Teachers’ Experiences with Professional Development and Its Impact on Instructional Practice

Jill Kind

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Teachers’ Experiences with Professional Development and Its Impact on Instructional Practices

by

Jill M. Kind

A Dissertation
Submitted to the Graduate Faculty of St. Cloud State University in Partial Fulfillment of the Requirements for the Degree Doctor of Education in Educational Administration and Leadership

May, 2019

Dissertation Committee:
Kay Worner, Chair
John Eller
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Abstract

“The central lesson now evident is that sustained improvement in students’ outcomes requires sustained effort to change teaching and learning practices in thousands and thousands of classrooms, and this requires focused and sustained effort by all parts of the education system and partners” (Levin & Fullan, 2008, p. 289). The process of changing teaching and learning practices occurs through professional development. The Every Student Succeeds Act relies on the research of Desimone, Porter, Garet, Yoon, and Birman (2002), Garet, Porter, Desimone, Birman, and Yoon (2001), Guskey (2003), Hirsh, Psencik, and Brown (2014), and Wei, Darling-Hammond, Andree, Richardson, and Orphamos (2009) to identify set of criteria describing effective professional development. The six ESSA criteria are job-embedded, data-driven, classroom-focused, sustained, intensive, and collaborative each impact teachers’ instructional practices in different ways. Professional development also occurs in either a traditional format or a reform format (Garet et al., 2001).

The purpose of the study was to determine what select Minnesota K-12 teachers report as their frequency of their participation in professional development aligned to ESSA criteria, the formats of professional development in which teachers participated, and how professional development positively impacted their instructional practice. The quantitative methodology utilized a survey instrument to determine participants’ experiences with professional development.

The study results indicated that select Minnesota teachers reported participating in professional development that aligns with three of the six ESSA criteria (collaborative, data-driven, and sustained) of effective professional development more frequently than was found in the Frontline Institute Research study (Combs & Silverman, 2017). The study sample of K-12 Minnesota teachers also reported that reform formats of professional development had a higher positive impact on instructional practice than did traditional formats.
Acknowledgement

I am so appreciative for the support, guidance, and wisdom of my dissertation committee: Dr. Dave Lund, Dr. Jim Johnson, Dr. John Eller, and my committee chair Dr. Kay Worner. I am indebted to Dr. Worner’s persistence for me to finish and talking me off the ledge many times.

When I first began classes as a member of cohort VIII, never did I imagine that I would meet a fabulous group of women who would provide so much encouragement, laughter, and now a lifetime of friendship. Thank you Sarah, Marcia, and Michelle for being part of this crazy journey.

I want to acknowledge my friends near and far whose encouragement was always a text or call way. The ones who were willing to read, listen, cheer on, or shake my ears when appropriate, I feel your support and friendship. In particular, Emily and Laura—you are truly exceptional friends.

I doubt many people acknowledge their former spouse for all of his support and making sure our children were taken care of, but Brian Kind certainly deserves the acknowledgement.
Dedication

For my daughters, Allana and Marcella,

I love you and am inspired by you each and every day.

Always remember—you can do hard things.

Love, Dr. Mama Llama
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Chapter I: Introduction

Teacher professional development provides an opportunity for educators to develop the skills, knowledge, and capacities to meet the ever changing the demands of working in education and “when thoughtfully conceived, well-designed, and supported—is at the heart all successful educational improvement efforts” (Resources for Learning, 2017, p. 5). Effective professional development can be the, “key strategy for increasing educator effectiveness in order to improve student outcomes,” and an examination of the effectiveness and the formats of professional development experienced by teachers and how it positively impacts their practice can provide a picture of the current state of professional development in Minnesota (Hirsh, Psencik, & Brown, 2014, p. 20).

The essential outcome of professional development is, “to change educator practice in ways that increase student learning” (Hirsh et al., 2014, p. 133). However, teachers perceive several reasons that professional development does not impact teaching practice; these reasons include lack of collaboration, the everyday work of teaching, and the overwhelming amount of information provided in a short time (Lester, 2003). In order to change teacher practice, professional development needs to be effective; research indicated that common and substantial benefits for pupils are linked to CPD (continuing professional development) that is research-informed and rich in research-related processes. These include improvements in: achievement and attainment, behaviour, attitudes to subjects which pupils had previously been wary of and their ability to organise themselves, collaboration with others and selection of appropriate learning strategies. (Cordingley, 2015, p. 236)
The Nation at Risk Report (1983) surmised that the United States lagged behind the rest of the world on student performance on international standardized tests (Hochberg & Desimone, 2010). As a result of this report, the federal government created legislation to raise the level of student achievement in United States schools through increased accountability measures. These accountability measures included standards-based learning, standardized testing, and teacher professional development. The legislation created as a result of the Nation at Risk Report included, the Improving America’s Schools Act of 1994, Goals 2000, and No Child Left Behind Act of 2001 (Hochberg & Desimone, 2010). Eventually, the Every Student Succeeds Act (ESSA) of 2015 was added to the body of legislation impacting teachers.

The Every Student Succeeds Act of 2015 expanded upon previous legislation and research to articulate six criteria for quality teacher professional development. The ESSA legislation did not articulate concrete and measurable definitions for the six criteria; the Frontline Research Institute developed the definitions and metrics for the six criteria in ESSA (Combs & Silverman, 2017). Using these definitions and metrics, Frontline Research Institute then conducted an analysis of existing data to determine teacher’s experiences with quality professional development.

The findings, while perhaps not surprising, were startling: for four out of the six criteria, over 80% of enrollments failed to meet the metric. In other words: most professional development offered and enrolled in today does not meet the federal definition of quality. (Combs & Silverman, 2017, p. 5)

The results from the Frontline Institute report were disappointing, given that, “teacher learning serves an important function in the accountability system by fostering the capacity to
effect the instructional changes necessary to enable students to achieve proficiency on content and performance standards” (Hochberg & Desimone, 2010, p. 91). In addition, the results of the Frontline Institute report mirror the results found in other studies, including *The State of Professional Learning*, which found that, “teachers recognize the importance of practicing and applying new skills with students in the classroom, yet few teachers report receiving adequate time for this type of job-embedded professional learning, such as getting or giving actionable feedback to assure implementation of new skills with fidelity by through classroom observations” (Resources for Learning, 2017, p. 13). Effective professional development provides teachers an opportunity to stay up to date with the continuous advancement of knowledge and practices (Matherson & Windle, 2017). Effective professional development has three agreed-upon outcomes: changes in teachers' beliefs and attitudes, changes in teachers' instructional practices, and changes in students' learning outcomes (Guskey, 1985).

Professional development which resulted in changes to teachers’ beliefs, attitudes, and instructional practices does not happen without context, “we must study it within these multiple contexts, taking into account both the individual teacher-learners and the social systems in which they are participants” (Borko, 2004, p. 4). These learning systems develop practices and policies which generate the student learning outcomes desired by the system (Guskey, 2014). Learning systems are organized to create a collaborative school culture, where teachers take collective responsibility for their own learning and work toward the implementing and continuously improving school and district-wide initiatives (Hirsh et al., 2014).

Professional learning calls for long-term sustained focus on embedding the practice of learning into the system so that those who have the greatest impact on student learning
are continuously developing precision in their work to produce better outcomes for all.

(Hirsh et al., 2014, p. 21)

Conceptual Framework

“What teachers are doing in class with students on a daily basis has the greatest potential to influence the academic outcome for students, and the more challenged students are in social capital terms, the more true this is” (Katz & Dack, 2013, p. 4). Given the critical role that teachers play in student achievement and in the success of school initiatives, it is then, “essential that staff development provide the content and opportunities necessary to foster teacher learning and changes in practice” (Birman, Desimone, Porter, & Garet, 2000, p. 32).

The Every Student Succeeds Act provided six criteria and several formats of professional development in which teachers should engage in as a means of improving student performance. The criteria for effective professional development articulated by ESSA and defined by Frontline Research Institute was used as a framework to design, implement, and evaluate professional development. The six criteria for effective professional development identified in ESSA included job-embedded, classroom-focused, data-driven, collaborative, intensive, and sustained (ESSA, 2015).

Statement of the Problem

The standards-based school reforms’ legislation increased the need for teachers, “to have deep knowledge of their subject and the pedagogy that is most effective for teaching the subject” (Blank, de las Alas, & Smith, 2008, p. 3). The structure through which teachers gain increased content knowledge, improved pedagogical practice, and refined teaching practices is professional development (Desimone, Porter, Garet, Yoon, & Birman, 2002). These critical aims of
professional development have led “public schools to spend approximately twenty billion dollars annually on professional development activities and those efforts deserve serious study” (Guskey, 2009, p. 228). Professional development has typically been evaluated based on its content, where research suggested that, “the features of professional development were what mattered for relationships with changes in knowledge and skills and classroom practice” (Desimone, 2009, p. 183).

The study’s problem was that there is a lack of research on Minnesota K-12 teachers’ experiences regarding the connection between:

- The criteria of effective professional development as defined by the Every Student Succeeds Act;
- The formats of professional development in which teachers participated; and
- How teachers’ instructional practice are positively impacted by professional development.

Frontline Research Institute (2017) analyzed existing data on professional development and concluded that there is little alignment of professional development with the ESSA criteria, but the data is not specific to Minnesota (Combs & Silverman, 2017).

**Purpose of the Study**

The purpose of the quantitative study was to determine what select Minnesota K-12 teachers report as their frequency of participation in professional development aligned to the six ESSA criteria, the formats of professional development in which teachers participate, and how professional development positively impacted their instructional practice.
Assumptions of the Study

For study purposes, the researcher developed the following assumptions:

1. Teachers use social media.

2. Teachers responding to the survey answered the questions honestly.

3. Teachers responding to the survey read the definitions associated with the survey.

4. Teachers had participated in professional development opportunities.

5. The professional development opportunities met at least one criterion of high-quality professional development identified in the Every Student Succeeds Act.

Delimitations of the Study

The study was designed to gather and analyze data from a convenience sample of Minnesota K-12 licensed teachers regarding professional development in which they participated in during the past twelve months. Delimitations of the study are factors that are “controlled by the researcher” (Roberts, 2010, p.139).

- A convenience sample of Minnesota K-12 licensed teachers was used which does not allow for generalizability.

- The survey relied on teachers’ self-reporting and experiences of professional development.

- The survey relied on teachers’ honesty in responding to the questions.

- The researcher used passive recruitment techniques utilizing social media to attract possible participants thus limiting participants to those who access social media.

Research Questions

The research questions guiding the study included:
1. Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers identify as their frequency of participation in professional development?

2. How did select Minnesota K-12 licensed teachers rank the six ESSA professional development criteria as having positively impacted their instructional practice?

3. What did select Minnesota K-12 licensed teachers identify as the formats of professional development in which they most frequently participated?

4. How did select Minnesota K-12 licensed teachers rank the formats of professional development as having positively impacted their instructional practice?

**Definition of Terms**

*Every Student Succeeds Act*: The 2015 reauthorization of the Elementary and Secondary Education Act which, “requires that teachers and principals participate in professional learning that is defined in accordance with consensus definitions of rigor and quality” (Combs & Silverman, 2017, p. 11).

*Every Student Succeeds Act Criteria of Professional Development:*

- Sustained: taking place over an extended period; longer than one day or a one-time workshop,
- Intensive: focused on a discrete concept, practice, or program,
- Collaborative: involving multiple educators, educators and coaches or a set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding,
● Job-embedded: a part of the ongoing, regular work of instruction and related to teaching and learning taking place in real time in the teaching and learning environment,

● Data-driven: based upon responsive real time information about the needs of participants and their students,

● Classroom-focused: related to the practices taking place during the teaching process and relevant to instructional processes (Combs & Silverman, 2017).

Learning: “Learning is the process through which experience causes permanent change in knowledge or behavior” (Katz & Dack, 2013, p. 14).

Learning Forward: “Learning Forward is a nonprofit, international membership association of learning educators committed to one purpose in K-12 education Every educator engages in effective professional learning every day to so every student achieves” (Hirsh et al., 2014, p. 41).

Learning Organization: "where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (Senge, 1990, p. 3).

Learning System: “Learning systems organize professional learning communities to advance continuous improvement, promote collective responsibility, and support alignment of individual, team, school, and school district goals” (Hirsh et al., 2014, p. 22).
**Professional Development:** “Professional development is the process whereby people’s professionalism may be considered to be enhanced, with a degree of permanence” (Evans, 2014, p. 188).

**Professional Learning:** “Professional learning calls for long-term sustained focus on embedding the practice of learning into the system so that those who have the greatest impact on student learning are continuously developing precision in their work to produce better outcomes for all” (Hirsh et al., 2014, p. 21).

**Reform Professional Development:** Format for professional development different than traditional formats. Included in this category are: “teacher study groups, teacher collaboratives, networks, or committees, mentoring, internships, and resource centers” (Garet et al., 2001, p. 920)

- **Coaching:** “One to one working with a more experienced teacher” (Boyle, While, & Boyle, 2004, p. 67).
- **Mentoring:** “Usually one-to-one induction or ongoing support and advice from senior member of staff to junior or across peer groups” (Boyle et al., 2004, p. 67).
- **Networks** “Links teachers or groups either in person or electronically, to explore and discuss topics of interest, pursue common goals, share information and address common concerns” (Boyle et al., 2004, p. 67).
- **Professional learning community:** “professional community of learners, in which the teachers in a school and its administrators continuously seek and share learning, and act on their learning. The goal of their actions is to enhance their effectiveness as
professionals for the students' benefit; thus, this arrangement may also be termed communities of continuous inquiry and improvement” (Hord, 1997, p. 1).

- **Study Group**: “Teachers engage in regular, structured and collaborative interactions around topics identified by the group” (Boyle et al., 2004, p. 67).

*Traditional Professional Development*

- **Institutes, Courses, and Conferences**: “Take place outside of the teacher’s school or classroom; and they involve a leader or leaders with special expertise and participants who attend at scheduled times” (Garet et al., 2001, p. 920).

- **Workshops**: “A workshop is a structured approach to professional development that occurs outside the teacher’s classroom” (Garet et al., 2001, p. 920).

**Summary**

Teacher professional development provides an opportunity for educators to develop the skills, knowledge, and capacities to meet the ever changing the demands of working in education and “when thoughtfully conceived, well-designed, and supported—is at the heart all successful educational improvement efforts” (Resources for Learning, 2017, p. 5). The Every Student Succeeds Act of 2015 expanded upon previous legislation and research to articulate six criteria for quality teacher professional development. The ESSA legislation did not articulate concrete and measurable definitions for the six criteria; the Frontline Research Institute developed the definitions and metrics for the six criteria in ESSA (Combs & Silverman, 2017). The purpose of the study was to determine what select Minnesota K-12 teachers reported as their frequency of their participation in professional development aligned to six ESSA criteria, the
formats of professional development in which teachers participate, and how professional
development positively impacted their instructional practice.

The review of related literature in Chapter II provides an overview of effective
professional development, the identification the formats of professional development available to
teachers, and will describes the impact of quality professional development on teacher
instructional practice.

Chapter III presents the details of the quantitative study including methodology,
participants, human subject approval, instruments for data collection and analysis, research
design, procedures, and timeline.

Chapter IV provides a thorough analysis of the data collected in the survey.

Chapter V presents a summary of the findings, conclusions based on data collected,
discussion, limitations, and recommendations offered for further research in the field and for
professional practice.
**Chapter II: Review of Literature**

**Introduction**

The role of professional learning for teachers cannot be understated. In 2009, Linda Darling-Hammond said, to help young people learn the more complex and analytical skills they need for the 21st century, teachers must learn to teach in ways that develop higher-order thinking and performance. To develop the sophisticated teaching required for this mission, education systems must offer more effective professional learning than has traditionally been available. (Darling-Hammond & Richardson, 2009)

The purpose of the quantitative study was to determine what select Minnesota K-12 teachers reported as their frequency of their participation in professional development aligned to the six ESSA criteria, the formats of professional development in which teachers participate, and how professional development positively impacted their instructional practice. The purpose of this literature review is to provide an overview of related research on the following themes:

1. Effective professional development,
2. Formats of professional development available to teachers, and
3. Impacts of quality professional development on teacher instructional practice

**Effective Professional Development**

Learning Forward’s mission is to, “build the capacity of leaders to establish and sustain highly effective professional learning” (Learning Forward, 2017). Learning Forward, formerly called the National Staff Development Council, was founded in 1969 with the purpose of supporting educators and leaders in providing and receiving high-quality professional learning.
and the organization brought together its first members in Minneapolis, Minnesota (Learning Forward, 2017). The National Staff Development Council changed its name to Learning Forward in 2010 to illustrate, “a growing international presence, a stronger focus on educator learning to support student learning, and the increasing influence of the association among policy makers, decision makers, and practitioners” (Learning Forward, 2017). Learning Forward’s aim of effective professional development is to “help educators develop their own knowledge, skills, practices, and dispositions so they can help students perform at higher levels” (Hirsh et al. 2014, p. 36). However, professional development offered for teachers frequently focused on credits, licenses, and salaries, instead of on how teachers can improve their practice and the performance of their students (Hirsh et al., 2014). Helen Timperley (2011) challenges the term professional development, saying,

> the term ‘professional development’ has taken on connotations of delivery of kind of information to teachers in order to influence their practice where ‘professional learning’ implies an internal process in which individuals create professional knowledge through interaction with this information in a way that challenges previous assumptions and creates new meanings. (p. 4)

Timperley further asserted that, “professional learning requires teachers to be seriously engaged in their learning whereas professional development is often seen merely as participation” (Timperley, 2011, p. 5). Learning Forward developed a succinct definition of professional learning as well as effectiveness criteria, “professional learning calls for long-term sustained focus on embedding the practice of learning into the system so that those who have the greatest
impact on student learning are continuously developing precision in their work to produce better outcomes for all (Hirsh et al., 2014, p. 21).

Desimone, Borko, Pairse, and Darling-Hammond agreed with Learning Forward on the importance of professional development, “as the key strategy for increasing organization and educator effectiveness in order to improve student outcome” (Hirsh et al., 2014, p. 20). More importantly, ensuring professional development is effective and provides teachers with the knowledge, skills, and capacities to, “ensure that all children attend an excellent school” (Hirsh et al., 2014, p. 5). Researchers approached the definition of effective professional development in a variety of ways; between 1993 and 2003, no fewer than thirteen organizations attempted to identify the characteristics of effective professional development (Guskey, 2003). While “there appears to be little agreement among professional development researchers or practitioners about the criteria for ‘effectiveness,’ the synthesis of these publications identified twenty-one characteristics with, ‘the enhancement of teachers’ content and pedagogical knowledge” as the most frequently occurring (Guskey, 2003, p. 749). Guskey’s (2003) list of the effective characteristics professional development included:

- Time must be well organized, carefully structured, and purposefully directed;
- Collaboration needs to be structured and purposeful, with efforts guided by clear goals for improving student learning;
- Aligned with other reform initiatives and to model high-quality instruction;
- Broadly defined outcomes to include a variety of indicators of student achievement, such as assessment results, portfolio evaluations, marks or grades, or scores from standardized examinations (pp. 749-750).
Desimone et al. (2002) conducted a longitudinal study of the impact of professional development on teacher practice, found the emergence of five characteristics of effective professional development:

1. A focus on content and how students learn content,
2. In-depth active learning opportunities,
3. Links to high standards, opportunities for teachers to engage in leadership roles,
4. Extended duration;
5. Collective participation of groups of teachers from the same school, grade, or department (p. 82).

Desimone’s later research (2009) suggested a consensus on the core attributes of professional development which impact teacher practice. These core attributes are: content focus, active learning, coherence, duration, and collective participation (p. 183). Content-focused professional development provided teachers with information about the specific content they teach and how students learn the subject (Desimone, 2011). Subsequent research on content-focused professional development expanded the definition to include, “concrete tasks of teaching, assessment, observation, and reflection” (Pella, 2015; Wei et al., 2009).

The attributes of coherence and duration proved problematic for teachers. Coherence in professional development was the alignment of all professional development activities to, “be consistent with other professional development, with their knowledge and beliefs, and with school, district, and state reforms and policies” (Desimone, 2011, p. 69). Desimone and Garet (2015) found that a strong facet of coherence was “the alignment of [professional development] with the material the teacher is teaching” (p. 256). A criticism of professional development has
centered on the lack of coherence or disconnect among various professional development activities (Garet et al., 2001). An additional criticism, “rather than treating professional development as a distinct and separate entity or area of focus, as has commonly been the case, teacher improvement should be approached as a natural byproduct of larger organizational management strategies” (Graham, 2007, p. 2).

Duration referred to the amount of time teachers spent in professional development and how that time is distributed during the year (Desimone, 2011). A meta-analysis conducted by Yoon, Duncan, Lee, Scarloss, and Shapley (2007) found that an average of 49 hours of professional development has the potential for a 21 percentile point increase in student achievement (Yoon et al., 2007). Moreover, the same meta-analysis concluded, “that greater than 14 hours of professional development showed a positive and significant effect on student achievement from staff development” (Yoon et al., 2007, p. 12).

Despite the research on duration and coherence as critical attributes of effective professional development, most professional development was still identified as “one-shot workshops at which they listen passively to ‘experts’ and learn about topics not essential to teaching” (Boyle et al., 2004, p. 47). Examining the data on the links between professional development explicitly focused on content in a specified area and the duration of time teachers spent in that area, “only 56% of teachers reported more than eight hours of professional development” (Boyle et al., 2004, p. 47). Teachers also reported that professional development which is both sustained and intensive, has a greater likelihood of having an impact than sporadic professional development (Garet et al., 2001). Furthermore,
results also indicate that professional development that focuses on academic subject matter (content), gives teachers opportunities for "hands-on" work (active learning), and is integrated into the daily life of the school (coherence), is more likely to produce enhanced knowledge and skills. (Garet et al., 2001, p. 935)

Federal legislation sought to define professional development with the 2001 No Child Left Behind Act, which described high quality professional development as activities that improve and increase teachers’ knowledge of the academic subjects the teachers teach (content focus) and that are sustained and intensive (duration) and are directly related to state academic content standards, student academic achievement standards, and assessment. (Desimone, 2009, p. 184)

The Every Student Succeeds Act (ESSA) of 2015 expanded upon No Child Left Behind when it, “legislates that professional development is aligned with high-quality research and with evidence that it improves teaching and learning” (Combs & Silverman, 2017, p. 14). This legislation identified six criteria of high-quality professional learning: sustained, intensive, collaborative, job-embedded, data-driven, and classroom-focused. The ESSA legislation did not provide explicit definitions of these criteria, which led Frontline Research Institute to develop “succinct and measurable definitions” (Combs & Silverman, 2017, p. 12). The definitions developed from the research and served as a guide for evaluating professional development are:

- Sustained: taking place over an extended period; longer than one day or a one-time workshop,
- Intensive: focused on a discrete concept, practice, or program,
● Collaborative: involving multiple educators, educators and coaches or a set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding,

● Job-embedded: a part of the ongoing, regular work of instruction and related to teaching and learning taking place in real time in the teaching and learning environment,

● Data-driven: based upon responsive real time information about the needs of participants and their students,

● Classroom-focused: related to the practices taking place during the teaching process and relevant to instructional processes (Combs & Silverman, 2017).

The Frontline Research Institute conducted an analysis of existing data to determine teacher’s professional development experiences to each of the six ESSA criteria and determined that only 13% of professional development activities lasted longer than three meetings and therefore did not meet the definition of sustained professional development (Combs & Silverman, 2017). Frontline Research Institute also found that average length of professional development activities was 4.5 hours, which did not meet the metric for intensive professional development (Combs & Silverman, 2017). Additional conclusions from the Frontline Research Institute included:

● 9% of professional development enrollments have a collaborative format

● 8% of activities offered aligned to the data-driven format

● 63% of professional development opportunities are offered within the school system
85% of activities were aligned with at least one classroom-focused InTASC Standard (Combs & Silverman, 2017, p. 5).

The Frontline Research study concluded that, “most professional development offered and enrolled in today does not meet the federal definition of quality” (Combs & Silverman, 2017, p. 5).

Indepedently examining each of the criteria of effective professional development under ESSA, provides a limited picture of professional development because, “each of the criteria work in concert to produce high quality—that is, effective in supporting educators to grow and improve—professional learning, and merely meeting one or two does not translate to effectiveness” (Combs & Silverman, 2017, p. 6.). An important aspect to consider is the interconnected nature of the elements of effective professional development.

Linking the attributes of duration and coherence, research asserted that, professional development is more effective when schools approach it not in isolation (as in the traditional one-shot workshop) but rather as a coherent part of a school reform effort. To avoid disparities between what teachers learn in professional development work and what they can actually implement in their classrooms, schools should seamlessly link curriculum, assessment, standards, and professional learning opportunities. (Darling-Hammond & Richardson, 2009, p. 2)

Guskey summarized the importance of, “agreeing on the criteria for effectiveness and providing clear descriptions of important contextual elements, we can guarantee sure and steady progress in our efforts to improve the quality of professional development endeavors” (Guskey, 2003, p. 750). The criteria developed in ESSA and defined by Frontline (Combs & Silverman,
2017) provided a framework to determine if the formats of professional development experienced by teachers met the definition of effective. The results of the data analysis completed by Frontline Research Institute and other data sources, clearly indicated that teachers do not experience professional development aligned with the research on effective professional development practices (Combs & Silverman, 2017).

**Formats of Professional Development**

“Professionals learn, in a way that shapes their practice, from a diverse range of activities, from formal PD programs, through interaction with work colleagues, to experiences outside work, in differing combinations and permutations of experiences” (Webster-Wright, 2009, p. 705). Desimone (2009) found that teacher professional development, “comes in a multitude of formal and informal, embedded and discrete activities,” and vary from highly structured presentations to conversations in school halls (p. 183).

Informal professional development activities included, “‘hallway’ discussions with other teachers about instruction techniques, embedded in teachers’ everyday work lives” (Desimone, 2009, p. 491). The characteristics of informal professional development included, “a low degree of planning and organization in terms of context, support, time, and objectives” (Kyndt, Gijbels, Grosemans, & Donche, 2016, p. 1113). Informal professional development also occurred after each lesson taught, assessment given, curriculum revision, or publication read (Desimone, 2009; Guskey, 1991).

Formal professional development involved times in which teachers have “structured time, space, goals and support” (Kyndt et al., 2016, p. 1113). Formal professional development can be categorized into several different activities and Garet et al. (2011) identified ten formats of...
formal professional development, “within-district workshops, courses for college credit, out-of-district workshops, out-of-district conferences, teacher study groups, teacher collaboratives or networks, committees, mentoring, internships, and resource centers” (p. 921). Boyle et al. (2004) added to the list by including: “research/enquiry, coaching, observation of colleagues, sharing practice, drop-in clinics,” as formal activities (p. 61).

In addition to the formal/informal continuum, teacher professional development can also be separated into traditional and reform activities (Garet et al., 2001). Traditional professional development activities included, “within-district workshops, courses for college credit, out-of-district workshops, out-of-district conferences” (Garet et al., 2001, p. 921). Traditional forms of professional development are characterized by their location, typically outside for a teacher’s classroom and/or school; as well as the role of a leader or leaders with special expertise (Garet et al., 2001). These forms of professional development are, “quite common, they are widely criticized as being ineffective in providing teachers with sufficient time, activities, and content necessary for increasing teacher's knowledge and fostering meaningful changes in their classroom” (Garet et al., 2001, p. 920). These traditional or, “typical forms of professional development tend not to encourage accommodations or conceptual change” (Katz & Dack, 2013, p. 22).

Teacher study groups, teacher collaboratives or networks, committees, mentoring, internships, and resources centers are considered reform formats of professional development (Garet et al., 2001). Reform professional development formats offer more sustained learning, increased coherence, and more active learning (Garet et al., 2001). In a 1989 study, reform
activities constituted 18.7% of the professional development activities in which teachers participated (Desimone et al., 2002).

Professional learning communities, where teachers, “continuously seek and share learning, and act on their learning,” fall under the definition of reform format of professional development (Hord, 1997, p. 1). The role and the power of professional learning community is exhibited when teachers; “focus on learning rather than teaching, work collaboratively on matters related to learning, and hold itself accountable for the kind of results that fuel continual improvement. When educators do the hard work necessary to implement these principles, their collective ability to help all students learn inevitably will rise” (DuFour, 2011, p. 162).

Professional learning communities exemplify a critical attribute of effective professional development, collective participation, which occurred when; “groups of teachers from the same grade, subject, or school should participate in professional development activities together to build an interactive learning community” (Desimone, 2011, p. 69). Vescio’s research identified four critical components of professional learning communities: collaboration, student learning focus, teacher authority, and ongoing learning (Vescio, Ross, & Adams, 2008). Katz and Dack (2013) asserted that, “a strong PLC in a school revolves around learning being central in all interactions and conversations” (p. 24). This furthers the notion that professional learning communities center on learning and improving practice and provide “opportunities that create dissonance or discomfort” (Katz & Dack, 2013, p. 33). However, Supovitz (2006) asserted that “for the most part, PLCs are more about doing things together, rather than learning things together” (Katz & Dack, 2013, p. 31). Vescio et al. (2008) added that, “to demonstrate results, PLCs must be able to articulate their outcomes in terms of data that indicate changed teaching
practices and improved student learning, something they have not yet established as common practice” (p. 82).

Different professional development activities generate different results in teacher learning,

traditional approaches to professional development do foster teachers’ awareness or interest in deepening their knowledge and skills. However, these approaches appear insufficient to foster learning which fundamentally alters what teachers teach or how they teach. Activities of the reform format are more effective primarily because they are longer and thus have more content focus, active learning opportunities and coherence. When traditional forms of activities are longer they too have better core features and are just as effective. (Birman et al., 2000; Boyle et al., 2004)

Teachers report that the majority of their professional development occurred “on in-service days or in the summer, and nearly 25% report spending fewer than 1 hour each week on professional learning” (Resources for Learning, 2017, p. 13). The most popular professional development activities were observations of colleagues and sharing practice, while the least popular were study groups, drop-in clinics, and coaching (Boyle et al., 2004).

Teachers want professional development activities that provide engaging and relevant opportunities to practice skills and strategies that teachers identified as best meeting their needs to increase student success (Matherson & Windle, 2017). Desimone’s findings are also consistent with the idea that professional development characterized by “active learning,” where teachers are not passive “recipients” of information, also boosts the impact of professional development activities (Desimone, 2011). Active learning is often more prevalent in reform formats of
professional development, including observations, sharing practice, and discussions with colleague (Garet et al., 2001). Teachers believed that, “successful professional development… involves components of social interaction, not just the ‘sit and get’” (Matherson & Windle, 2017, p. 29). “These findings are consistent with research and reformers that suggested that teachers must engage in active learning such as interacting with their colleagues on a regular basis to discuss their work and their students’ learning, in order to develop a deeper understanding of how children think and learn” (Desimone, 2011, p. 101).

The content of professional development, either traditional or reform format, must provide teachers with, “first hand opportunities to integrate theory with classroom practice” (Darling-Hammond & McLaughlin, 2011, p. 83). Active professional development that allows teachers to merge theory and practice include activities such as reviewing student work, getting feedback through observation or sharing practice, or planning how to implement curriculum or strategies (Hochberg & Desimone, 2010). “The most useful professional development focuses on active teaching, assessment, observations, and reflection” (Matherson & Windle, 2017, p. 29).

**Impact of Professional Development on Teacher Practice**

In 2008, Title II funds granted by the federal government to the states to improve teacher quality totaled close to $3 billion (Hochberg & Desimone, 2010). Under the Improving Teacher Quality component of Title II, funds can be used for, “offering professional development in core academic areas; promoting growth and rewarding teacher quality” (Martin, Kragler, Quatroche, & Bauserman, 2014, p. 84). The amount of time, energy, and money devoted to improving teacher quality through professional development must enhance teacher practice and impact student achievement (Hochberg & Desimone, 2010). Moreover,
a government survey in 2011-2012 showed that 89% of the nations’ 2.37 million teachers who teach core academic content areas participated in professional development programs. The most common topics for their professional development included using effective instructional strategies and increasing core academic content. (Martin et al., 2014, p. 84)

A survey conducted by the Bill and Melinda Gates Foundation (2015) found that 20% of teachers have input into their professional learning. The same survey found that teachers with a high degree of choice in their professional learning are twice as satisfied with their professional learning as compared to those who have no choice (K-12 Education Team, 2015, p. 10).

Satisfaction with professional development can also help move teachers from compliance to learning by incorporating, “teachers’ voices helps shape the professional learning, resentment is reduced and anxiety decreases because they have more control over the changes happening in their schools and classrooms. Teachers truly feel empowered” (Donohoo, 2017, p. 54). In order to ensure that professional development impacts teacher practice, Learning Forward’s belief statements put forth that:

Professional learning that improves educator effectiveness is fundamental to student learning.

1. All educators have an obligation to improve their practice.

2. More students achieve when educators assume collective responsibility for student learning.

3. Successful leaders create and sustain a culture of learning.
4. Effective school systems commit to continuous improvement for all adults and students. (Learning Forward, 2017)

This belief has led to, “teachers, school and district leaders, and other stakeholders driving a serious conversation to make sure the significant investment in professional learning is resulting in real impact on students” (Crow & Pipkin, 2017, p. 5).

Yoon et al. (2007) examined the findings from 1,343 studies published in the last 20 years that, “potentially addressed the impact of educators’ professional development on student learning outcomes, only nine of them meet the standards set by the What Works Clearinghouse” (p. 3).

All of the studies that showed a positive relationship between professional development and improvements in student learning involved workshops or summer institutes. These workshops focused on the implementation of research-based instructional practices, involved active-learning experiences for participants, and provided teachers with opportunities to adapt the practices to their unique classroom situations. (Guskey & Yoon, 2009, p. 496)

Guskey and Yoon’s research showed that traditional formats of professional development showed a positive relationship. Reform formats of professional development have, “no reliable, valid, and scientifically defensible data to show that the strategies do work. The best that can be said is that their value has yet to be determined.” (Guskey & Yoon, 2009, p. 498).

John Hattie’s (2009) meta-analysis of over 537 studies on professional development, determined that professional development has an overall effect size of 0.62. An effect size of 0.62 is above Hattie’s threshold of 0.40, meaning that the professional development should have
a visible impact on changing teacher practice (Hattie, 2009). However, the effects of teacher professional vary based upon the area of practice, “professional development is more likely to change teacher learning, but these learnings have less effect on teachers’ actual behavior and teachers’ reactions to the professional development, and even less influence on student learning” (Hattie, 2009, p. 120). Hattie’s later research found the effect size of professional development has decreased to 0.51, which is still above the threshold for having a visible impact on teacher practice; and that, “teachers profit greatly from professional development if it provides them with concrete goals and steps for improving and evaluating their instruction in the future” (Hattie & Zierer, 2017, p. 30).

Professional development as a process designed to change teacher practice can begin with activities that are intended to shift teacher’s knowledge, skills, beliefs, and behaviors (Guskey, 2002). An additional step in the process is for teachers to use the newly acquired knowledge, skills, beliefs, or behaviors “to improve the content of their instruction, their approach, their pedagogy, or both” (Desimone, 2009, p. 184). While the process seems simple and linear, many other factors need to be considered, including the time given to teachers to process the new learning and integrate the learning into their practices (Guskey, 2002); “teachers report that they are not provided adequate time during the school day to follow-up on their professional learning by practicing and applying new skills in the classroom” (Resources for Learning, 2017, p. 2). Additionally, the integration of new skills and strategies into teacher practice involves using the skills with students and being provided with further feedback and job-embedded professional learning (Poekert, 2012; Resources for Learning, 2017). Showers (1987) found that, “without
extensive training, persons do not have sufficient knowledge or experience to ‘buy in.’ Once they develop skill and learn to use it, they reach a position where they can make a decision” (p. 82).

Lester’s (2003) research into how to plan effective professional development indicated that, “the teachers who are credited to be the most effective in the classroom are also those who are most anxious to improve their pedagogical skills” (p. 52). The relationship between the process of changing practice and the teacher characteristics is crucial, “for professional development to be successful, two critical factors should be considered: (a) what motivates teachers to engage in professional development, and (b) the process by which the change in teachers’ cognitive discourses occurs” (Matherson & Windle, 2017, p. 29). Teacher motivation cannot be controlled but the purposeful planning of research-based professional development can include improved knowledge of subjects and teaching and learning strategies, willingness to innovate and continue learning, improved confidence and skills in matching teaching and learning strategies with individual needs, and confidence in embedding strategies highlighted as high leverage by research in their day to day practice. (Cordingley, 2015, p. 236)

Teachers participation in professional development centered on a specific aspect of teaching, as opposed to a more general aspect, has shown an increased chance that teachers will use the specific teaching in their classroom practice (Garet et al., 2001). Cordingley (2015) added that, “professional learning conversations that focused simply on analysing current practice and those not rooted in evidence from experimenting with new approaches were not linked with benefits for students” (p. 242). Katz and Dack (2013) argued that “the focus of professional development needs to be on learning outcomes and how participants will behave
differently after the event” (p. 27). Additionally, when professional development’s main focus was on teacher behavior, the impact on student learning is much smaller than when the professional development focal point was on either the curriculum, teacher content knowledge or on how students learn the content (Yoon et al., 2007).

Katz and Dack (2013) define learning as, “the process through which experience causes permanents change in knowledge or behavior” (p. 14). Timperley (2011) expanded this definition stating that “professional learning is an active process of systematic inquiry into the effectiveness of practice for student engagement, learning and well-being and through this process become self-regulated learners” (p. 7). The extent to which changes in instructional practices take effect in the classroom are unclear as, “most teachers reported that professional development reinforced their existing practices, and a minority reported no effect at all” (Hill, 2009, p. 472). Planners of professional development must consider how to provide teachers time to “develop sufficient depth in their knowledge of their new practices so that they can adjust these practices to fit in the nuances of their particular context while maintaining program fidelity” (Guskey, 2014, p. 15). Professional development programs that showed significant effects were intentionally designed to be content-focused, provide sufficient learning time, and provide in-school follow up, which relates directly back to the elements of effective professional development (Blank et al., 2008). The combination of content-focused, sufficient time, and follow up may help counteract the, “one hypothesis for the disappointing results of very intensive content-focused professional development, such as that studied by Garet and colleagues (2008, 2011), is that professional development is less effective when it does not help teachers translate the knowledge or strategies into daily instructional routines and lessons” (Desimone &
Garet, 2015, p. 256). The conditions under which professional development was found to be most effective for student learning included teachers receiving “extended, content-specific opportunities combined with follow-up support” (Weiss & Pasley, 2006, p. 1). Even if these conditions are met, and “teachers’ learning opportunities are of moderate quality and contain no errors or unproven facts, there is also the problem of transfer. In one recent study, we saw teachers taking lessons or activities into their classrooms, often to ill effect” (Hill, 2009, p. 472).

Evidence from a longitudinal study of teacher change conveyed that, “77% of the 779 participants in longer-term professional development activities changed at least one aspect of their teaching practice” (Boyle et al., 2004, p. 46). The areas of teaching practice most impacted by longer-term professional development activities included; planning, teaching style, and assessment practices (Boyle et al., 2004).

In addition to the process of professional development changing teacher practice, other factors which influence the impact of professional development on teacher practice include the context in which a teacher works (Borko, 2004). Teachers develop competence differently based on, “the context of their practice and their understanding of that practice” (Webster-Wright, 2009, p. 719). As individuals, “teachers bring to staff development their knowledge and skills, their learning and teaching styles, and their personal characteristics such as states of growth, conceptual flexibility, sense of efficacy, and self-concepts” (Showers, 1987, p. 79). Hochberg and Desimone (2010) explained that a large contributor to the success of changing instructional practices is dependent upon a “teachers’ will and skill to change,” highlighting that change is an individual process (p. 96). The will and skill to change may force to teachers to have their
“beliefs or practices are called into question and challenged in ways that require a revision to what we think, believe, know, and do is when learning takes place” (Katz & Dack, 2013, p. 20).

Professional development impacts teachers differently and, “understanding why professional development is successful with some teachers and understanding how to expand the subset is crucial for improving overall student achievement” (Martin et al., 2014, p. 470).

Furthermore, schools and districts that want to,

increase the effectiveness and sustainability of their professional development efforts is to acknowledge the way that professional development affects teachers differently and to adjust it accordingly. This may mean adding additional supports for certain types of teachers, focusing professional development efforts on those teachers that they are most likely to work for, or choosing professional development programs that are best suited to the faculty of a particular school or district. (Martin et al., 2014, p. 471)

While the format of professional development could be a combination of traditional and reform, improving student achievement also requires a focus on the skills students are most lacking or to the skills that are most generalizable” (Martin et al., 2014, p. 479). Moreover, “for practices to become institutionalized, professional development must have the core features of quality-content focus, active learning, coherence, sufficient duration, and collective participation” (Martin et al., 2014, p. 480).

The institutionalization of a practice does not occur quickly, “capacity must be built over time. Periods of intense development must be coupled with opportunities to recoup. Sustainability is about energy more than it is about time. School cultures improve when teachers when within the school learn from each other on an ongoing basis” (Fullan, 2005, p. 220). In
order to achieve institutionalization of a practice and, learning systems must commit to, “sustained, cumulative improvements at the classroom and school level, by each and every teacher in the school” (Fullan, 1990, p. 19).

**Summary**

In summary, an extensive amount of research supported the identification of explicit criteria that professional development must meet in order to be considered effective (Combs & Silverman, 2017; Desimone et al., 2002; Garet et al., 2001; Guskey, 2003; Hirsh et. al., 2014; Learning Forward, 2017; Pella, 2015; Wei et al., 2009). Research also identified several formats of professional development dividing each format into either traditional (within-district workshops, out-of-district workshops, and college courses) or reform (teacher study groups, coaching, professional learning communities, networks, resource centers and mentoring) (Garet et al. 2001). Much of the research indicated that the professional development teachers experience does not meet the criteria of effective professional development as defined under ESSA, and depending upon whether it is was a reform or tradition format, the impact on teacher practice varies.

This chapter provided a review of the research on effective professional development, the formats of professional development, and how professional development impacted teacher practice. Chapter III discusses the methodology, including the participants, Human Subject Approval, the instrument for data collection, the research design, treatment of data, and procedures and timelines.
Chapter III: Methodology

Introduction

The purpose of the quantitative study was to determine what select Minnesota K-12 teachers reported as their frequency of their participation in professional development aligned to the six ESSA criteria, the formats of professional development in which teachers participate, and how professional development positively impacted their instructional practice.

Chapter three provides specific information regarding the quantitative study, including methodology, participants, Human Subject Approval, data instruments for collection and analysis, research design, and procedures and timeline.

Research Questions

The four research questions guiding the study included:

1. Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers identify as their frequency of participation in professional development?
2. How did select Minnesota K-12 licensed teachers rank the six ESSA professional development criteria as having positively impacted their instructional practice?
3. What did select Minnesota K-12 licensed teachers identify as the formats of professional development in which they most frequently participated?
4. How did select Minnesota K-12 licensed teachers rank the formats of professional development as having positively impacted their instructional practice?
Participants

Participants in the study were K-12 Minnesota teachers licensed in all subject areas, including special education and English language learners, who were recruited using passive recruitment techniques utilizing social media.

Participants were identified using two non-probability sampling techniques, convenience sampling and snowball sampling. Convenience sampling is when, “the researcher simply chooses the sample from those she has easy access” (Cohen, Manion, & Morrison, 2011, p. 156). Snowball sampling takes the initial convenience sample and uses, “them as informants to identify others who qualify for inclusion. These informants then identify yet others” (Cohen et al., 2011, p. 158).

The survey was distributed utilizing social media, which are “internet-based applications that permit users to construct a public or semi-public profile and create and maintain a list of other users (‘friends’) with whom they may share content and participate in social interactions and networking” (Gelinas et al., 2017, p. 3). The Harvard Catalyst Regulatory Foundations, Ethics, & Law Program described online passive recruitment as having a, “have strong corollaries to traditional forms of active and passive recruitment” (Harvard Catalyst Regulatory Foundations, Ethics, & Law Program, 2015). Those traditional forms of passive recruitment could include posting of flyers and advertisements on bulletin boards (Gelinas et al, 2017, p. 5). Using the security and privacy settings in each of the social media platforms, the researcher was able to make the recruitment post public, similar to a bulletin board. No information on potential survey participants was recorded from their social media profile. The use of Facebook, Twitter, Instagram, and LinkedIn to passively recruit survey participants does not violate any of the social
media sites policies. The researcher did not personally connect with any of the potential participants to recruit them for participation. The researcher posted the recruitment script (Appendix B) and a link to the survey on Facebook, Twitter, Instagram, and LinkedIn; the message read,

Dear Teachers, My name is Jill Kind and I am a doctoral student at St. Cloud State University, researching teachers’ experiences with professional development during the past twelve months. The link below will redirect you to the survey. I anticipate that your participation in this survey presents no greater risk than everyday use of the Internet.

Thank you for your time.

This use of social media to recruit participants was an example of convenience sampling. When people saw the recruitment post and chose to share it with others was snowball sampling.

When participants clicked on the link in the recruitment message, they were directed to the survey, which was external to the recruitment message. This further helped ensure participant confidentiality as there was no direct contact between researcher and participant. Once in the survey, participants were provided with a message regarding informed consent, that participation was voluntary, and stipulated their rights as a research participant (Appendix C). Participants were not asked to provide any demographic information and were informed that their answers are confidential. The informed consent letter provided participants with information regarding how data were presented and that there were no inherent risks to their participation. Lastly, survey participants were informed that submission of a completed survey would indicate their consent to participate in the study and the results of the survey would be presented publicly at St. Cloud State University.
Human Subjects—Institutional Review Board (IRB)

The researcher completed the Human Subjects Review training course by provided by St. Cloud State University on October 28, 2017 (Appendix A). After the research committee approved the research proposal, the researcher submitted appropriate application materials to the St. Cloud State University Institutional Review Board. The proposed study was approved by the Institutional Review Board on July 19, 2018.

Research Design

Based on the research questions, a quantitative research study was determined to be the most effective design for ascertaining teachers’ experiences with the six criteria of effective professional development identified under the Every Student Succeeds Act (ESSA) and defined by Frontline Research Institute (2017), the formats of professional development in which teachers participated, and how teachers’ instructional practice were impacted by professional development. In the quantitative study, an electronic closed-ended survey which utilized social media for distribution was used to gather data. The survey questions were designed by applying information from the related literature regarding the ESSA criteria for effective professional development, the formats of professional development in which teachers participate, and the impact of professional development on teacher practice. The survey questions were grounded in the research detailed in the review of related literature and demonstrated content validity because they, “show that it fairly and comprehensively covers the items it purports to cover” (Cohen et al., 2011, p. 188).

After the initial design of the survey, it was field tested with a group of doctoral students all working in the field of education in Minnesota. The purpose of the field test was to garner
feedback on question clarity, response clarity, time needed to complete the survey, and connection between the research questions and the survey. After the field test, the researcher used the feedback to further refine the instrument.

The survey included six questions (Appendix D). The survey was delivered to participants using Survey Monkey, an online survey provider. The first question was designed to ensure that only Minnesota teachers responded to the survey. People who respond that they did not work in Minnesota received the following message, “Thank you for your willingness to participate in this survey. Unfortunately, at this time, you do not meet the participation criteria.” Survey Monkey allows the use of skip logic, which allows survey respondents to take a specific path throughout the survey. Question two asked participants to identify their current role in schools; participants who selected responses other than K-12 teacher received the following message, “Thank you for your willingness to participate in this survey. Unfortunately, at this time, you do not meet the participation criteria.” Participants who answered both questions in the affirmative were moved on to question three.

Question three reflected the ESSA criteria of effective professional development. Participants were asked to determine the frequency of their participation in professional development aligned to each of the criteria during the past 12 months.

Question five required participants to identify the frequency of the formats of professional development in which they participated in during the past twelve months. The formats of professional development identified in this question correspond to either traditional or reform formats of professional development as described in the literature.
Questions four and six asked participants to distribute a total of 10 points among the professional development criteria or formats that they think most positively impacted their classroom practice. The points could be distributed freely, so they may be spread out, or awarded to only a few criteria or formats, or all allocated to single criteria or format. Constant rank sum questioning was selected because it “enables priorities to be identified…. It requires respondents to make comparative judgements and choices across a range of items” (Cohen et al, 2011, p. 391).

**Treatment of Data**

The data analysis methods used the results from the online survey provider, Survey Monkey. Data were analyzed using the Statistical Package for the Social Sciences (SPSS). Data from the questions was analyzed using descriptive statistics including such measures as frequency, and mean (Cohen et al., 2011).

Questions one and two were not included in the data analysis. The sole purpose of those two questions was to ensure that the correct sample was completing the survey.

Question three asked teachers to rate the frequency with which teachers participated in professional development meeting each of the ESSA criteria during the past twelve months. The division of frequencies was: less than 25% of the time, 25-50% of the time, 51-75% of the time, and more than 75% of the time.

Question five asked participants to rate the frequency of the formats of professional development in which they participated during the past 12 months. The frequencies are divided into never, yearly, quarterly, monthly, and weekly. Question five was further analyzed by
categorizing each format of professional development as either traditional or reform professional development based on the research of Garet, Porter, and Desimone (2001).

Question four and six both used constant rank sum. This allowed the researcher to determine how teachers prioritized both the criteria and the format of professional development in which they participated during the past 12 months.

**Procedures and Timeline**

The proposed study was approved by the Institutional Review Board on July 19, 2018. The researcher developed a statement of consent and the survey link which was distributed to teachers via social media on August 28, 2018. The message posted (Appendix B) on Facebook, Twitter, Instagram, and LinkedIn read,

> Dear Teachers, My name is Jill Kind and I am a doctoral student at St. Cloud State University, researching teachers’ experiences with professional development during the past twelve months. The link below will redirect you to the survey. I anticipate that your participation in this survey presents no greater risk than everyday use of the Internet.

Thank you for your time.

Participants who selected to go to the survey were then provided with a message regarding informed consent. The message also informed participants that they are free to withdraw from the study at any point by exiting the survey. Survey Monkey automatically collected participants’ responses. The researcher posted follow up messages on each social media outlet on August 28, September 9, September 25, October 2, and October 20. The text of the message was the same each time it was posted. The message and survey link were shared by other people 81 times. The
survey was open until October 26. Once closed, data were analyzed. The final oral defense was held on February 20, 2019 at St. Cloud State University.

**Summary**

Chapter III outlined the purpose of the study, the research design and research questions, Human Subjects Approval, the participants, instrument used for data collection, treatment of the data and analysis, and procedures and timelines. The quantitative study investigated teachers’ experiences on the connection between the professional development they experience and the six criteria of effective professional development defined under the Every Student Succeeds Act (ESSA), the formats of professional development in which teachers participated, and how teacher practice was impacted by professional development.
Chapter IV: Results

Purpose

The goal of all students attending excellent schools and having teachers with the knowledge, skills, and capacities can be accomplished by ensuring that each and every teacher is provided with effective professional learning (Hirsh et al., 2014). Effective professional development must also, “provide occasions for teachers to reflect critically on their practice and to fashion new knowledge and beliefs about content, pedagogy, and learners” (Darling-Hammond & McLaughlin, 2011, p. 82). These occasions could happen during traditional or reform formats of professional development (Garet et al., 2001).

The purpose of the study was to determine what select Minnesota K-12 teachers report as their frequency of their participation in professional development aligned to the six Every Student Succeeds Act (ESSA) criteria, and what formats of professional development positively impacted their instructional practice.

Research Design

A quantitative research design was determined to be the most effective for ascertaining teachers’ experiences related to effective professional development defined under the Every Student Succeeds Act (ESSA), the formats of professional development in which teachers participated, and the impact of professional development on instructional practices. In the quantitative study, an electronic closed-ended six question survey was used to gather data. The first two questions were exclusionary and asked if the respondent worked in Minnesota and in what area the respondent taught. The remaining four survey questions were designed from the related literature regarding the ESSA criteria for effective professional development, the formats
of professional development in which teachers participate, and the impact of professional
development on instructional practice. The survey questions demonstrated content validity
because they “show that it fairly and comprehensively covers the items it purports to cover”
(Cohen et al., 2011, p. 188).

**Research Questions**

Chapter IV provides the findings of the study based on four research questions developed
by the researcher and derived from the related literature. Statistical analysis was conducted by
the researcher using the Statistical Package for the Social Sciences (SPSS). Quantitative data
were analyzed and findings reported in the same sequence as the research questions were
presented.

The research questions guiding the study included:

1. Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers
   identify as their frequency of participation in professional development?
2. How did select Minnesota K-12 licensed teachers rank the six ESSA professional
development criteria as having positively impacted their instructional practice?
3. What did select Minnesota K-12 licensed teachers identify as the formats of
   professional development in which they most frequently participated?
4. How did select Minnesota K-12 licensed teachers rank the formats of professional
development as having positively impacted their instructional practice?
Organization of Chapter IV

Chapter IV results are organized by each of the four research questions of the study. A description of the study participants is detailed first; the descriptive data for each research question are found in tables with explanations of the findings following each table.

Sample Description

The survey garnered a total of 233 responses. The study specifically focused on Minnesota teachers, which eliminated 28 of the initial responses. Additionally, the study focused on K-12 classroom, Special Education, and English Language teachers which reduced the sample size to 155 responses. Upon analysis of the survey responses, 49 were incomplete resulting in a total of 106 completed surveys.

Data Analysis

Research Question 1: Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers identify as their frequency of participation in professional development?

Research question one aligns with survey question three which asked respondents to reflect on all the professional development experiences in which they participated during the past twelve months and select how frequently these professional development experiences met the ESSA criteria of effective professional development.

Tables 1-6 describe frequency of participation reported by study participants for each of the six ESSA criteria; Table 7 provides a comparison of participation frequency among the six ESSA criteria.

Table 1 illustrates the frequency of participation in the ESSA criterion of job-embedded professional development. Job-embedded professional development considers the ongoing,
regular work of instruction and related to teaching and learning taking place in real time in the teaching and learning environment (Combs & Silverman, 2017).

Table 1

*Frequency of Participation in Job-Embedded Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>23</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>28</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>29</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>26</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 1 data illustrate that 29 respondents or 27.4% identified their participation in job-embedded professional development occurred 51-75% of the time. A total of 28 respondents or 26.4% identified their participation between 25-50% of the time and 26 respondents indicated their participation in job-embedded professional development occurring more than 75% of the time. Participation in job-embedded professional development occurred less than 25% of the time for 23 respondents or 21.7%.

Table 2 reveals the frequency of participation in professional development which is data-driven. This ESSA criterion is based upon responsive real time information about the needs of teachers and their students (Combs & Silverman, 2017).
Table 2

*Frequency of Participation in Data-Driven Professional Development*

<table>
<thead>
<tr>
<th>Frequency of Participation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>28</td>
<td>26.4%</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>30</td>
<td>28.3%</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>34</td>
<td>32.1%</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>14</td>
<td>13.2%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 2 data reveal that 34 respondents or 32.1% of respondents indicated that their professional development was data-driven 51-75% of the time. Another 30 respondents, 28.3% reported they participated in professional development which was data-driven 25-50% of the time and 28 or 26.4%, indicated their participation in data-driven professional development less than 25% of the time. The fewest number of respondents 14 or 13.2% indicated their professional development was data-driven more than 75% of the time.

Table 3 describes the frequency of respondents’ participation in classroom-focused professional development. Classroom-focused professional development is related to the practices taking place during the teaching process and relevant to instructional processes (Combs & Silverman, 2017).
Table 3

*Frequency of Participation in Classroom-Focused Professional Development*

<table>
<thead>
<tr>
<th>Frequency of Participation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>18</td>
<td>17.0%</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>21</td>
<td>19.8%</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>41</td>
<td>38.7%</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>26</td>
<td>24.5%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 3 data reveal that 41 respondents or 38.7% identified their participation in classroom-focused professional development occurred 51-75% of the time. While 26 respondents or 24.5% identified their participation more than 75% of the time, 21 respondents indicated their participation in classroom-focused professional development occurred 25-50% of the time. A total of 18 respondents or 17.0% indicated their participation in classroom-focused professional development occurred less than 25% of the time.

Table 4 shows the frequency of participation in sustained professional development. This is defined as professional development taking place over an extended period—longer than 1 day or a one-time workshop (Combs & Silverman, 2017).
Table 4

*Frequency of Participation in Sustained Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>45</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>25</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>24</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>12</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 4 data reveal that 45 respondents or 42.5% of respondents indicated that their professional development was sustained less than 25% of the time. Another 25 respondents or 23.6% said they participated in professional development which was sustained 25-50% of the time and 24 or 22.6% indicated their participation in sustained professional development 51-75% of the time. A total 12 or 11.3% of respondents indicated their professional development was sustained more than 75% of the time.

Table 5 describes the frequency of respondents’ participation in intensive professional development. Intensive professional development focuses on a discrete concept, practice, or program (Combs & Silverman, 2017).
Table 5

*Frequency of Participation in Intensive Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>31</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>27</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>28</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>20</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 5 data reveal that 31 respondents or 29.2% identified their participation in intensive professional development occurred less than 25% of the time. While 28 respondents or 26.4% identified their participation between 51-75% of the time, 27 respondents indicated their participation in intensive professional development occurred 25-50% of the time. The fewest number of respondents, 20 or 18.9%, indicated their participation in intensive professional development occurred more than 75% of the time.

Table 6 shows the frequency of participation in professional development which is collaborative. This is professional development involving multiple educators, educators and coaches or a set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding (Combs & Silverman, 2017).
Table 6

*Frequency of Participation in Collaborative Professional Development*

<table>
<thead>
<tr>
<th>Frequency of Participation</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 25% of the time</td>
<td>13</td>
<td>12.3%</td>
</tr>
<tr>
<td>25-50% of the time</td>
<td>20</td>
<td>18.9%</td>
</tr>
<tr>
<td>51-75% of the time</td>
<td>36</td>
<td>34.0%</td>
</tr>
<tr>
<td>More than 75% of the time</td>
<td>37</td>
<td>34.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 6 reveal that 37 respondents or 34.9% identified their participation in collaborative professional development occurred more than 75% of the time. While 36 respondents or 34% identified their participation between 51-75% of the time; 20 respondents indicated their participation in collaborative professional development occurring between 25-50% of the time. A total of 13 respondents or 12.3% indicated their participation in collaborative professional development occurred less than 25% of the time.

Table 7 compares the frequency of participation for each of the ESSA criteria for professional development.
Table 7

**Comparison of the Frequency of Participation in the ESSA Criteria of Professional Development**

<table>
<thead>
<tr>
<th></th>
<th>Job-Embedded</th>
<th>Data-Driven</th>
<th>Classroom Focused</th>
<th>Sustained</th>
<th>Intensive</th>
<th>Collaborative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
<td>#</td>
<td>%</td>
</tr>
<tr>
<td>50% of the time or less</td>
<td>51</td>
<td>48.1%</td>
<td>58</td>
<td>54.7%</td>
<td>39</td>
<td>36.8%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>70</td>
<td>66.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>58</td>
<td>54.7%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>33</td>
<td>31.1%</td>
</tr>
<tr>
<td>More than 51% of the time</td>
<td>55</td>
<td>51.9%</td>
<td>48</td>
<td>45.3%</td>
<td>67</td>
<td>63.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36</td>
<td>34.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>48</td>
<td>45.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>73</td>
<td>68.9%</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>106</td>
<td>106</td>
<td>106</td>
<td>106</td>
<td>106</td>
</tr>
</tbody>
</table>

Table 7 data illustrate how the respondents (n = 106) identified the frequency of their participation in professional development aligned to the ESSA criteria. The first two and last two frequency categories were combined to obtain greater clarity of responses.

The most frequently reported professional development aligned with ESSA criteria was collaborative with 68.9% (n = 73) of respondents indicating professional development aligned with this criterion more than 51% of the time. Classroom-focused 63.2% (n = 67) and job-embedded 51.9% (n = 55) were the next most frequently reported participation in professional development ESSA criteria was in the lowest participation frequency reported was the professional development criterion, sustained, with 66.0% (n = 70) participating less than 50% of the time. The second lowest frequency of participation, 50% or less of the time, was for the ESSA criteria of data-driven and intensive each with 54.7% (n = 51).

**Research Question 2:** How did select Minnesota K-12 licensed teachers rank the six ESSA professional development criteria as having positively impacted their instructional practice?
Survey question four asked participants to distribute ten points among the six ESSA professional development criteria in terms of the positive impact each had on their instructional practice. Table 8 below summarizes how respondents ranked the six criteria and the mean scores.

Table 8

<table>
<thead>
<tr>
<th></th>
<th>Min</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive</td>
<td>0</td>
<td>10</td>
<td>1.1</td>
</tr>
<tr>
<td>Data-Driven</td>
<td>0</td>
<td>5</td>
<td>1.2</td>
</tr>
<tr>
<td>Sustained</td>
<td>0</td>
<td>10</td>
<td>1.3</td>
</tr>
<tr>
<td>Job-Embedded</td>
<td>0</td>
<td>10</td>
<td>2.0</td>
</tr>
<tr>
<td>Classroom Focused</td>
<td>0</td>
<td>6</td>
<td>2.1</td>
</tr>
<tr>
<td>Collaborative</td>
<td>0</td>
<td>10</td>
<td>2.4</td>
</tr>
</tbody>
</table>

The mean for each ESSA criteria was calculated by multiplying each ranking (0-10) by the number of respondents and then dividing the total for each criteria by the number of total respondents (n = 106). The higher the mean scores the more positive impact on instructional practice. The criteria with the highest mean score, 2.4, was collaborative professional development. Classroom-focused professional development attained mean score of 2.1. Job embedded professional development received a mean score of 2.0, and sustained professional development recorded a mean score of 1.3. Data-driven professional development had a mean score of 1.2. The lowest mean score, 1.1, was for intensive professional development.

Research Question 3: What did select Minnesota K-12 licensed teachers identify as the formats of professional development in which they most frequently participated?
The researcher analyzed the responses to survey question five which asked participants to identify the formats of professional development in which they most frequently participated. Tables 9-17 show how participants identified their frequency of participation in nine formats of professional development identified in the review of literature which included: within district, out of district, college courses, teacher study group, online or face to face networks, mentoring, teacher resource center, coaching, and professional learning communities.

Table 9 identifies the frequency of participation in within district format of professional development.

Table 9

*Frequency of Participation in Within District Format of Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td>Yearly</td>
<td>3</td>
</tr>
<tr>
<td>Quarterly</td>
<td>54</td>
</tr>
<tr>
<td>Monthly</td>
<td>40</td>
</tr>
<tr>
<td>Weekly</td>
<td>9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

The majority of respondents, 54 or 50.9%, identified their participation in district professional development as occurring quarterly. The second highest reported frequency was monthly with 40 respondents or 37.7%. A total of nine respondents or 8.5% reported their participation in district professional development occurred weekly. Yearly participation in district professional development was selected by three or 2.8% of respondents.
Table 10 provides a summary of the frequency of participation in out of district professional development.

Table 10

*Frequency of Participation in Out of District Format of Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>28</td>
</tr>
<tr>
<td>Yearly</td>
<td>64</td>
</tr>
<tr>
<td>Quarterly</td>
<td>14</td>
</tr>
<tr>
<td>Monthly</td>
<td>0</td>
</tr>
<tr>
<td>Weekly</td>
<td>0</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

A total of 64 or 60.4% of respondents reported participating in out of district professional development yearly. The second highest reported frequency for participating in out of district professional development was never selected by 28 respondents or 26.4%. Quarterly participation in out of district professional development was indicated by 13.2% or 14 respondents. No respondents indicated participation in out of district professional development either weekly or monthly.

Table 11 summarizes the frequency of participation in college courses as a format of professional development.
A total of 69 respondents or 65.1% indicated never for the frequency of participation in college courses as a format of professional development. An additional 14 respondents or 13.2% indicated the frequency of participation in college courses as a format of professional development as yearly. Quarterly and weekly participation in college courses as professional development were each identified by eight respondents or 7.5%. A total of seven respondents or 6.6% indicated the frequency of their participation in college courses occurred monthly.

Table 12 shows the frequency of participation in teacher study groups as a format of professional development.
Table 12

Frequency of Participation in Teacher Study Group Format of Professional Development

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>69</td>
<td>65.1%</td>
</tr>
<tr>
<td>Yearly</td>
<td>10</td>
<td>9.4%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>11</td>
<td>10.4%</td>
</tr>
<tr>
<td>Monthly</td>
<td>11</td>
<td>10.4%</td>
</tr>
<tr>
<td>Weekly</td>
<td>5</td>
<td>4.7%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

A total of 69 respondents or 65.1% indicated never for the frequency of participation in teacher study groups as a format of professional development. Quarterly and monthly participation in teacher study groups as professional development were each identified by eleven respondents or 7.5%. Yearly participation was selected as the frequency of participation by 10 respondents or 10.4%. A total of five respondents or 4.7% indicated their participation in teacher study groups as weekly.

Table 13 shows the frequency of participation in online or face to face networks as reported by 106 participants.
Table 13

*Frequency of Participation in Online or Face to Face Networks of Professional Development*

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>46</td>
</tr>
<tr>
<td>Yearly</td>
<td>15</td>
</tr>
<tr>
<td>Quarterly</td>
<td>17</td>
</tr>
<tr>
<td>Monthly</td>
<td>13</td>
</tr>
<tr>
<td>Weekly</td>
<td>15</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
</tr>
</tbody>
</table>

Participation in online or face to face networks 46 respondents or 43.4% indicated that they never participate in online or face to face networks for professional development. Quarterly participation in online or face to face networks was indicated by 17 respondents or 16.0%. Weekly and yearly participation in online or face to face networks as professional development were each identified by 15 respondents or 14.2%, and monthly participation in online or face to face networks was indicated by 13 respondents or 12.3%.

Table 14 shows the frequency of participation in mentoring as a format of professional development.
A majority of respondents, 63 or 59.4%, indicated never for the frequency of participation in mentoring as a format of professional development. An additional 13 respondents or 12.3% indicated the frequency of participation in mentoring as a format of professional development as quarterly. A total of 12 respondents or 11.3% indicated the frequency of their participation in mentoring occurring weekly. Monthly participation in mentoring as a form of professional development was indicated by 10 respondents or 9.4%. Yearly participation in mentoring was indicated by eight respondents or 7.5%.

Table 15 describes data for the frequency of participation in teacher resource centers.
A majority of respondents, 90 or 84.9%, indicated the choice of never for the frequency of participation in teacher resource centers as a format of professional development. Quarterly participation in teacher resource centers as professional development was identified by seven respondents or 6.6%. Weekly, monthly and yearly participation in teacher resource center professional development were each reported by five or fewer respondents.

Table 16 summarizes the frequency of participation in coaching as a format of professional development.

### Table 15

<table>
<thead>
<tr>
<th>Format of Professional Development</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>90</td>
<td>84.9%</td>
</tr>
<tr>
<td>Yearly</td>
<td>5</td>
<td>4.7%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>7</td>
<td>6.6%</td>
</tr>
<tr>
<td>Monthly</td>
<td>3</td>
<td>2.8%</td>
</tr>
<tr>
<td>Weekly</td>
<td>1</td>
<td>0.9%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Frequency of Participation in Teacher Resource Center Format of Professional Development
Table 16

*Frequency of Participation in Coaching Format of Professional Development*

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>30</td>
<td>28.3%</td>
</tr>
<tr>
<td>Yearly</td>
<td>9</td>
<td>8.5%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>45</td>
<td>42.5%</td>
</tr>
<tr>
<td>Monthly</td>
<td>18</td>
<td>17.0%</td>
</tr>
<tr>
<td>Weekly</td>
<td>4</td>
<td>3.8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

The largest number of respondents, 45 or 42.5%, identified their participation in coaching as a professional development format occurred quarterly. The second highest reported frequency was never at 30 respondents or 28.3%. Monthly participation in coaching as a professional development format was selected by 18 respondents or 17.0%. A total of nine respondents or 8.5% reported their participation in coaching professional development occurring yearly. Weekly participation in coaching was selected by only four or 3.8% of the 106 respondents.

Table 17 shows the frequency of participation in professional learning communities.
Table 17

Frequency of Participation in Professional Learning Community Format of Professional Development

<table>
<thead>
<tr>
<th>Format of Professional Development</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>4</td>
<td>3.8%</td>
</tr>
<tr>
<td>Yearly</td>
<td>2</td>
<td>1.9%</td>
</tr>
<tr>
<td>Quarterly</td>
<td>6</td>
<td>5.7%</td>
</tr>
<tr>
<td>Monthly</td>
<td>16</td>
<td>15.1%</td>
</tr>
<tr>
<td>Weekly</td>
<td>78</td>
<td>73.6%</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 17 data illustrate that 78 respondents or 73.6% identified their participation in professional learning communities as weekly. A total of 16 respondents or 15.1% identified their participation as monthly. There were 12 or 11.3% respondents who indicated their participation in professional learning communities was quarterly, yearly or never.

Table 18 highlights the distribution of participation in all nine formats of professional development.
Table 18

*Comparison of Participation in all Nine Formats of Professional Development (n = 106)*

<table>
<thead>
<tr>
<th>Professional Learning Community</th>
<th>Professional Development</th>
<th>Coaching</th>
<th>Teacher Resource Center</th>
<th>Face to Face or Online Networks</th>
<th>Mentor</th>
<th>Study Group</th>
<th>College Course</th>
<th>Out of District</th>
<th>In District</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Never</em></td>
<td>0.0%</td>
<td>28.6%</td>
<td>26.4%</td>
<td>69.4%</td>
<td>65.1%</td>
<td>63.6%</td>
<td>46.8%</td>
<td>43.4%</td>
<td>46.8%</td>
</tr>
<tr>
<td><em>Yearly</em></td>
<td>3.8%</td>
<td>64.0%</td>
<td>13.2%</td>
<td>11.2%</td>
<td>94.0%</td>
<td>15.4%</td>
<td>10.4%</td>
<td>10.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td><em>Quarterly</em></td>
<td>2.8%</td>
<td>60.4%</td>
<td>13.2%</td>
<td>11.2%</td>
<td>10.4%</td>
<td>16.0%</td>
<td>10.4%</td>
<td>10.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td><em>Monthly</em></td>
<td>4.8%</td>
<td>60.0%</td>
<td>6.6%</td>
<td>11.0%</td>
<td>10.4%</td>
<td>12.3%</td>
<td>10.4%</td>
<td>10.4%</td>
<td>10.4%</td>
</tr>
<tr>
<td><em>Weekly</em></td>
<td>5.8%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Professional learning communities were the most frequent format of professional development reported in the study, with 73.6% (n = 78) of participants indicating weekly participation. Teacher resource center as a format of professional development was the least frequently participated in professional development, 84.9% (n = 90) of respondents reported never participating. Out of district professional development was the most frequently participated in format of professional development on a yearly basis with 60.4% (n = 64) of respondents indicating participation. Quarterly participation was most frequent for the in-district format of professional development with 50% (n = 54) of respondents reporting participation.

Table 19 shows a comparison between the formats of professional development categorized as traditional and those categorized as reform formats. Traditional formats of professional development include within district, outside of district, and college courses (Garet...
Reform formats of professional development include teacher study groups, face to face and online networks, mentoring, teacher resource center, coaching, and professional learning communities (Garet et al., 2001).

Table 19

Comparison of Participation Traditional Formats and Reform Formats of Professional Development

<table>
<thead>
<tr>
<th></th>
<th>Traditional Formats</th>
<th>Reform Formats</th>
<th>Reform v. Traditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Never</td>
<td>97</td>
<td>30.5%</td>
<td>302</td>
</tr>
<tr>
<td>Yearly</td>
<td>81</td>
<td>25.5%</td>
<td>49</td>
</tr>
<tr>
<td>Quarterly</td>
<td>76</td>
<td>23.9%</td>
<td>99</td>
</tr>
<tr>
<td>Monthly</td>
<td>47</td>
<td>14.8%</td>
<td>71</td>
</tr>
<tr>
<td>Weekly</td>
<td>17</td>
<td>5.3%</td>
<td>115</td>
</tr>
<tr>
<td>TOTAL</td>
<td>318</td>
<td>100.0%</td>
<td>636</td>
</tr>
</tbody>
</table>

Table 19 compares the frequency of participation between traditional and reform formats of professional development. Overall respondents indicated that participation in reform formats (636) of professional development occurred more frequently than traditional formats (318). The only format of professional development in which the frequency for traditional professional development was greater than the frequency of reform professional development was yearly participation.

Table 20 combines the frequency of participation for both traditional and reform formats of professional development.
Table 20

*Combined Total of Traditional Formats and Reform Formats of Professional Development Participation*

<table>
<thead>
<tr>
<th></th>
<th>Combined Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
</tr>
<tr>
<td>Never</td>
<td>399</td>
</tr>
<tr>
<td>Yearly</td>
<td>130</td>
</tr>
<tr>
<td>Quarterly</td>
<td>175</td>
</tr>
<tr>
<td>Monthly</td>
<td>118</td>
</tr>
<tr>
<td>Weekly</td>
<td>132</td>
</tr>
<tr>
<td>TOTAL</td>
<td>954</td>
</tr>
</tbody>
</table>

Table 20 combines all the reported frequencies of participation in both traditional and reforms formats of professional development. The highest reported frequency of participation was never at 41.8% (n = 399) of responses. The other four frequencies yearly, quarterly, monthly, and weekly have similar distributions ranging from 12.4% (n = 118) to 18.3% (n = 175).

**Research Question 4**: How did select Minnesota K-12 licensed teachers rank the formats of professional development as having positively impacted their instructional practice?

The researcher analyzed the responses to survey question five. Participants were asked to distribute ten points among the nine formats of professional development as having a positive impact on their instructional practice. Table 21 below summarizes how respondents ranked each of the formats.
Table 21

Summary of Positive Impact of Nine Formats of Professional Development on Practice

<table>
<thead>
<tr>
<th>Format</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Sum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher Resource Center</td>
<td>0</td>
<td>1</td>
<td>193</td>
<td>0.04</td>
</tr>
<tr>
<td>Face to Face or Online Professional Network</td>
<td>0</td>
<td>5</td>
<td>155</td>
<td>0.270</td>
</tr>
<tr>
<td>Teacher Study Group</td>
<td>0</td>
<td>4</td>
<td>68</td>
<td>0.42</td>
</tr>
<tr>
<td>College Course</td>
<td>0</td>
<td>10</td>
<td>44</td>
<td>0.64</td>
</tr>
<tr>
<td>Mentoring Relationship (Mentor or Mentee)</td>
<td>0</td>
<td>6</td>
<td>29</td>
<td>0.64</td>
</tr>
<tr>
<td>Coaching</td>
<td>0</td>
<td>10</td>
<td>68</td>
<td>1.08</td>
</tr>
<tr>
<td>Outside of District Workshop</td>
<td>0</td>
<td>8</td>
<td>4</td>
<td>1.46</td>
</tr>
<tr>
<td>Within District or School Workshop</td>
<td>0</td>
<td>6</td>
<td>114</td>
<td>1.82</td>
</tr>
<tr>
<td>Professional Learning Community</td>
<td>0</td>
<td>10</td>
<td>285</td>
<td>2.69</td>
</tr>
</tbody>
</table>

The weighted mean for each ESSA criteria was calculated by multiplying each ranking (0-10) by the number of respondents and then dividing the total for each format by the number of total respondents (n = 106). The higher the mean scores the more positive impact on instructional practice. The format with the highest mean score, 2.69, was professional learning community. Within district or school format of professional development attained a mean score of 1.82. Outside of district format of professional development received a mean score of 1.46, and coaching as a format of professional development recorded a mean score of 1.08. Both college courses and mentoring relationships attained a mean score of 0.64. The mean score for teacher study group as a format of professional development was 0.42. Face to face or online professional learning networks as a format of professional development attained a mean score of
The format with the lowest mean score (0.04) was teacher resource center as a format of professional development.

Table 22 provides a comparison between the formats of professional development categorized as traditional and those categorized as reform formats.

Table 22

Comparison of the Positive Impact on Practices of Traditional Formats and Reform Formats of Professional Development

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional</td>
<td>0</td>
<td>10</td>
<td>3.92</td>
</tr>
<tr>
<td>Reform</td>
<td>0</td>
<td>10</td>
<td>5.13</td>
</tr>
</tbody>
</table>

Reform formats of professional development include teacher study groups, face to face and online networks, mentoring, teacher resource center, coaching, and professional learning communities; traditional formats of professional development include within district, outside of district, and college courses (Garet et al., 2001). Reform formats of professional development received mean score of 5.13 compared to traditional formats with a mean score of 3.92, which reflects a higher perceived impact of reform formats of professional development than traditional formats of professional development on instructional practice.

Summary of Results

The study examined teachers’ perceptions on the quality of the professional development in which they participated aligned with the six ESSA criteria, the formats in which teachers participated, and how both the quality and format positively impacted their instructional practice.
The Every Student Succeeds Act identified six criteria of effective professional development: job-embedded, data-driven, classroom-focused, sustained, intensive, and collaborative. Teachers reported the professional development aligned with the ESSA criteria in which they most frequently participated was collaborative and the least frequently participated in was sustained professional development. Mean scores revealed collaborative professional development most positively impacted instructional practice.

The literature discussed nine formats of professional development which were divided into two major categories, traditional and reform. In district professional development was reported as the most frequent participation format in traditional professional development; while professional learning communities was reported as the most frequent participation format in reform professional development. Study participants reported most frequently participating in reform formats of professional development. Mean scores revealed that professional learning communities were the format of professional development which most positively impacted instructional practice while teacher resource centers least positively impacted instructional practice.

Chapter V summarizes the findings, compares findings to the related literature, presents conclusions and provides recommendation for future research and professional practice.
Chapter V: Conclusions, Implications, and Recommendations

Introduction

“No system or district in the world has made significant gains for students without a relentless focus on the learning and teaching process” (Fullan & Quinn, 2016, p. 79). The impact of a teacher on student learning cannot be minimized, “student achievement is most influenced by classroom practice, and practice is most influenced by teacher learning” (Katz & Dack, 2013, p. 6). In order to improve student achievement there must be, “some fundamental shifts in thinking about professional development, leadership and classroom practice” (Timperley, 2011, p. 3). Two of the factors that help shape teacher learning are the alignment of professional development to the criteria of effective professional development and the format of the professional development.

Effective professional development can be the, “key strategy for increasing educator effectiveness in order to improve student outcomes,” and an examination of the effectiveness and the formats of professional development experienced by teachers and how it impacts their practice can provide a picture of the current state of professional development in Minnesota (Hirsh et al., 2014, p. 20).

Chapter V presents a summary of the findings, conclusions based on data collected, and recommendations for practice and further research in the field.

Purpose of the Study

The purpose of the study was to determine what select Minnesota K-12 teachers report as their frequency of their participation in professional development aligned to ESSA criteria, the
formats of professional development in which teachers participated, and how professional
development positively impacted their instructional practice.

**Research Design**

A quantitative research study methodology was determined to be the most effective
design for ascertaining teachers’ experiences as related to the connection between the criteria of
effective professional development defined under the Every Student Succeeds Act (ESSA), the
formats of professional development in which teachers participated, and how teachers’
instructional practice were impacted by professional development. In the quantitative study, an
electronic closed-ended survey was used to gather data. The survey was completed by 109
licensed K-12 teachers. The survey was designed from information from the related literature
regarding the ESSA criteria for effective professional development, the formats of professional
development in which teachers participate, and the impact of professional development on
teacher practice. The questions used in the survey instrument reflect the research detailed in the
review of related literature and demonstrate content validity because they “show that it fairly and
comprehensively covers the items it purports to cover” (Cohen et al., 2011, p. 188).

**Research Questions**

The research questions guiding the study included:

1. Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers
   identify as their frequency of participation in professional development?

2. How did select Minnesota K-12 licensed teachers rank the six ESSA professional
development criteria as having positively impacted their instructional practice?
3. What did select Minnesota K-12 licensed teachers identify as the formats of professional development in which they most frequently participated?

4. How did select Minnesota K-12 licensed teachers rank the formats of professional development as having positively impacted their instructional practice?

Conclusions and Implications

This section addresses each research question and includes connections to recent research and observations from the researcher regarding the study’s results.

Research Question 1: Using the six ESSA criteria, what did select Minnesota K-12 licensed teachers identify as their frequency of participation in professional development?

The Every Student Succeeds Act defines six criteria of high-quality professional development. For three of the six criteria, the study results were greater than the only other study the researcher could find that used the ESSA criteria. For example, in the Frontline Research Institute study (Combs & Silverman 2017), it was found that only 9% of the professional development activities were collaborative. The study results showed that 68.9% of participants indicated professional development was collaborative more than half the time. Collaborative professional development in the MN study (68.9%) is 58.9% higher than Frontline Research Institute study (9%). One explanation for the difference could be the focus in Minnesota on the use of professional learning communities as a format of professional development. Another area of difference was in the area of professional development aligned to the criterion of data-driven. The Frontline Research Institute study found that data-driven professional development occurred 8% of the time; in contrast, 45.3% of the study participants indicated that professional development was data-driven more than 50% of the time. Sustained professional development...
was reported by 33.9% of study participants to occur more than 50% of the time. The Frontline Research Institute study found that professional development was reported to be sustained only 13% of the time.

The study results found that the study participants reported their participation in the criteria of job-embedded and classroom-focused professional development as less than the Frontline Research Institute study. Professional development aligned to the criterion of job-embedded professional development was reported to occur more than 50% of the time by 51.9% of respondents. In the Frontline Research Institute study, job-embedded professional development activities were found to occur in 63% of occurrences. The Frontline Research Institute study also found that professional development activities were classroom-focused occurred 85% of the time. The study respondent, 63.2%, indicated that professional development activities were classroom-focused more than half the time, less than the Frontline Research Institute study.

The Frontline Research Institute study evaluated the criterion of intensive professional development by the average length of professional development activities (Combs & Silverman, 2017). While a direct comparison is not achievable, the results of the study indicated that intensive professional development occurred less than 50% of the time for 54.7% of study participants.

**Research Question 2:** How did select Minnesota K-12 licensed teachers rank the six ESSA professional development criteria as having positively impacted their instructional practice?
Study participants ranked each of the six ESSA professional development criteria as having the most positive impact on their instructional practice; the rankings in order from highest positive impact to lowest were:

1. Collaborative
2. Classroom-Focused
3. Job-Embedded
4. Sustained
5. Data-Driven
6. Intensive

The study findings are consistent with the review of literature, particularly for teacher learning must take place within school and classroom settings (Anderson & Mitchener, 1994; Borko & Putnam, 1996). Desimone’s research reinforces the study findings that collective participation or collaboration is a core attribute of successful professional development (Desimone, 2009).

The study results indicated that classroom-focused professional development received the second highest mean score (2.1) for its positive impact on instructional practice. The research of Cordingley (2015), Garet et al. (2001), and Yoon et al. (2007) all supported the impact of classroom-focused professional development and each suggested that the more focused the professional development was on a specific aspect of classroom practice the better the results for students.

Garet et al.’s (2001) research indicated professional development which is both sustained and intensive has a greater likelihood of having an impact on teacher practice; the study results
differed showing that sustained professional development was ranked fourth and intensive professional development was ranked sixth. A possible explanation relates to the low frequency in which teachers participated in professional development that was sustained and intensive. If teachers have not participated in professional development meeting these criteria, it would be difficult to rank how it has impacted their instructional practice.

Study results support the research which indicated that teacher learning must take place within school and classroom settings (Anderson & Mitchener, 1994; Borko & Putnam, 1996).

**Research Question 3:** What did select Minnesota K-12 licensed teachers identify as the formats of professional development in which they most frequently participated?

The study results indicated that a majority of professional development occurs quarterly for teacher participation. The related literature reported that the majority of professional development occurred, “on in-service days or in the summer, and nearly 25% report spending fewer than 1 hour each week on professional learning” (Resources for Learning, 2017, p. 13). The quarterly participation in professional development by select Minnesota teachers reflects the hold that traditional formats of professional development have in schools and school districts.

The Boyle et al. (2004) research found that the least popular professional development activities were study groups, drop-in clinics, and coaching. The study results found that 65% of participants never participated in study groups, while 42.5% participated quarterly in coaching.

Participants in the study indicated that participation in reform formats of professional development occurred more frequently than traditional formats; a 1989 study, reform activities constituted 18.7% of the professional development activities in which teachers participated (Desimone et al., 2002).
**Research Question 4:** How did select Minnesota K-12 licensed teachers rank the formats of professional development as having positively impacted their instructional practice?

Study participants ranked each of the nine formats professional development according to the positive impact on their instructional practice. The rankings in order from highest positive impact professional development format to lowest professional development format were:

1. Professional Learning Community
2. Within District or School Workshop
3. Outside of District Workshop
4. Coaching
5. College Course (tie)
6. Mentoring Relationship (tie)
7. Teacher Study Group
8. Face to Face or Online Professional Network
9. Teacher Resource Center

The study results indicated that three formats (within district or school workshop, outside of district workshop, and college courses) of the top-ranked five formats of professional development, are categorized as traditional format of professional development. These formats of professional development do not lead to the types of changes to instructional practice that may be necessary to make the types of student academic gains as required by legislation (Birman et al., 2000; Boyle et al., 2004). However, reform formats of professional development overall were perceived as having a greater positive impact on instructional practice than traditional methods of professional development.
The study results also indicated that professional learning communities had the most positive impact on instructional practice; additionally, the study indicated that criterion of collaborative professional development was ranked as the one that most positively impacted instructional practice. These findings are consistent with the research of Matherson and Windle (2017), Desimone (2009, 2011), Garet et al. (2001), and DuFour (2011).

**Discussion**

Overall, the study sample of Minnesota teachers reported participating in professional development that aligns with three of the six ESSA criteria (collaborative, data-driven, and sustained) of effective professional development more frequently than was found in the Frontline Institute Research study (Combs & Silverman, 2017). Professional development aligned to three ESSA criteria of collaborative, classroom-focused, and job-embedded were reported by study participants as having the most positive impact on their instructional practices.

Additionally, the study sample of Minnesota teachers, 66.6%, reported they participated more frequently in reform formats of professional development than suggested by the research of Desimone et al. (2002) which indicated reform activities constituted 18.7% of professional development. The higher frequency of participation by select Minnesota teachers in reform formats of professional development is reflective of the emphasis that schools and school districts have placed on participation in professional learning communities. Select Minnesota teachers report participating in professional learning communities weekly at higher rates than they report participating in professional development that is job-embedded, which is surprising as professional learning communities typically meets the definition of job-embedded, “a part of the ongoing, regular work of instruction and related to teaching and learning taking place in real
time in the teaching and learning environment” (Combs & Silverman, 2017). Additionally, the study sample may not view participation in professional learning communities as meeting the criteria of sustained professional development because of the low frequency of participation reported in professional development that is sustained.

The study sample of Minnesota teachers also reported that reform formats of professional development had a higher positive impact on instructional practice than did traditional formats. This is not as surprising as the frequency of participation in reform formats of professional development, 66% of the study sample is greater than the frequency of participation in traditional formats of professional development, 33% of the study sample.

**Limitations**

During the course of the study several limitations emerged; Roberts (2010) explained limitation as “limitations are usually areas over which you have no control,” and “which may negatively affect your results” (p. 162). These limitations included:

1. The number of accepted survey responses was low given that the survey was distributed using multiple social media sites. One explanation could be the time of year survey was initially distributed. Another explanation is sharing it through individual social media contacts failed to specifically target the most appropriate audience.

**Recommendations for Practice**

The following recommendations for practice are offered based on the literature and the conclusions of the study.
1. Guskey (2003), Desimone et al. (2002), Desimone (2009), and Combs and Silverman (2017) indicated the importance of collaborative or collective participation in professional development. The study results indicated that this is a prevalent practice and one that study participants perceived a positively impacting their instructional practice. It is recommended that schools and school district leaders work to continue and possibly expand collaborative professional learning experiences for teachers.

2. It is recommended that school and school district leaders ensure more sustained and intensive professional learning experiences are provided to teachers. Yoon et al.’s (2007) research indicated “that greater than 14 hours of professional development showed a positive and significant effect on student achievement” (p. 12).

3. The study results indicated that 63.2% of respondents participated in professional development which was classroom-focused more than 51% of the time. This is slightly less than the Frontline Research Institute study which indicated that 85% of activities were classroom-focused. It is recommended that schools and school district leaders work to ensure that the professional development activities provided are classroom-focused. This classroom-focused approach addresses the research by Weiss and Pasley (2006) which indicated that the professional development which was most effective for students learning was, “extended, content-specific opportunities combined with follow-up support” (p. 1).

**Recommendations for Further Research**

The following recommendations for further research are offered based on the related literature and the conclusions of the study.
1. It is recommended that further research could be conducted in multiple school districts to evaluate their professional development programs and how they align with the criteria for effective professional development.

2. It is recommended that a study be conducted which compares teachers’ perceptions of the positive impact of professional development on instructional practices compared to the actual instructional practice changes as results of participation in the professional development activity. This could address the concern noted by Hattie (2009), “professional development is more likely to change teacher learning, but these learnings have less effect on teachers’ actual behavior” (p. 120).

3. It is recommended that a case study be conducted within a district that examines the long-term changes to instructional practice that occur as a result of professional development.

4. Desimone (2011) defined coherence as the alignment between professional development activities and other school and district policies and work. It is recommended that a case study of school district professional development plans could be conducted to determine the extent to which coherence is achieved.

5. It is recommended that a study could be replicated in another state or states in the United States.

6. It is recommended that a replication of the study be conducted with an added qualitative component of interviewing study participants. These interviews could help clarify how each criteria and format positively impacted instructional practice.
Additionally, the interviews could seek information about the ways in which instructional practice was positively impacted.

**Concluding Remarks**

Select Minnesota teachers reported they experienced three of the indicators of effective professional development (collaborative, data-driven, and sustained) more frequently than those of the only national study on the ESSA criteria (Combs & Silverman, 2017). However, other criteria, classroom-focused, intensive, and job-embedded are were reported by study participants were experienced less frequently. It may be concluded that study participants experienced models of professional development which may be, “fairly ineffective in changing teacher practice” (Katz & Dack, 2013, p. 25). The study results mirror many other studies which indicated that “resources are being poured into professional development, evidence for the effectiveness of these programs is uneven” (Goldschmidt & Phelps, 2010, p. 432).

Under ESSA, the demands for accountability around student achievement are not going to disappear and in order to improve student learning, systems must ensure that, “student learning and well-being are not a by-product of professional learning but rather its central purpose” (Timperley, 2011, p. 5). This means schools and school districts need to be intentional regarding the development of a coherent system of professional learning for teachers. “The central lesson now evident is that sustained improvement in students’ outcomes requires sustained effort to change teaching and learning practices in thousands and thousands of classrooms, and this requires focused and sustained effort by all parts of the education system and partners” (Levin & Fullan, 2008, p. 289). As schools and school districts develop meaningful school improvement plans to align with accountability systems, the role of, “well-designed and
implemented professional development should be considered an essential component of a comprehensive system of teaching and learning that supports students to develop the knowledge, skills, and competencies they need to thrive in the 21st century” (Darling-Hammond, Hyler, & Gardner, 2017, p. 24).
References


doi:10.1080/0958517042000189470.


Appendix A: Human Subjects Review

This is to certify that:

Jill Kind

Has completed the following CITI Program course:

- Basic/Refresher Course - Human Subjects Research (Curriculum Group)
- IRB Training for Graduate Students (Course Learner Group)
- 1 - Basic Course (Stage)

Under requirements set by:

St. Cloud State University

Verify at www.citiprogram.org/verify/?wf6c131f3-399a-4b41-8ecc-a149e4f96923-24878363
Appendix B: Recruitment Post

Dear Teachers, My name is Jill Kind and I am a doctoral student at St. Cloud State University, researching teachers’ experiences with professional development during the past twelve months. The link below will redirect you to the survey. I anticipate that your participation in this survey presents no greater risk than everyday use of the Internet. Thank you for your time.
Appendix C: Invitation and Consent to Participate

Dear Colleagues,

You are invited to participate in a research study about Teachers’ Experiences with Professional Development and its Impact on Instructional Practices.

If you agree to be part of the research study, you will be asked to complete a brief survey regarding your experiences with high-quality professional development, formats of professional development in which you participate, and how these impact your instructional practices.

**Benefits of the research** - The purpose of the study is to determine what select Minnesota K-12 teachers report as their level of their participation in professional development aligned to ESSA criteria, the formats of professional development in which teachers participate, and how professional development positively impacts their instructional practice. One benefit that this research could provide is a clear picture of what professional development teachers participate in and how it impacts their practice. Additionally, this information could benefit districts, unions, and other professional development providers to improve how they offer learning to adults. It could also provide school leaders a view into how teachers relate the professional development to a change in their instructional practice.

**Risks and discomforts** - There are no foreseeable risks involved in participation in this study. One potential risk related to recruitment is, if a teacher chooses to share the survey link with colleagues then a risk is that their colleague could infer they participated in the survey. They could not infer answers or other information.

Data collected will remain anonymous as no identifying information is collected.
Participating in this study is completely voluntary. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University, or the researcher. If you decide to participate, you are free to withdraw at any time without penalty.

If you have questions about this research study, you may contact me at (763) 391-709 or at kindj@district279.org or my faculty advisor, Kay Worner, at ktworner@stcloudstate.edu. If you have any questions regarding your rights as a research participant, please contact St. Cloud State University’s Human Subjects Review Board at (320) 308-4932 or researchnow@stcloudstate.edu. Results of the study can be requested from the researcher and will be published at the St. Cloud State University Repository.

Your completion of the survey indicates that you are at least 18 years of age and your consent to participation in the study.

Thank you for your time and consideration.
Appendix D: Survey

K-12 Classroom Teacher Professional Development Experiences and Impact Survey

1. Please select where you work.
   - Minnesota (go to question 2)
   - Outside of Minnesota (end survey)

2. Please select your current role in your school.

<table>
<thead>
<tr>
<th>Role</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>K-12 Teacher</td>
<td>(go to question 3)</td>
</tr>
<tr>
<td>K-12 EL Teacher</td>
<td>(go to question 3)</td>
</tr>
<tr>
<td>K-12 Special Education Teacher</td>
<td>(go to question 3)</td>
</tr>
<tr>
<td>Early Childhood Educator</td>
<td>(end survey)</td>
</tr>
<tr>
<td>School Psychologist</td>
<td>(end survey)</td>
</tr>
<tr>
<td>Nurse</td>
<td>(end survey)</td>
</tr>
<tr>
<td>Teacher on Special Assignment</td>
<td>(end survey)</td>
</tr>
<tr>
<td>Social Worker</td>
<td>(end survey)</td>
</tr>
<tr>
<td>Counselor</td>
<td>(end survey)</td>
</tr>
<tr>
<td>Other</td>
<td>(end survey)</td>
</tr>
</tbody>
</table>

3. Reflecting on all the professional development experiences in which you participated during the past twelve months, how frequently did these professional development experiences meet the criteria of effective professional development?

<p>| Job-Embedded: a part of the ongoing, regular work of instruction and related to teaching and learning taking place in real |
|--------------------------------------------------------------|-------------------------------------------------|
|                                                             | Less than 25% of the time | 25-50% of the time | 51-75% of the time | More than 75% of the time |</p>
<table>
<thead>
<tr>
<th></th>
<th>Time in the teaching and learning environment</th>
<th>Data-Driven: based upon responsive real time information about the needs of participants and the students</th>
<th>Classroom-Focused: related to the practices taking place during the teaching process and relevant to instructional processes</th>
<th>Sustained: taking place over an extended period; longer than one day or a one-time workshop</th>
<th>Intensive: focused on a discrete concept, practice, or program</th>
<th>Collaborative: involving multiple educators, educators and coaches or a set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding</th>
</tr>
</thead>
</table>

4. Please distribute a total of ten points among the professional development criteria that you think most positively impacted your instructional practice. You may distribute them freely, they may be spread out, or awarded to only a few criteria, or all allocated to single criteria if you wish.

<table>
<thead>
<tr>
<th></th>
<th>Points Must total 10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job-Embedded:</strong> a part of the ongoing, regular work of instruction and related to teaching and learning taking place in real time in the teaching and learning environment</td>
<td></td>
</tr>
<tr>
<td><strong>Data-Driven:</strong> based upon responsive real time information about the needs of participants and the students</td>
<td></td>
</tr>
</tbody>
</table>
### Classroom-Focused:
related to the practices taking place during the teaching process and relevant to instructional processes

### Sustained:
taking place over an extended period; longer than one day or a one-time workshop

### Intensive:
focused on a discrete concept, practice, or program

### Collaborative:
involving multiple educators, educators and coaches or a set of participants grappling with the same concept or practice and in which participants work together to achieve shared understanding

5. During the past twelve months, how frequently did you participate in each type of professional development?

<table>
<thead>
<tr>
<th>Type of Professional Development</th>
<th>Never</th>
<th>Yearly</th>
<th>Quarterly</th>
<th>Monthly</th>
<th>Weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within-District or School Workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outside of District Workshop</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Course</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Study Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Face to Face or Online Professional Network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mentoring Relationship (Mentor or Mentee)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Resource Center</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coaching</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Professional Learning Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. Please distribute a total of ten points among the types of professional development that you think most positively impacted your instructional practice. You may distribute them freely, they may be spread out, or awarded to only a few type, or all allocated to single type if you wish.

<table>
<thead>
<tr>
<th>Professional Development</th>
<th>Points Must total 10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within-District or School Workshop</td>
<td></td>
</tr>
<tr>
<td>Outside of District Workshop</td>
<td></td>
</tr>
<tr>
<td>College Course</td>
<td></td>
</tr>
<tr>
<td>Teacher Study Group</td>
<td></td>
</tr>
<tr>
<td>Face to Face or Online Professional Network</td>
<td></td>
</tr>
<tr>
<td>Mentoring Relationship (Mentor or Mentee)</td>
<td></td>
</tr>
<tr>
<td>Teacher Resource Center</td>
<td></td>
</tr>
<tr>
<td>Coaching</td>
<td></td>
</tr>
<tr>
<td>Professional Learning Community</td>
<td></td>
</tr>
</tbody>
</table>

**Thank you for your time in completing this survey**
Appendix E: IRB Approval

Institutional Review Board (IRB)
720 4th Avenue South AS 210, St. Cloud, MN 56301-4498

Name: Jill Kind
Email: jmhannahann@stcloudstate.edu

IRB PROTOCOL DETERMINATION: Exempt Review

Project Title: Teachers' Experiences with Professional Development and its Impact on Instructional Practices
Advisor: Kay Worner

The Institutional Review Board has reviewed your protocol to conduct research involving human subjects. Your project has been: APPROVED

Please note the following important information concerning IRB projects:
- The principal investigator assumes the responsibilities for the protection of participants in this project. Any adverse events must be reported to the IRB as soon as possible (ex. research related injuries, harmful outcomes, significant withdrawal of subject population, etc.).
- For expedited or full board review, the principal investigator must submit a Continuing Review/Final Report form in advance of the expiration date indicated on this letter to report conclusion of the research or request an extension.
- Exempt review only requires the submission of a Continuing Review/Final Report form in advance of the expiration date indicated in this letter if an extension of time is needed.
- Approved consent forms display the official IRB stamp which documents approval and expiration dates. If a renewal is requested and approved, new consent forms will be officially stamped and reflect the new approval and expiration dates.
- The principal investigator must seek approval for any changes to the study (ex. research design, consent process, survey/interview instruments, funding source, etc.). The IRB reserves the right to review the research at any time.

If we can be of further assistance, feel free to contact the IRB at 320-308-4932 or email ResearchNow@stcloudstate.edu and please reference the SCSU IRB number when corresponding.

IRB Chair: **Signature**
IRB Institutional Official: **Signature**

Dr. Benjamin Witts
Associate Professor- Applied Behavior Analysis
Department of Community Psychology, Counseling, and Family Therapy

Dr. Latha Ramakrishnan
Interim Associate Provost for Research
Dean of Graduate Studies

OFFICE USE ONLY

SCSU IRB# 1831 - 2341
1st Year Approval Date: 7/19/2018
1st Year Expiration Date: Type: Exempt Review
2nd Year Approval Date: 3rd Year Approval Date:
2nd Year Expiration Date: 3rd Year Expiration Date: