they did have the opportunity to develop evaluations of professional development activities.

Survey questions associated with student effect show that 38.5% (11) of teachers in grades 3–5 responded that they use classroom performance to assess the success of teachers' professional development experiences. While numbers are low at 36% (13), teachers in Grades 3–5 responded positively to the survey statement that students' classroom performance is used to assess the success of professional development and report that their school's professional development helps them learn about effective student assessment techniques. While both of these categories show a low percentage of positive responses, they are both considerably higher than other grade levels. Over half of the teachers in Grades 3–5 (66.7%, 24) and Grades 6–8 (56.3%, 18) feel positively that their school structures time for teachers to work together to enhance student learning. Roughly 47% (17) of teachers in Grades 3–5 and 45.4% (15) of teachers in Grades 6–8 answered positively when presented the statement that they are able to make

decisions about professional development based on research that shows evidence of improved student performance.

Survey answers associated with peer interaction had overall higher results across all grade levels included. High percentages of teachers in Grades K–2 (84.2%, 16), Grades 3–5 (66.7%, 24), Grades 6–8 (60.70%, 20), and other (59.3%, 16) responded positively to the question related to colleagues' ideas as being helpful for improving teaching. A majority of teachers in Grades 3–5 (58.3%, 27) and Grades 6–8 (60.6%, 24) feel that they learn about their profession from leaders at their school and feel that fellow teachers, trainers, and facilitators are available to help implement new instructional practices. All grade levels had a relatively positive response, over 50% (61), to the question referring to their school being supportive of their growth as a teacher. Appendix G displays the results of the data evaluated based on grade level taught.

Discussion of the Results

The purpose of this research was to explore teacher perception of professional development offered to them in their institutions. The study surveyed 124 teachers in grade levels kindergarten through eighth grade as well as special pull out teachers with teaching experience ranging from 1 to 20 years. The quantitative descriptive data showed that educators have varied perceptions of professional development. This section will continue with a discussion of the differences in the perceptions of teachers based on the three themes utilized in this study.

The results generated with this study were in line with much of the existing literature on the professional development needs of educators (Darling-Hammond et al., 2017; Granger et al., 2018; Lampi et al., 2015). Some data analysis indicated that teachers did not have an opinion

about professional development opportunities that focused on student achievement, but it is understood that teachers' motivation is student growth. Previous research on professional development and student achievement focuses on the idea that educators need to have opportunities to learn about the tools needed to develop strategies and ideas that will enable them to effect student achievement as well as be able to engage in active learning that helps to create structures that encourage the use of new ideas (Goodnough, 2019).

Content and choice. When considered as a whole, the teachers surveyed for this research view professional development content and choice options overall poor. They have indicated that these opportunities do not help them explore new ideas and are of no value. A total of 66.9% of the teachers surveyed find professional development is not relevant to content taught in the classroom, and 61% report having no input into individualizing their learning they report (58.3%); they have minimal opportunity to practice skills learned in these sessions. Teachers surveyed have also indicated (79.1%) that they have no opportunities to develop an evaluation of their professional development opportunities.

This study reveals that content provided to teachers is not sufficient for their needs in the classroom. This seems to indicate that there is a lack of real opportunities genuinely focused on the needs of the teacher. Decisions made for professional development come from upper management and focus mostly on district needs and requirements. These needs may not, however, be the specific needs of the teacher in the classroom. Perhaps giving teachers more choice and allowing for discussion of needs will afford more success when developing professional development. Giving teachers a voice and choice to identify what practices would help them in the classroom can help teachers engage in learning that will help them develop their

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craft. Professional development evaluations and individualization could help to build a strong foundation of opportunities that will help teachers with their goals and work on their needs.

When viewed through the lens years of teaching experience, teachers with fewer years of teaching (71.5%) find professional development opportunities are highly valuable to their teaching and help them explore new ideas. This same group (57.2%) reported attending opportunities that are relevant to the content they teach in the classroom and more ability (57.2%) to practice new skills gained during staff development. This seems to indicate that new teachers have more guidance than more experienced teachers. There is much more focus put on new teachers in school districts with mentor programs and required programs for skill and pedagogy building.

Teachers with 6–10 years of teaching experience revealed a high percentage of positive responses to questions relating to exploring new ideas and instruction modeling instructional practices in the classroom. This may be in part due to the fact that new adoptions, as well as teaching strategies, are being introduced, and teachers with a little more experience are at a point in their career that they are more willing to explore new ideas and develop new strategies. Also, being more comfortable in the classroom can make it more likely that a teacher is willing and able to explore new ideas. The data also shows that teachers with 21+ years of experience indicated that they could help individualize their own professional development opportunities. This, too, maybe in part because seasoned teachers are more likely to understand their own needs and be able to look at themselves more thoughtfully. Professional development then becomes more of reflective practice and one that can help teachers develop further.

Interestingly, all of the subgroups revealed that they have little experience with designing evaluations of their professional development activities. Looking at professional development

through the lens of reflective practice, it seems that evaluations could be a missing piece of professional development that could help drive opportunities to be more valuable. Reflection and inquiry into professional development can help schools develop practical knowledge that results in improved teacher learning.

When viewing the data through the lens of grade level taught, almost half of teachers in Grades 6–8 feel that professional development opportunities help them with new ideas, and a majority of teachers in Grades 3–5 feel that professional development opportunities are overall valuable. The fact that the teachers in the upper elementary grades and middle school grades feel that professional development helps them with new ideas and find opportunities valuable maybe because these are departmentalized grade levels. This allows for teachers to learn content that they deal with daily and already feel proficient. Teachers in the lower grade levels are generalists and are therefore responsible for all subject matter. This subject overload could be a reason that these grade levels responded with a more negative view of professional development content.

Most of the teachers of the 124 surveyed did not feel that professional development modeled classroom instruction, but teachers in Grades K−5 felt that the professional development presented to them was relevant to the content that they teach. Like the groups of teaching experience, all of the subgroups in the grade levels taught reported that they have little experiences with designing evaluations of these activities. Evaluations seem to be a missing piece of professional development opportunities that could lend some insight into the needs of educators in schools and districts. Focus on professional development evaluation seems to be a missing piece in the mind of most educators. Evaluation, while inherently valuable for its user, can be a costly and time-consuming process. This could be part of the reason that schools do not employ this aspect of professional development.

Student effect. Of the 124 teachers surveyed, 76.5% report not using student classroom performance to assess their professional development experiences. This could be due in part to the district, and school needs to provide professional development as a requirement for campus improvement. Campuses that are not looking at student assessment and classroom performance are missing an integral part of the process. By blindly offering learning to teachers, schools are impeding the success of its teachers. Looking at student need can help institutions develop a plan for its teachers that will be more effective at helping students succeed.

On the other hand, 72.8% of teachers surveyed feel that the professional development offered to them helps them develop effective student assessment techniques and that their intuitions structured time for teachers to work together to enhance student learning. These results support the idea that the students are at the core of the educational system and that it is essential to keep students at the forefront of the development of professional development. This data supports the idea that the leaders of educational intuitions are working with educators to improve student learning. The data also shows that while teachers feel that professional development opportunities are focused on student learning, they do not feel that these opportunities are always research-based.

Viewing the data collected on teacher years of experience, teachers with fewer years of teaching have a more positive perception of professional development associated with student effect. More than half of teachers with 1–2 years of experience found that the opportunities afforded them help them learn about effective assessment techniques. This same group reported 71.4% of teachers being able to make decisions about professional development based on research showing evidence of improved student performance. This group had 100% of participants reporting positive experiences with their institution structuring time for teachers to

work together to enhance student learning while only half of the teachers with 21+ years of experience had the same experience. This positive response from the educators with the least amount of years of teaching experience may also have to do with the fact that new teachers generally get more support than veteran teachers. Mentors and specialized new teacher opportunities give extra support to this demographic.

The data collected from teachers based on grade level show that overall, teachers in Grades 3–5 have a more positive response to questions focusing on student effect of professional development. This group feels that they can use student classroom performance to evaluated professional development and that their school structures time for teachers to work together to enhance student performance. This data also shows that the teachers in departmentalized grade levels tend to feel more prepared to help students by looking at classroom performance and have more time to work together in their departments.

Almost half of the teachers in both grade-level groups, Grades 3–5 and Grades 6–8, feel that they are able to make decisions about professional development based on research that shows evidence of improved student performance. The data here again shows the departmentalized grade levels. These grade levels have more opportunities for specific and focused opportunities that allow for the utilization of student performance and research.

Peer interaction. Overall, the data collected concerning peer interaction was positive. Of the teachers surveyed, 66% feel that their colleagues' ideas are helpful, and half report that they learn about their profession from their leaders. The high positive response to peer interaction's importance may be because grade levels work together in groups sharing information and planning. Having time for team/department meetings can afford grade levels the opportunity for peer interaction that is needed to focus on content and material. The fact that over half of the

participants report that they feel their school has been supportive of their growth and almost half felt that their coworkers are available to help them when implementing new instructional practices also points to the fact that having time to work collaboratively is an integral part of professional development opportunities.

Years of teaching experience showed overall positive perceptions concerning peer interaction in professional development opportunities. Teachers with 1–2 years of experience (85.7%) and all other groups (60%) reported a high positive response associated with colleagues' ideas helping improve teaching practice. The utilization of peer idea sharing is an essential aspect of an educational workplace. While not all professional development is considered effective, peer interaction and the ability to learn and work with a colleague is a big part of the teaching experience, and teachers are aware of the need to work as a team.

Peer interaction again had overall higher results across all grade levels. All grade levels have a high percentage of teachers that feel their colleagues' ideas help improve teaching. Most of the teachers in grades 3–8 relayed that they learn about their profession from their leaders and feel that fellow teachers, trainers, and facilitators are available to help implement new instructional practices. Half of all the grade levels found their school supportive of their growth as a teacher. It is vital to consider peer interaction while designing professional development, as it seems that educators find merit in being able to work with colleagues and have support from leaders.

Discussion of the Results in Relation to the Literature

Professional development for teachers has become an essential key to improving the quality of education in the U.S. and is the focus of many educational intuitions in the nation (Boston Consulting Group, 2014). Granger et al. (2018) discussed the importance of professional

development as a fundamental component of improving student achievement and teacher practice. The opportunities offered to teachers need to meet the rigor and demands of new policy and reform. Too often, educators find that the professional development offered to them, or forced upon them, is not meeting this need. Lampi et al. (2015) discussed that educators are concerned with the relevance, the level of expertise of presenters, the ability to sustain the material over time, as well as the idea that content is presented by a presenter that shares the same experiences and needs. Existing literature also indicates that teachers must feel that the professional development they are required to take is useful and supportive (Martin & González, 2017). Lampi et al. (2015) have stated that educators are concerned with the relevance, the level of expertise of presenters, the ability to sustain the material over time, as well as the idea that content is presented by a presenter that shares the same experiences and needs.

The literature reviewed recognizes that professional development is an essential focus for school systems and must be an integral part of the planning and ongoing learning for school faculty members (Calvert, 2016). Professional development structured in a way that enables teachers to build strategies that will enhance classroom practice is most useful (Kennedy, 2016). The results of this study shine a light on the issue that teachers are not finding these opportunities useful as almost 70% of the teachers surveyed view professional development opportunities they have attended as inferior. The teachers found that the content is not relevant to what they teach in the classroom, and they have no input into their learning. Thus, schools must focus on opportunities that are job-embedded, developed utilizing an instructional focus, and pedagogical content (Darling-Hammond et al., 2017).

The existing literature upholds the idea that if teachers are engaged in authentic professional development opportunities that help build knowledge and skills that their teaching

practices are more likely to change, thus affecting student achievement and that school systems must be willing to develop appropriate opportunities for professional development (Kennedy, 2016). It is essential, therefore, for an attempt to be made to identify the content and formats that make professional development effective (Skourdoumbis, 2017). Molinare (2017) focused on an attempt to understand and evaluate student success while also focusing on opportunities that build content for teachers are available. This study focused on student effect and found that while over half of the teachers found that their intuitions structured time for teachers to work together to enhance student learning, they do not report utilizing research that supports improving student performance when developing professional development opportunities.

Current research has shown that high-quality professional development must include collaboration and is an integral part of these opportunities (Darling-Hammond et al., 2017). The research suggests that collaboration can include one-on-one opportunities or small group as well as institution-wide and district-wide opportunities (Trust et al., 2016). The data collected is supported by this research in that the teachers surveyed felt very strongly about collaboration and the ability to work together during professional development.

While there are many different approaches to professional development, Lampi et al. (2015) found that in order for professional development to be effective, it must include a focused practice that incorporates a broad range of practices, such as collaborative learning, peer-assisted learning, independent learning, professional learning communities, and teacher-as-student approaches (Hardin & Koppenhaver, 2016; Quinn, 2013). Trust et al. (2016) have also found that professional learning should support teachers by allowing them to co-construct knowledge for their practice. This study supports this idea that overall most of the teachers report a high positive perception of the ability to collaborate with peers as well as leaders in their schools.

Limitations

Limitations in research are described by Creswell (2003) as extraneous variables that can influence a study by threatening reliability and validity but are beyond the researcher's control. The limitations in this study should inform future research. The researcher identified some of the limitations of this quantitative descriptive study before the start of the study. One such limitation was that the findings in descriptive studies do not imply causation because the variables were not manipulated, and possible alternative explanations were not established (Adams & Lawrence, 2015). This study was designed specifically to explain the variables and, therefore, did not look to control or manipulate the variables to determine causation.

Another limitation of this study was the small number of participants, and the few number of individual schools asked to participate. In total, 124 surveys completed were from five schools, three of which were within the same institution. These schools included an early childhood campus, two elementary campuses, and two middle school campuses. While all school settings are not the same in demographics or years of experience, it would be advantageous to look at the data utilizing a larger sample to determine if the same results would be yielded. The use of a descriptive study made it difficult to generalize the results ot high school teachers or even upper education Including a larger number of participants as well as a more varied selection of grade levels taught from prekindergarten to higher education could produce a more realistic view of teacher perception of opportunities offered to them which would allow for a better understanding of needs in order to develop a higher quality professional development program that educators can support and learn from.

In addition to the limitation of the small number of participants, the lack of teachers with 1–2 years of experience is also a limitation that must be addressed. Although the participants

were educators with varying years of experience, the small group of teachers represented by only 7, reported teaching 1–2 years. It would have been more beneficial to have more new educators to ensure a more diverse sample and allow for a better understanding of the perception of and needs of new teachers. New teachers have specific needs to help them ensure that they understand school curriculum and state a local standards as well as school climate and general workings of a new instution. The inclusion of a large number of new teachers could be useful to institutions in order to begin developing teachers that are a good fit for the istitution as well as knowledgable and invested in the school.

The small number of specific grade level teachers was an unexpected limitation to this study. All participants were from grade levels K–8 but not evenly distributed. The sample resulted in a minimal number of early childhood teachers (Grades K–2). This lack of even distribution in sampling occurred due to the voluntary nature of the sampling procedure. The inclusion of more institutions could enable the reseach to focus on more educatores therefore yielding a better understanding of each variables needs. While there is no way to ensure even distribution more surveys would make the research more rich in that it would allow for more participation.

Another limitation is the studies specific instrument used to collect data. The survey consisted of 20 questions, 18 Likert-type questions and two opinion questions that were developed by using all of the professional development questions from the Panorama Teacher Survey (Panorama Education, 2015), which is free and open-sourced and the SAI developed by the National Staff Development Council and the Southwest Educational Development Laboratory. While the questions all address professional development perceptions, the small number of opinion questions are a limitation as there is a lack of open discussion of teacher

opinion. Having more opinion questions would allow for a more in-depth understanding of teachers' specific thoughts about professional development. In addition, the inclusion of interviews could allow for a deeper understanding of what teachers actualy need and are getting from professional development presented to them. By adding interviews the research data could allow institutions to develop a more comprehensive and more sought after professional development program that will enhance student achievement and effect teacher practice.

Although the study is descriptive in design, which can be useful when looking at large volumes of data, this is another limitation of the study. Descriptive statistics are limited in that they only allow researchers to make summations about the people that are actually studied and are not easily generalizable to other samples. An inferential study would have allowed for a generalization to include larger populations (Vogt et al., 2012). Inferential statistics would allow the researcher to make a broader statement about any relationships between data found. This type of study could help the researcher to better understand the differences between the groups' studies.

Another limitation is the few number of open-ended questions in the survey. Open-ended questions can be helpful to researchers in seeking a perspective from a participant. The addition of more open-ended questions could seemingly develop a better understanding of participants' perceptions of professional development and allow for more in-depth information being collected, allowing for the researcher to make more meaningful interpretations (Vogt et al., 2012). More questions could help the researcher understand the data points and allow for a deeper understanding of the needs of educators as well as the actual perceptions of the teachers as to the types of professional development they are being expected to attend. The addition of

more open ended questions would also allow for secondary analysis in the future that can help to focus and direct further studies.

Implications of the Results for Practice, Policy, and Theory

The purpose of this study was to investigate the teachers' perceptions of current professional development offered to them to allow schools to develop programs that teachers will embrace and will effect student achievement. The goal was to contribute to current research and educational institutions to improve existing programs. This study offers an understanding of teacher perception of professional development presented to them and will allow districts to develop programs that will better suit educators' needs and wants.

School systems in the nation are facing educational reform and constant change in order to provide for the continually changing educational system (Boston Consulting Group, 2014). The study revealed that teachers in all of the grade levels surveyed maintain a positive perception of peer support throughout all of the research question criteria presented. The NCLB (No Child Left Behind Act, 2002) and, more recently, the ESSA (2015) have changed the criteria set up for school systems around the U.S. by setting up critical mechanisms for improving classroom instruction and student achievement (Demonte, 2013).

The results of the study initially illustrated educators' perceptions of professional development presented to them in their schools. Results have shown that teachers believe that developing effective professional development is a critical step in addressing student achievement as well as facilitating programs that are required by new educational reform. The findings from this study provide school leaders as well as teachers an overview of the perceptions of a cross-section of educators in the early childhood, elementary, and middle school

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realm. These results may be applied to the educational setting by utilizing the current study's responses to develop and evaluate programs presented to educators.

Implications for practice. The study supports the idea that content and choice are an essential aspect of professional development to teachers. These results can be applied to the educational setting utilizing the current study's results and identifying professional development requirements and standards to develop opportunities that are relevant to specific grade levels, and years of teaching, as well as subject matter. This knowledge offers an insight into the needs and opinions of educators in the classroom and will be a benefit to understanding what will help develop knowledge and success in the classroom. Aguilar (2014) stated that professional development structured in such a way that teachers can build strategies would enhance their classroom practice and knowledge.

The current study also focuses on student effect as an essential aspect of professional development and can be utilized to understand educators' perception of how professional development opportunities help change their practice in the classroom in order to affect student achievement. Current literature shows that professional development's effects upon student achievement are especially relevant in current educational reform. Shaha and Ellsworth (2013) focused on an attempt to understand and evaluate student success while also focusing on opportunities that build content for teachers are available. The current study may be useful in developing opportunities that teachers will find useful to enhance student success and help to develop surveys for teachers to gain a better understanding of specific institutions.

The results of this study illustrated the high opinion of educators' feelings of support from peers and leaders in their institutions. These results may be applied to the educational setting by utilizing the current study's information to understand what educators find positive

about existing professional development opportunities. The research and teacher views help to offer an insight into what is working and what is not in professional development currently offered to educators.

Implications for policy. Educational reform and accountability have become of paramount importance in current educational systems (Martin & González, 2017). Research showed that school leaders and educators alike are working to build professional development opportunities that will support and develop teachers while ensuring that reform goals like NCLB are met while effecting student achievement (Derrington & Campbell, 2018; Wieczorek, 2017). The results of this study supported the research regarding the need for professional development and educators' views that change needs to happen in order to develop positive changes in professional development that will ensure student achievement. The findings from his study help to establish the need to include teachers' needs and input into the development of professional development opportunities as well as give them more input as they are faced with new legislation and professional goals. It is hard to say whether this research will inform changes in legislation or policies involving professional development required by states or districts in our nation.

Implications for theory. The theoretical framework of this study was grounded in adult learning theory and social constructivist theory, which are both based on the idea that adults learn differently than children. According to adult learning theory—based on scholarship by Knowles—adults need to be involved in their learning by planning and evaluating opportunities (Powell & Bodur, 2019). Social constructivist theory is focused on the idea that adults have different motivations and life experiences than children and therefore have different needs (Merriam & Bierema, 2014). The focus of this study was to explore how teachers perceive the learning that they receive in the work place and to discover what they feel they need and

understand what they want in opportunities, it was appropriate to use adult learning theory and social constructivist theory to understand the educators' responses.

When considering both of these theories in relation to this study, teacher responses supported the idea that they value opportunities to choose what professional development they choose. They also desire the ability to direct their own learning, which is supported by the ideas put forth by Knowles's theory of adult learning theory. The responses strongly support this theory by showing that teachers want to be involved in the planning of the learning that they are required to attend and that they value the opportunities to have varied choice. Adult learning theory emphasizes that most of adult learning is self-directed and the results of this study show that school administrators should consider this when planning learning for teachers (Merriam & Bierema, 2014).

The findings from this study also found a connection with the social constructivist theory in that responses show that teachers want to feel a part of what they are learning. The focus for professional development based on this theory should consider that adults feel a strong need to be responsible for their own learning. Participant responses show that teachers want varied choice and opportunities as well as an ability to share their knowledge with others. Professional development opportunities based on this theory should focus on personal learn and opportunities for educators to construct their own learning (Wever et al., 2018)

Changing the current structure of professional development at various schools can help these schools meet and exceed the goals set forth by educational reform. The knowledge of educators' needs as well as theory contexts, will help to ensure this success. Research shows that accountability goals have made it essential for leaders to align professional development to educators' opportunities to enable them to meet the high expectations (Wieczorek, 2017).

Research on teacher perceptions of professional development is important to educational institutions and the future of education as a whole. The understanding of educators' needs as well as their understanding and learning of pedagogy and curriculum will undoubtedly have a great impact on learning in the classroom as policies change. The knowledge of this information based on grade level teaching as well as teacher tenure can undoubtedly inform schools around the country as to the needs of all groups allowing for a better structure for and development of professional development opportunities.

Recommendations for Further Research

The recommendations in the following sections include ideas to expand or strengthen this study or develop similar studies in the future. These recommendations include the researcher's reflection based on the research data. The recommendations include possible changes to components of the research methodology, the research participants, and other general recommendations.

As a part of future research, a potential area to extend the research is to extend the study to include high school teachers and a much more significant amount of early childhood and lower elementary teachers. Given the extreme difference in needs of all groups of educators, extending this study to include all K–12 teachers could allow for a better understanding of specific needs in order to develop high-quality opportunities for all teachers at every level. Darling-Hammond et al. (2017) describe these high-quality opportunities as giving educators the tools to refine pedagogies to teach each grade level skills as well as learning more about their craft at specific levels. The small number of participants is a specific element of the study design that was not optimal to get a clear understanding of teacher perception; adding a more significant

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number of participants could allow for a more extensive examination of teachers' perception of professional development.

Adding a case study or expanding the participation numbers could provide more information about educators' perceptions by enabling researchers to get a better understanding of these perceptions. Adding a qualitative component could also build on this research. Data from classroom observations, teacher interviews, and more detailed open-ended questionnaires could develop a more productive, more complete view of these perceptions (Maxwell, 2013). These additions could add to the body of research that will allow institutions to develop professional development opportunities that build teacher knowledge, student achievement, as well as teacher buy in.

An understanding of school climate, achievement, and teacher previous knowledge could also build on this research by allowing researchers to understand the beginning attitude of educators in order to establish a basis for perception in certain environments. This will allow the researcher to view the data in a more holistic way that can allow for a better understand of perception. It could be helpful to understand the diverse backgrounds of teachers as well as the needs of specific schools and students before determining a general perception of all educators.

The time constraints placed on this study limited teacher participation and therefore most likely limited the sample size. The use of a longer window of time for teacher responses could ensure that a larger number of participants were contacted and were able to participate. A research study that encompasses the entire school year could add to the body of knowledge by allowing school administration as well as policy makers get a better picture of teacher perception of professional development offered to them in an entire school year This addition of time to

complete the survey could help the researcher obtain a larger number of participants perhaps enabling for a better view of teacher perception.

Finally, the results of this study illuminated the idea of teachers with fewer years of teaching finding professional development opportunities more useful. As indicated by the results of the study, teachers with two years of experience find the experiences presented to them as helpful to their craft. It is also important to point out that teachers with more years of experience 6–10 found they were able to explore new ideas, and teachers with 21+ years of experience reported a higher instance of being able to individualize their own professional development opportunities. These findings warrant further research on the topic in order to find out why a disconnect exists for those underrepresented groups of teaching years of experience.

Conclusion

The purpose of this research study was to explore teachers' perceptions of professional development opportunities offered to them. This quantitative descriptive study added to the body of literature on effective professional development and educators' perceptions of their personal needs for growth in craft as well as the influence on student achievement. Overwhelming data focuses on the fact that, in today's climate of reform, educators are being faced with initiatives to set high goals for student learning while enhancing teacher pedagogical skills along with content knowledge (Calvert, 2016; Derrington & Campbell, 2018; Lampi et al., 2015). The increase in educational reform and changes in accountability measures as well as the constant focus on student achievement in our nation has made it a priority for educational institutions to develop programs to hire, and maintain high quality educators.

This chapter included interpretations of the data to determine connections between the findings of past and present research. This research study provided a possible starting point for

future researchers to look at the growing need of appropriate professional development opportunities for educators in a time of educational reform. The implications of the findings from this research suggest a potential understanding of teacher perception allowing for educational institutions to change or enhance traditional professional development already present in schools around the nation. The participants indicated a preference for more choice and more peer interaction as well as a need for content focused opportunities.

The data from this study reveals that teacher perceptions reflect the demand for high-quality professional development required from current reform. The results contribute to the body of knowledge regarding teacher perception of professional development and may offer insight for further investigation. Overall, teachers' perception of professional development varied from years of teaching experience and grade level taught. The data collected shows that teachers do not feel that they have the opportunity to choose their learning and do not have control of their learning. According to the data, teachers want a voice. The data show that teachers from all grade levels and years of experience feel that they should be focusing on student achievement and feel that they must evaluate professional development. Interestingly, new teachers feel much more satisfied with professional development than those who have more years of experience.

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Appendix A: Professional Development Attitudes and Experiences

1 At your school, how valuable are the available professional development opportunities?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

2 How often do your professional development opportunities help you explore new ideas?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

3 Are the professional development opportunities presented to you on campus relevant to the content that you teach?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

4 Are your colleagues' ideas helpful for improving your teaching?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

5 Do you have input into individualizing your own professional development opportunities?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

6 Do you feel that your school has been supportive of your growth as a teacher?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

7 Do you feel you learn about your profession from the leaders at your school?

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

8 At our school, teachers can choose the types of professional development they want to receive (e.g., study group, action research, observations).

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

9 Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

10 We design evaluations of our professional development activities prior to the professional development program or set of activities.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

11 We have opportunities to practice new skills gained during staff development.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

12 The professional development that I participate in models instructional strategies that I will use in my classroom.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

13 We use students' classroom performance to assess the success of teachers' professional development experiences.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

14 We make decisions about professional development based on research that shows evidence of improved student performance.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

15 My school structures time for teachers to work together to enhance student learning.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

16 Our school's professional development helps me learn about effective student assessment techniques.

	Never	Seldom	Sometimes	Frequently	Always
Choose one:	○	○	○	○	○

17 What are the most positive aspects of professional development at your school? Please give specific examples.

18 If you could change anything about the professional development opportunities at your school, what would you change? Please give specific examples that you would like to see happen at your school.

19 What grade level do you currently teach?

- ○ Kindergarten

- ○ First grade

- ○ Second grade

- ○ Third grade

- ○ Fourth grade

- ○ Fifth grade

- ○ Sixth grade

- ○ Seventh grade

- ○ Eighth grade

- ○ Other

20 How many years have you been teaching?

- ○ 1–2

- ○ 3–5

- ○ 6–10

- ○ 11–15

- ○ 16–20

- ○ 21

Appendix B: Participant Consent Form

Research Study Title: Educators View of Professional Development and It's Perceived
Influence on Practice and Student Achievement
Principal Investigator: Christi Hicks–Graduate Student Concordia University
Research Institution: Concordia University–Portland
Faculty Advisor: Dr. John Mendes

Purpose and procedure:
The purpose of this survey is to explore what educators feel constitutes effective professional development as well as the influences professional development opportunities have on practice and student achievement. Participation is voluntary, and no one will be paid to be in the study. The study will begin (date to be determined once permissions are all acquired). Participants will be asked to answer a series of questions pertaining to his/her experiences with professional development, as well as several questions establishing background information. The survey will take approximately 15 minutes.

Risks:
There are no risks to participating in this study other than providing your information. However, I will protect your information. Any personal information you provide will be coded so it cannot be linked to you. Any name or identifying information you give will be kept securely via electronic encryption. When I look at the data, none of the data will have your name or identifying information. I will only use a secret code to analyze the data. I will not identify you in any publication or report. Your information will be kept private at all times, and then all study documents will be destroyed three years after we conclude this study.

Confidentiality:
This information will not be distributed to any other agency and will be kept private and confidential.

Right to Withdraw:
Your participation is greatly appreciated, but I acknowledge that the questions I am asking are personal in nature. You are free at any point to choose not to engage with or stop the study. You may skip any questions you do not wish to answer. This study is not required, and there is no penalty for not participating.

Contact Information:
You will receive a copy of this consent form. If you have questions, you can talk to or write the principal investigator, Christi Hicks.

Your Statement of Consent:

I have read the above information. I volunteer my consent for this study.

_____   _____
Participant Name   Date

_____   _____
Participant Signature   Date

_____   _____
Investigator Name   Date

_____   _____
Investigator Signature   Date

Investigator: Christi Hicks
c/o: Professor Dr. John Mendes
Concordia University–Portland
2811 NE Holman Street
Portland, Oregon 97221

Appendix C: Percentages of Teachers' Responses, Mean for Survey Questions

Content/Choice Survey Question	Never	Seldom	Sometimes	Frequently	Always	*SD*	*M*
1. How often do your professional development opportunities help you explore new ideas?	0.70%	7.90%	39.60%	31.70%	2.90%	0.736	3.34
2. At your school, how valuable are the available professional development opportunities?	0.70%	10.80%	31.70%	32.40%	7.20%	0.858	3.42
3. The professional development that I participate in models instructional strategies that I will use in my classroom.	1.40%	7.20%	37.40%	32.40%	4.30%	0.789	3.37
4. At our school, teacher can choose the types of professional development they want to receive.	8.60%	15.10%	32.40%	20.90%	5.80%	1.068	3.5
5. Are the professional development opportunities presented to you on campus relevant to the content you teach?	2.20%	8.60%	38.80%	25.90%	7.20%	0.876	3.33
6. Do you have input into individualizing your own professional development?	5.80%	10.80%	27.30%	31.70%	7.20%	1.033	3.29
7. We have opportunities to practice new skills gained during staff development.	1.40%	8.60%	30.90%	33.10%	8.60%	0.882	3.47

(continued)

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Content/Choice Survey Question	Never	Seldom	Sometimes	Frequently	Always	SD	M
8. We design evaluations of our professional development activities prior to the professional development program or set of activities.	30.4%	33.9%	14.8%	17.4%	3.5%	1.177	2.3
9. We use students' classroom performance to assess the success of teachers' professional development experiences.	21.70%	19.10%	35.70%	16.50%	7.00%	1.189	2.68
10. Our school's professional development helps me learn about effective student assessment techniques.	6.10%	18.40%	48.20%	20.20%	7.00%	0.959	3.04
11. My school structures time for teachers to work together to enhance student learning.	3.50%	21.10%	21.10%	36.80%	17.50%	1.113	3.44
12. We make decisions about professional development based on research that shows evidence of improved student performance.	6.10%	18.30%	35.70%	29.60%	10.40%	1.053	3.20
13. Are your colleagues' ideas helpful for improving your teaching?	0.00%	7.00%	27.00%	53.00%	13.00%	0.779	3.72
14. Do you feel you learn about your profession from the leaders at your school?	3.50%	14.00%	28.90%	36.00%	17.50%	1.0	3.5

(continued)

Content/Choice Survey Question	Never	Seldom	Sometimes	Frequently	Always	*SD*	*M*
15. Do you feel that your school has been supportive of your growth as a teacher?	0%	6.10%	25.20%	34.80%	33.90%	0.917	3.97
16. Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.	7.90%	12.90%	21.60%	30.90%	9.40%	1.146	3.25

Appendix D: Survey Question 18 Sample Response–Professional Development

Attitudes and Experiences Survey

Theme	Sample Responses
Teacher Driven Professional development	Connecting with my fellow faculty is one of the best aspects of professional development. I get as much as Input into the professional development. I prefer to attend professional development off campus because it is then relevant to my subject area.
	Professional development with my fellow staff members because a wonderful opportunity to develop bonds and friendship.
	I like that our school will include teachers across grade levels in an ELA (language arts) training, so we can have time to ensure we are vertically aligned and working well to support each other so that students can build upon their knowledge each year. For instance, all of 1st - 8th grade is implementing a reading/writing workshop and we walked through the training for the workshop all together. It was amazing to see such collaboration, alignment and unity!
	I am learning from other teachers who have taught longer than I have, or who have different ideas on how to teach a topic or materials to use.
	We have been having teacher to teacher professional development every week and I found that to be very beneficial to my growth. Teachers get to choose what they present on and every teacher can personalize with the presenter since he/she is a classroom teacher within our building. I have appreciated the opportunity to learn from my fellow employees and learn from what works in their classrooms.
	Teachers training teachers.
	Being able to collaborate with other educators and bounce ideas off one another is what I get the most out of.
	I enjoy learning from other educators about ideas in their classrooms.
Student Driven Professional Development	The most positive aspect of professional development at my school is that it truly is student centered and student focused. Almost all of the professional development we do is based off of student data or teacher concerns for changing something that deals with students for the better.
	Professional development supports teachers' effort to engage students.
	Learning how to use testing data to help students and communicate with parents
	We have a reading specialist who comes in once a month and leads staff development in new literacy techniques. Each month, she gives us specific ideas and asks us to use them and then checks in the next month.

Theme	Sample Responses
Student Driven Professional Development	My school offers a great deal of teacher choices for professional development. They trust and encourage us to learn more in areas where we feel we need to grow. Additionally our school also has a vision and wants each of us to learn more about that topic in order to meet a campus goal based on student data. Variety of choices: online, in person I like that they're often set for evenings or weekends to allow teachers to attend without missing class. Most are hosted by other teachers in the district with actual experience with the students we teach.
Outside Offerings of Professional Development	Teachers are encouraged to attend ProD outside the school environment, and opportunities are frequently presented to do so - Region 4, Houston Zoo, and Museum of Natural Science. I enjoyed the opportunity to visit other classrooms (classes not in session) to get ideas to use on my own. We receive funding from the public schools we can put toward any professional development in our state. Mostly, we are on our own to find PD that we are interested in taking. Money is available to cover costs. Increased budget for PD and availability of subs to make use of it. Also, open to PD outside of the LCMS offerings. Being able to pursue outside Professional Development locally and nationally. Outside opportunities have been the most helpful and the school has been supportive in sending us.

Appendix E: Survey Question 19 Sample Response–Professional Development

Attitudes and Experiences Survey

Theme	Sample Responses
Teacher Driven Professional development	Connecting with my fellow faculty is one of the best aspects of professional development. I get as much as Input into the professional development.
	Professional development with my fellow staff members because a wonderful opportunity to develop bonds and friendship.
	I like that our school will include teachers across grade levels in an ELA (language arts) training, so we can have time to ensure we are vertically aligned and working well to support each other so that students can build upon their knowledge each year. For instance, all of 1st - 8th grade is implementing a reading/writing workshop and we walked through the training for the workshop all together. It was amazing to see such collaboration, alignment and unity!
	Learning from other teachers who have taught longer than I have, or who have different ideas on how to teach a topic or materials to use.
	We have been having teacher to teacher professional development every week and I found that to be very beneficial to my growth. Teachers get to choose what they present on and every teacher can personalize with the presenter since he/she is a classroom teacher within our building. I have appreciated the opportunity to learn from my fellow employees and learn from what works in their classrooms.
	Teachers training teachers.
	Being able to collaborate with other educators and bounce ideas off one another is what I get the most out of.
Student Driven Professional Development	I enjoy learning from other educators about ideas in their classrooms.
	The most positive aspect of professional development at my school is that it truly is student-centered and student-focused. Almost all of the professional development we do is based on student data or teacher concerns for changing something that deals with students for the better.

Theme	Sample Responses
	Professional development supports teachers' effort to engage students.
	Learning how to use testing data to help students and communicate with parents
	Freedom to pursue what I am passionate about and the opportunities to share what I've learned with the staff
	We have a reading specialist who comes in once a month and leads staff development in new literacy techniques. Each month, she gives us specific ideas and asks us to use them and then checks in the next month.
Choice in Professional development	My school offers a great deal of teacher choices for professional development. They trust and encourage us to learn more in areas where we feel we need to grow. Additionally our school also has a vision and wants each of us to learn more about that topic in order to meet a campus goal based on student data.
	Variety of choices: online, in person
	I like that they're often set for evenings or weekends to allow teachers to attend without missing class. Most are hosted by other teachers in the district with actual experience with the students we teach.
	Teachers are encouraged to attend ProD outside the school environment, and opportunities are frequently presented to do so - I enjoyed the opportunity to visit other classrooms (classes not in session) to get ideas to use on my own.
	We receive funding from the public schools we can put toward any professional development in our state.
	Mostly, we are on our own to find PD that we are interested in taking.
Outside Offerings of Professional Development	Increased budget for PD and availability of subs to make use of it. Also, open to PD outside of the [institutional name redacted] offerings.
	Being able to pursue outside Professional Development locally and nationally.
	Outside opportunities have been the most helpful, and the school has been supportive in sending us.

Appendix F: Percentages of Teachers' Responses Based on Years of Experience

Content/Choice Survey Question	1–2 Years 7	3–5 Years 21	6–10 Years 25	11–15 Years 15	16–20 Years 24	21+ years 30
How often do your professional development opportunities help you explore new ideas?	71.50%	42.10%	50%	46.70%	40%	26.90%
At your school, how valuable are the available professional development opportunities?	71.50%	47.40%	41.60%	33.30%	58%	50%
The professional development that I participate in models instructional strategies that I will use in my classroom.	71.50%	47.40%	45.80%	53.40%	54.50%	23%
At our school, teacher can choose the types of professional development they want to receive.	42.90%	31.60%	33.30%	40%	27.30%	26.90%
Are the professional development opportunities presented to you on campus relevant to the content you teach?	57.20%	36.90%	45.80%	26.70%	36.30%	42.30%
Do you have input into individualizing your own professional development opportunities?	28.60%	52.60%	45.80%	53.40%	45.50%	50%
We have opportunities to practice new skills gained during staff development.	71.50%	57.90%	62.50%	46.70%	59.10%	26.90%
We design evaluations of our professional development activities prior to the professional development program or set of activities.	28.60%	26.30%	25.00%	20%	27.20%	7.60%
Student Effect We use students' classroom performance to assess the success of teachers' professional development experiences.	28.60%	36.80%	16.70%	20%	31.80%	15.30%

Content/Choice Survey Question	1–2 Years	3–5 Years	6–10 Years	11–15 Years	16–20 Years	21+ years
	7	21	25	15	24	30
Our school's professional development helps me learn about effective student assessment techniques.	71.50%	42.10%	25.00%	20%	22.70%	16%
My school structures time for teachers to work together to enhance student learning.	100%	42.10%	65.20%	33.40%	59.10%	50%
We make decisions about professional development based on research that shows evidence of improved student performance.	71.40%	36.90%	37.50%	40.00%	36.30%	42.30%
Peer Interaction						
Are your colleagues' ideas helpful for improving your teaching?	85.70%	73.70%	62.50%	60%	68.10%	61.50%
Do you feel you learn about your profession from the leaders at your school?	100%	47.30%	62.50%	50%	63.60%	34.60%
Do you feel that your school has been supportive of your growth as a teacher?	71.50%	68.50%	70.80%	73.30%	72.70%	61.60%
Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.	100%	36.80%	50%	40%	59.10%	38.50%

Appendix G: Percentages of Teachers' Responses Based on Grade Level Taught

Survey Question	Grades K–2	Grades 3–5	Grades 6–8	Other
Content/Choice				
How often do your professional development opportunities help you explore new ideas?	36.80%	42%	45.40%	40.70%
At your school, how valuable are the available professional development opportunities?	26.40%	52.80%	54.50%	48.10%
The professional development that I participate in models instructional strategies that I will use in my classroom.	42.10%	47%	42.40%	44.40%
At our school, teacher can choose the types of professional development they want to receive.	47.40%	39%	39.40%	22.20%
Are the professional development opportunities presented to you on campus relevant to the content you teach?	84.20%	58.30%	39.40%	29.60%
Do you have input into individualizing your own professional development opportunities?	42.10%	53%	54.60%	33.30%
We have opportunities to practice new skills gained during staff development.	26.30%	67%	54.60%	40.70%
We design evaluations of our professional development activities prior to the professional development program or set of activities.	10.50%	31%	21.20%	14.80%
Student Effect				
We use students' classroom performance to assess the success of teachers' professional development experiences.	21.10%	38.50%	27.30%	11.10%
Our school's professional development helps me learn about effective student assessment techniques.	26.30%	36.00%	33.40%	7.60%
My school structures time for teachers to work together to enhance student learning.	36.80%	66.70%	56.30%	48.10%
We make decisions about professional development based on research that shows evidence of improved student performance.	31.60%	47.20%	45.40%	29.60%
Peer Interaction				
Are your colleagues' ideas helpful for improving your teaching?	84.20%	66.70%	60.70%	59.30%
Do you feel you learn about your profession from the leaders at your school?	44.50%	58.30%	60.60%	44.40%
Do you feel that your school has been supportive of your growth as a teacher?	57.90%	75.00%	72.70%	62.90%
Fellow teachers, trainers, facilitators, and/or consultants are available to help us implement new instructional practices at our school.	47.40%	56.00%	51.60%	37.00%

Appendix H: Statement of Original Work

The Concordia University Doctorate of Education Program is a collaborative community of scholar-practitioners, who seek to transform society by pursuing ethically-informed, rigorously- researched, inquiry-based projects that benefit professional, institutional, and local educational contexts. Each member of the community affirms throughout their program of study, adherence to the principles and standards outlined in the Concordia University Academic Integrity Policy. This policy states the following:

Statement of academic integrity.

> As a member of the Concordia University community, I will neither engage in fraudulent or unauthorized behaviors in the presentation and completion of my work, nor will I provide unauthorized assistance to others.

Explanations:

What does "fraudulent" mean?

> "Fraudulent" work is any material submitted for evaluation that is falsely or improperly presented as one's own. This includes, but is not limited to texts, graphics and other multi-media files appropriated from any source, including another individual, that are intentionally presented as all or part of a candidate's final work without full and complete documentation.

What is "unauthorized" assistance?

> "Unauthorized assistance" refers to any support candidates solicit in the completion of their work, that has not been either explicitly specified as appropriate by the instructor, or any assistance that is understood in the class context as inappropriate. This can include, but is not limited to:

> - Use of unauthorized notes or another's work during an online test
> - Use of unauthorized notes or personal assistance in an online exam setting
> - Inappropriate collaboration in preparation and/or completion of a project
> - Unauthorized solicitation of professional resources for the completion of the work.

Statement of Original Work (Continued)

I attest that:

1. I have read, understood, and complied with all aspects of the Concordia University–Portland Academic Integrity Policy during the development and writing of this dissertation.

2. Where information and/or materials from outside sources has been used in the production of this dissertation, all information and/or materials from outside sources has been properly referenced, and all permissions required for use of the information and/or materials have been obtained, in accordance with research standards outlined in the *Publication Manual of The American Psychological Association.*

Christi Fernandez Hicks
_____
Digital Signature

Christi Fernandez Hicks
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Name (Typed)

February 16, 2020
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Date