Redefining Professional Development: Investigating the Professional Learning Experiences of Catholic School Educators

Rebecca Smith

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Redefining Professional Development: Investigating the Professional Learning Experiences of Catholic School Educators

by

Rebecca Smith

A dissertation to be submitted in partial fulfillment of the requirements for the degree of

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by

Rebecca Smith

This dissertation is completed as a partial requirement for the Doctor of Education (EdD) degree at the University of Portland in Portland, Oregon.

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Graduate Program Director

Dean of the Unit

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Abstract

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. Participants in this research included 223 educators from four Catholic high schools who took the 50-item Standards Assessment Inventory (SAI) survey (Learning Forward, 2011), which was grouped into seven Professional Learning Standards: learning communities, leadership, resources, data, learning designs, implementation, and outcomes. Additionally, nine educators participated in focus group interviews at three of the participating schools. The majority of teachers (79%) were White, 53% were Female, and 82% had at least a Master’s Degree.

An extensive literature review on teacher professional development revealed reform efforts to redefine professional development within the context of adult learning. Despite years of research on effective professional learning characteristics, teachers report little value in professional learning experiences and overall low job
satisfaction. Furthermore, professional learning research specific to Catholic education is scarce. This study utilized adult learning theory and national standards of professional learning to explore the efficacy of teacher learning in Catholic high schools.

Participants rated the SAI survey items on a frequency scale from Never (1) to Always (5). An ANOVA with repeated measures revealed that the Leadership standard \( (M = 3.71; SD = .63) \) was statistically significantly higher \( (p < .05) \) than all other standards. The Data standard was statistically significantly lower \( (p < .05) \) than all other standards \( (M = 2.88; SD = .78) \). Qualitative feedback revealed several key characteristics of effective professional learning at Catholic schools that reflect findings in prior research, including: collaborative, reflective, relevant, content-focused, and self-directed. Data analysis also revealed barriers to effective learning.

This research can serve as a model for school leaders to measure the efficacy of professional learning in any educational context. The findings call for further research on data usage and integrating an equity lens into professional learning. Finally, this research highlights the need to use research-based best practices to plan and implement effective professional learning experiences for educators.

Keywords: professional development, professional learning, Catholic education, secondary school, high school
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To the University of Portland, I must acknowledge the impact you have had on forming me as an educator, a reflective practitioner, a research scholar, and a lifelong learner. I will continue to live the values of teaching, faith, and service.

Last, but certainly not least, I thank my family who has always believed in me. To my husband, our daughter, my parents, my in-laws, my brothers and their families, you have all carried me through this journey in so many ways. Thank you.
Dedication

This work is dedicated to my family. To my daughter, I hope you always feel free to catch your dreams. To my husband, thank you for supporting me. To my parents, I am eternally grateful that you always believe in me. I love you all.
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Chapter 1: Introduction to the Study

Of the nearly 60,000 teachers surveyed in the Schools and Staffing Survey (SASS, 2011), 99% of public school teachers and 95% of private school teachers reported participating in professional development experiences in the previous 12 months. However, teachers reported little value in professional learning experiences (Darling-Hammond, 2016; Wei et al., 2009). According to a Teaching Commission survey, 42% of teachers indicated that professional development either leaves something to be desired or is a waste of time; only 18% said that the professional learning activities offered by their district or school were significant in helping them become more effective teachers (Peter D. Hart Research Associates and Harris Interactive, 2004).

Teacher dissatisfaction with professional learning experiences may be one reason why teacher job satisfaction has plummeted to the lowest level in 25 years. According to an annual Met Life Survey (2013), teacher job satisfaction decreased from 62% reporting being very satisfied in 2008 to only 39% reporting being very satisfied in 2012. Furthermore, 51% of teachers reported feeling under great stress several days a week, an increase from 36% in 1985.

These feelings of dissatisfaction may be one factor in high teacher attrition. Research conducted over the past two decades has found that between 40% and 50% of new teachers leave the teaching profession within their first five years of teaching (Ingersoll & Smith, 2003). A Teaching Commission poll (Peter D. Hart Research, 2004) found that 47% of teachers cited a lack of help for new teachers as a primary reason for leaving the profession. These statistics suggest that teachers often do not
receive the support they need to excel in their professional lives. If teacher learning becomes the priority in professional development experiences, perhaps teachers will remain dedicated and engaged in their call to teach.

The lack of satisfaction with professional development may also be caused by a deficiency of teachers developing and implementing their own professional learning experiences. Adult Learning Theory (Knowles, 1970) contends that the goals of adult learners must align with the goals of the learning experience. Additionally, adults must have a shared responsibility in planning and managing the learning experience. Despite this theoretical foundation, research suggests that much of the professional development experienced by teachers is not what educators actually need and desire. There is a potential for greater satisfaction in professional learning if teachers are given more power and choice (Bill and Melinda Gates Foundation, 2014; Guskey, 2002; Lee, 2005). Although it is limited, there is empirical research that reveals positive impacts of professional learning on student achievement (e.g. McGill-Franzen, Allignton, Yokoi, & Brooks, 1999; Saxe, Gearhart, & Nasir, 2001; Yoon et al., 2007).

There is also a need for teacher learning to be focused on the diversity of the student population. The teaching population in public schools in the U.S. is over 80% White, while the student population is nearly 50% students of color (National Center for Education Statistics, 2013). The student population in Catholic schools also continues to diversify. According to the National Catholic Educational Association (NCEA; McDonald & Schultz, 2014), students of color represent 20% of the student population at Catholic schools in the U.S. Also, 16% of the total Catholic school
student population is non-Catholic. The multicultural classroom calls for educating our teachers on how to reach students from different backgrounds and also how to support teachers of color. Specifically, professional development should be used to engage teachers in discussing culture, race, social identity, privilege, and power structures and how these factors impact their work as educators (Lee, 2007). A one-size-fits all model of professional development is not sustainable. This traditional method of professional learning can further marginalize teachers of color and do little to help teachers learn to teach with an equity lens (Kohli & Pizarro, 2016; Pella, 2012).

Professional development in the United States needs reform to ensure the time and resources invested in teachers contribute to learning. This research contributes to the limited literature on Catholic school teacher professional learning experiences. This study also serves as a model for evaluating and reforming professional learning in all schools. The terms professional development and professional learning are used interchangeably in this study. Research on reforming professional development focuses largely on adult learning. Professional learning experiences that support teachers as learners can be more relevant and meaningful (Knowles, 1990). Teacher voices are often left out of decisions about professional learning experiences, and schools fail to allocate the time and money necessary to make meaningful, sustained learning opportunities for educators. Therefore, there is a need to reform professional learning so it is meaningful for educators and worth the investment for schools.

**Funding and Lack of Resources**

Effective professional learning experiences are expensive. One study (Birman, Desimone, Porter, & Garet, 2000) estimated that districts must spend an average of
$512 per teacher for one high quality professional learning experience, yet districts rarely spend half of that amount. Many districts do not track spending on professional development. Prior to the 2008 recession, public school district spending on professional development was estimated to be between two and five percent of a district’s budget (Gulamhussein, 2013). In just one year, $1.5 billion of federal government money was spent on teacher development (Birman et al., 2007), with some districts spending up to $18,000 per teacher, per year (Jacob & McGovern, 2015). Despite monetary investments, professional learning still receives little positive feedback from teachers. District money needs to be invested wisely so teacher and student learning improve (Wayne, Yoon, Zhu, Cronen, & Garet, 2008).

Catholic schools specifically often struggle with adequate monetary resources, and professional development allocations are often minimal. This conundrum is largely due to the fact that Catholic school operating expenses increased 8.7% per year from 1980 to 1993, largely due to a shift in teaching faculty from ordained religious, such as priests and nuns, whose salaries were covered by their religious orders, to lay, non-ordained, teaching faculty members (Harris, 1996). Additionally, Catholic school subsidies from parish budgets have decreased, shifting the financial burden directly to schools (Bauch, 2014). Also, teachers at Catholic schools make consistently 30% to 40% lower salaries than their public school colleagues (Bauch, 2014). These financial challenges inevitably impact teacher learning.

Despite the financial constraints in both public and private education, there must be smart and equitable investments in teacher learning to improve professional satisfaction and increase student achievement (Darling-Hammond, 2016). After
conducting a cost-benefit analysis, one district found a $1.88 return for every $1.00 spent on a new teacher mentoring program, largely due to reduced teacher turnover (Villar & Strong, 2007). School leaders in both the public and private sectors must recognize the valuable impacts of effective teacher learning experiences.

**Time devoted to professional learning.** In addition to monetary concerns surrounding teacher professional learning, both about the cost-benefit and the allocation of funds, there is the problem of time. In a review of over 1,300 studies on the effects of professional development on student achievement, Yoon and colleagues (2007) found only nine studies that met What Works Clearinghouse (WWC) evidence standards. Of these nine studies, there were positive effects on student achievement, and the professional learning experiences entailed an average of 49 hours of contact time. In a further analysis of Yoon’s initial study, Guskey and Yoon (2009) found that effective professional learning required over 30 hours of contact time, including structured and sustained follow-up. Despite this empirical evidence, fewer than 50% of teachers received 17 or more hours of professional development in one year (Wei, Darling-Hammond, & Adamson, 2010). Furthermore, Joyce and Showers (2002) found that it required teachers doing a task 20 times before they mastered it, meaning that just learning a task in a one-time professional development session will not lead to a change in practice.

Time for professional learning can be embedded into an educator’s daily schedule in many forms, such as Professional Learning Communities (PLCs), peer observations, mentoring, or coaching. When compared to high-achieving countries around the world, the United States provided much less embedded collaboration time
for professional planning, according to data from the Teaching and Learning International Survey (TALIS) (Wei et al., 2009). For instance, Japan, Singapore, and Finland spent an average of 60% of their time teaching students, while U.S. teachers spent about 80% of their total working time teaching students. The additional time for professional collaboration appears to be a key factor in improving student achievement in these countries.

Both monetary and time resources need to be allocated to improve teacher learning, including the “redesign of the systems that recruit, prepare, select, develop, retain, evaluate, advance, and compensate teachers” (Archibald, Coggshall, Croft, & Goe, 2011, p. 1). The National Staff Development Council goes as far as to call professional learning a moral imperative due to the impact of inequities that accompany teaching quality and resource allocation (Hirsh, 2009). The national focus on quality teacher learning has the potential to benefit all stakeholders in education, especially teachers and students.

**Effective Professional Learning**

Huberman (1995) described professional development as a “process filled with plateaus, discontinuities, regressions, spurts, and dead ends” (p. 196). In order to maximize the benefits of investing in teacher learning, so it does not result in a dead end, school leaders in both public and private education must utilize research on adult learning to build effective learning experiences for teachers. Teacher voices must be heard regarding their own needs, so learning experiences are meaningful and worth the time and money schools invest. Teachers are better equipped to teach students how to
think critically when they too are supported as learners and taught to be critical thinkers through high-quality professional feedback (Kane & Staiger, 2012).

There are several qualities that surface in research on effective teacher professional learning. The most effective experiences include “both externally-provided and job-embedded activities that increase teachers’ knowledge and change their instructional practice in ways that support student learning” (Wei et al., 2009, p. 1). Desimone (2011) maintains that effective teacher professional learning has five key characteristics: a content focus, active learning, coherence, duration, and collective participation. These characteristics will be discussed in detail in Chapter 2.

The current state of professional development in our schools may not be helping teachers learn how they can improve (Jacob & McGovern, 2015). In her 2016 American Education Research Association (AERA) Distinguished Lecture, Darling-Hammond (2016) argued for promoting high-quality teaching and learning, resource accountability, and meaningful learning that encourages continuous improvement. Accountability should advance and ensure professional capacity, including teacher leadership in professional development (Darling-Hammond, 2016). Teacher learning environments must be differentiated and built around the strengths, interests, and needs of teachers as adult learners (Coggshall, Rasmussen, Colton, Milton, & Jacques, 2012).

Years of research on teacher professional learning identify a broad range of goals for learning experiences. Darling-Hammond (2009) argued that professional development for teachers should focus on subject area content knowledge and knowledge about learning, curriculum, and technologies. Furthermore, teachers must
analyze and reflect on their own instructional efficacy in order to revise and improve instruction. Effective teacher learning environments provide opportunities for teachers to test their understandings by trying new approaches and receiving feedback (Coggshall et al., 2012). The focus on reflective practice is a repeated theme in effective teacher learning (e.g., Allen & Penuel, 2015; Avalos, 2011; Darling-Hammond & McLaughlin, 1995; Martin, Kragler, Quatroche, & Bauserman, 2014; Mezirow, 1997). The research-based qualities of effective teacher learning must be incorporated into professional development, so the experiences are meaningful and relevant for educators.

**Catholic Education**

According to NCEA’s annual report (McDonald & Schultz, 2016), there are 6,525 Catholic schools in the U.S.: 5,325 elementary and 1,200 secondary. These schools have 151,101 full-time professional staff that serve nearly 2 million students; 97% of the staff are laity, and 75% are women. Despite extensive research on teacher professional development in public education, there is limited research on professional learning that supports these thousands of Catholic school educators. Research suggests there are certain characteristics that distinguish Catholic school teachers from public school teachers, such as mission-driven and focused on the moral development of students (Hunt, Joseph, Nuzzi, & Convey, 2002; Khmelkov, 2001). However, the literature is deficient in identifying characteristics of professional development that promote professional growth for Catholic educators within the unique learning environment of Catholic education.
**Purpose of This Study**

The methodology for this research involved an explanatory sequential mixed methods study (Creswell, 2015), including a teacher survey and follow-up focus group interviews. This mixed methods study will provide empirical data that identify characteristics of effective professional learning in Catholic high schools. This research will also identify learning challenges faced by educators in this setting. This study helps to fill a gap in professional learning research on Catholic school teacher perspectives of the efficacy of professional learning.

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. The methods included a survey of 223 Catholic school educators at four Catholic high schools. Following quantitative data analysis, the researcher conducted focus group interviews at three of the participating schools, each consisting of three educators ($n = 9$). The quality of learning experiences in Catholic high schools, based on teacher perceptions, were then compared to research-based best practices set forth in Learning Forward’s (2011) Professional Learning Standards. The collection of multiple forms of data, including quantitative and qualitative, provided a triangulated approach to data collection (Merriam, 2009). Additionally, analyzing open-ended feedback and interview transcriptions provided deeper insight into the quality of existent learning experiences, potential barriers to learning, and the learning needs of teachers in a Catholic education context.
The national learning standards used to frame this research advocate that the following characteristics result in professional learning that “leads to effective teaching practices, supportive leadership, and improved student results” (Learning Forward, 2015, para. 1): learning communities, resources, learning designs, outcomes, leadership, data, and implementation. This research will identify the efficacy of professional learning practices at Catholic high schools, identify barriers to professional learning, and provide a lens into implementation methods that may better meet the needs of teachers. The specific research questions explored in this study included:

1. How well do teacher learning experiences at Catholic high schools align with nationally recognized standards for professional learning?
   a. Were there differences based on participant demographics, education level, department, and years of experience?

2. What are teacher identified qualities of effective professional learning experiences?

3. What are potential barriers or challenges to creating effective learning experiences for teachers in the Catholic school context?

This research informs education policy and practice regarding professional learning, especially surrounding Catholic education, and contributes to existing theory on adult learning. The results of this study also highlight the need for future research on professional learning, particularly in regards to learning standards related to data and equity. This research was triangulated by utilizing multiple forms of data collection to increase internal validity (Merriam, 2009). Participants included educators at Catholic
high schools in an urban area of the Pacific Northwest. Questions for focus group interviews were formulated to provide a deeper understanding of survey responses.

**Significance**

There is a need for research that highlights the distinctive experiences and needs of educators called to serve in Catholic schools. This study will help fill a gap in research on professional learning experiences of teachers at Catholic high schools. The methodology used in this research provides a model for evaluating professional learning with research-based national standards. The findings highlight characteristics of adult learning that apply to educators in any context. This research also redefines professional development in the context of adult learning and provides Catholic school leaders with practical knowledge on how best to support their teachers professionally.

Results from this research can help guide the creation and implementation of meaningful, relevant professional learning opportunities. This study provides a stepping-stone for professional learning reform efforts, particularly within the Catholic school educational context. The voices of teachers are needed to identify and understand their differentiated learning needs. Finally, this research will serve as a model for building system-based improvement and consultation for more effective teacher professional learning. Meaningful professional learning involves redefining teacher improvement efforts, reevaluating existent professional learning programs, and reinventing how to support effective teaching (Jacob & McGovern, 2015). This research will provide a lens into teacher learning needs that can help support and encourage professional growth. Effective adult learning experiences can improve teacher job satisfaction and lead to higher quality teaching and learning in diverse
educational communities (Bill & Melinda Gates, 2014; Guskey, 2002; Kohli, Picower, Martinez, & Ortiz, 2015; McGee Banks & Banks, 1995; Met Life, 2013).

**Theoretical Framework**

The theoretical perspectives that guided this research were andragogy, or adult learning theory (Knowles, 1970, 1990), and experiential learning theory (Dewey, 1938, 1997; Kolb, 1984, 2015). Andragogy maintains that learning is a lifelong, internal process, and adults need to be engaged in learning experiences (Knowles, 1970). Adult learners “accumulate a growing reservoir of experience that becomes a resource for learning” (Knowles, 1970, p. 39). These experiences shape and influence new professional learning experiences. The andragogical model of learning contends that, prior to a learning experience, adults need to know why they are learning a new concept. Further, adults need to be questioned about what they hope to get out of a new learning experience (Knowles, 1970). The adult learning environment should be one of comfort, respect, acceptance, and freedom of expression.

Andragogy further advocates for adult engagement in self-directed learning experiences (Knowles, 1990). Adults come with a readiness to learn; however, learning must be immediately applicable to their own lives and related to their own internal forms of motivation, such as job satisfaction, self-esteem, or quality of life. Further, the quality of a learning experience is dependent on the quality of the learner’s interaction with his or her environment (Knowles, 1970).

Experiential learning theory further supports the concept of learning as a process that is greatly influenced by our experiences (Kolb, 1984). Learning should not be focused on outcomes but rather on helping learners reshape their conceptions
and ideas with the new knowledge they are gaining. This change process is often filled with conflict and tensions, which is why learning is continuous and requires modifying or disposing of old ideas. Learners must be open to learning, and reflecting on one’s experiences can aid the learning process (Dewey, 1997). Supporting adult learners in gaining new knowledge through experience can be challenging for instructors and learners alike. However, andragogy and experiential learning theory can help guide the development of effective learning experiences that are meaningful and relevant to adult educators.

Distinct from andragogy’s focus on adult learning, professional development can be defined as, “Processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so they might, in turn, improve the learning of students” (Guskey, 1999, p. 16). This definition lacks an explicit focus on adult learning, which is a common gap in research on teacher professional development. Redefining professional development within a learning lens allows for a focus on process rather than products or outcomes (Kolb, 1984). Human learning involves a continual change in a person’s body (genetic, physical, and biological) or mind (knowledge, skills, attitudes, values, emotions, beliefs, and senses) through social experiences (Jarvis, 2009). Teacher professional development focused on adult learning in a social context has the potential to effectively change education.

**Summary**

Research indicates a need for reform in teacher professional development in both public and Catholic schools. Professional development must focus on adult learning in order for the time and money spent on teacher development to be
meaningful and lead to real change in our schools. Teachers voices must be heard in how school leaders plan and implement professional learning experiences. If teachers are not open to change or do not recognize their own growth needs, then they will be resistant to change (Knowles, 1980). However, if teachers are involved, reflective, and challenged to think about new concepts and teaching strategies, the learning process is engaged in a positive manner (Dewey, 1997; Kolb, 2015). The literature is exhaustive in identifying characteristics of effective professional development, yet teachers still report a lack of meaningful learning experiences. This research gives voice to the experiences of teachers at Catholic high schools and applies research-based standards to analyzing the efficacy of their learning.

This research will include a literature review in Chapter 2 that explores the qualities and goals of teacher professional learning. Traditional professional learning experiences will be compared to reform models, and the potential benefits of various learning models will be described. Furthermore, empirical studies on the impact of teacher learning on student achievement and teacher capacity will be summarized. Research on the unique qualities of Catholic school educators will also be explored. Chapter 3 will explain the methodology used in this study, which was an explanatory sequential design mixed methods study (Creswell, 2015). Chapter 4 will provide a summary of both the quantitative and qualitative data analyses, and Chapter 5 will explore the substantiated conclusions of this research and the implications for future research.
Chapter 2: A Review of the Literature

This chapter explores current literature about professional learning for teachers. It begins with a working definition of professional learning, both from a traditional perspective and in the context of more current reform efforts. Next, research-based characteristics of effective professional learning will be identified. Furthermore, several models of professional development will be explained, and empirical research that supports these models will be explored. The chapter will conclude with empirical research regarding the impact of professional development as it relates to both teachers and students.

Defining Professional Learning

Despite widespread research on professional development, the definition continues to evolve and change, possibly due to the evolving needs of teachers and the shifting focus of research from professional development to a focus on professional learning. Guskey (1999) defined professional development as the “processes and activities designed to enhance the professional knowledge, skills, and attitudes of educators so they might, in turn, improve the learning of students” (p. 16). However, professional development has experienced a broadening in definition and practice in the 21st century as teaching has become a more collaborative practice (Lieberman & Miller, 2014; Stewart, 2014). Reminiscent of earlier definitions of learning as a process (Guskey, 1999; Huberman, 1995), the National Staff Development Council redefined professional development as a cycle of continuous improvement, involving several steps: data analysis, related student and adult learning goals, collaboratively planned lessons that utilize evidence-based strategies, coaching support, and self-
assessment regarding how professional collaboration and learning impact student achievement (Hirsh, 2009). This comprehensive definition highlights a general shift in the literature regarding the goals of professional development, to focus on collaborative learning and change. For the purposes of this research, the terms professional learning and professional development will be used interchangeably, with the preferred, more current term being professional learning.

**Traditional approach.** Traditionally, teacher professional learning is content-focused and linked to teacher beliefs and standards (Stewart, 2014). In contrast, reform efforts focus on engaging in and reflecting on an experience, which can lead to changes in practice (Mezirow, 2003). Traditional professional learning is often passive, individual, and intermittent (Stewart, 2014). Experiences usually involve a one-time experience determined by school leadership (Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004). Experiences are often formal workshops or courses, in-service days involving training on a new program, and often involve an outside expert (Corcoran, 1995). One qualitative study (LaCursia, 2011) of middle and high school health teachers found that in-school professional development was mandatory, and administrators made content decisions. Teachers felt a lack of voice and choice in planning and implementation (LaCursia, 2011). These findings were echoed in several studies about professional development (i.e., Acevedo, 2013; Bill & Melinda Gates, 2014).

Teachers reported that these types of traditional learning experiences felt irrelevant and disconnected from the classroom, often with conflicting goals between what is taught in the professional learning experience and their own opinions or
experiences (Allen & Penuel, 2015). For example, teachers may think that the messages given in a professional learning experience are already being practiced in their classrooms, or teachers may think a new school policy conflicts with earlier reform efforts or with their own instructional strategies that they view as effective. One study (Collins & Liang, 2015) gathered feedback from 895 educators who participated in an online professional learning experience, which included the same five online modules disseminated at a local level by trained trainers. Results suggested inconsistencies with the design and delivery of the experience when compared with research-based best practices of professional development. These conflicts can impede the efficacy of professional learning experiences.

Traditional professional learning also assumes that if a teacher knowledge gap is filled, implementation of this knowledge will occur, which is not always an accurate assumption (Gulamhussein, 2013). James and McCormich (2009) described this conflict as a weak link, meaning the knowledge is valuable, but there is not a strong relationship between the person conveying the knowledge and the teacher learner. In contrast, a strong link would provide teachers with supportive learning communities that enable sustained implementation of content taught during a professional learning experience. Professional development reform efforts are focusing on this aspect of learning.

Reform efforts. In the past decade, there have been numerous efforts to reform professional development to focus on teacher and student learning. Therefore, the definition has expanded to include more collaborative and embedded efforts of teacher support, such as Professional Learning Communities (PLCs) and peer
coaching. Desimone (2011) highlighted a professional development shift focused on the interactive nature of teacher learning, “based in discourse and community practice” (p. 68). Embedded experiences can occur several times a week and be focused on systemic, intentional, and regularly scheduled experiences (Yendol-Hoppey & Dana, 2010).

Professional learning reform efforts in the U.S. can look to other countries for ideas. Wei and colleagues (2009) found that teachers in the U.S. spend less time working collaboratively compared to other countries. For example, high-achieving European and Asian countries spent an average of 60% of their time in direct student instruction, with the additional time provided for collaborative planning and learning. In contrast, teachers in the U.S. spent 80% of their time instructing students and only 3 to 5 hours per week lesson planning, typically independently (Wei et al., 2009).

Another indicator of U.S. academic performance is the Program in International Student Assessment (PISA) rankings, which is an assessment administered every three years of reading, math, and science literacy of 15-year-old students in dozens of developed and developing countries (Desilver, 2017). The most recent PISA results (2016) indicated an overall ranking for the U.S. of 38th out of 71 countries in Math and 24th in Science, far behind comparative countries that support more collaborative education structures. Embedded experiences may help teachers assess and find solutions to immediate problems of practice (Croft, Coggshall, Dolan, Powers, & Killion, 2010).

Often, reform professional learning activities, such as consistent collaborative experiences with strong peer support, are perceived as more effective teacher learning
opportunities than traditional forms (Stewart, 2014). The key reason for this perception seems to be due to the extended duration, allowing for more time to focus on content, active learning, and coherence, which are three of the key characteristics in effective professional development (Birman et al., 2000). However, Birman et al. argued that the characteristics matter more than the categorization of an activity as traditional or reform. For instance, a one-time faculty training can still be effective when it includes teacher leadership, collaborative discussions, and reflective feedback about implementation.

Research indicates that progress is being made in the U.S. in reforming professional development into a more collaborative practice. Wei and colleagues (2010) released a follow-up report on the status of professional development based on U.S. Schools and Staffing Survey (SASS) data from 2000, 2004, and 2008, and found that nearly 75% of new teachers participated in induction programs, and 80% reported having a mentor. However, collaborative professional experiences averaged only 2.7 hours per week. Additionally, this report revealed areas of concern within the professional development field: teachers received little professional development regarding English Language Learners (ELLs) and students diagnosed with learning disabilities. There is still much room for reform in effectively supporting teachers as learners, especially within embedded opportunities with colleagues that can target students most in need.

**Teachers as adult leaners.** The collaborative nature of adult learning experiences, as supported by andragogy (Knowles, 1970) and experiential learning
theory (Kolb, 1984), encourages active participation and collegial reflection. Learning can be defined as:

The combination of processes throughout a lifetime whereby the whole person – body (genetic, physical, and biological) and mind (knowledge, skills, attitudes, values, emotions, beliefs, and senses) – experiences social situations, the perceived content of which is then transformed cognitively, emotively or practically (or through any combination) and integrated into the individual person’s biography resulting in a continually changing (or more experienced) person. (Jarvis, 2009, p. 25)

Collaborative professional learning is consistent, active, and peer-supported (Stewart, 2014). Collaborative models of professional learning “emphasize the importance of nurturing learning communities within which teachers try new ideas, reflect on outcomes, and co-construct knowledge about teaching and learning in the context of authentic activity” (Butler et al., 2004, p. 436). Due to the cyclical nature of learning, Timperley and colleagues (2008) advocate for teacher learning that allows time for teachers to practice new concepts. Hands-on, extended learning experiences provide relevant, practical opportunities for teachers to improve their practice.

A focus on teachers as adult learners can help target reform efforts in transforming knowledge into practice for increased student growth (Avalos, 2011; Darling-Hammond, 2016). One key to supporting teacher learning is to recognize the dual role of teachers as “technicians in researched-based practices, as well as intellectuals developing teaching innovations” (Gulamhussein, 2013, p. 5). Teachers must be treated as capable adult learners in order to stay engaged and current in their
professional practice. Jacob and McGovern (2015) argue that normalizing continuous
improvement and evaluating existent professional learning programs creates a culture
of growth, which helps teachers mature professionally.

Lieberman and Miller (2014) argued that recent shifts in social realities also
impact professional learning. For example, there has been a shift to focusing on
collegiality versus individualism, whole-school versus classroom concerns, and a
focus on learning versus on teaching. Technology has also begun to reshape
definitions and implementation methods of learning for educators (Hartsell, Herron,
Fang, & Rathod, 2009). A recent Association for Supervision and Curriculum
Development (ASCD) (2017) brief on the future of professional development
highlighted several current trends in teacher professional development.

For instance, in the current digital age, professional learning often occurs in online
collaborative platforms, such as Twitter chats and EdCamp, which are digital
conferences where the content is driven by participant expertise (Spirrison, 2016).
Furthermore, micro-credentialing is another digital learning platform for teachers.
Micro-credentialing allows teachers to participate in personalized, competency-based
professional leaning experiences (Schwartz, 2017). In order to receive a credential
from an online micro-credentialing company, such as the nonprofit Digital Promise,
teachers must go through multiple steps, including: learning a skill through an online
platform, sharing their learning in person with their colleagues, digitally submitting
artifact evidence of this shared learning experience, receiving electronic peer feedback
from the learning platform, reflecting on the feedback, and refining the learning for
final approval. Digital Promise does not charge for this experience. Figure 1 illustrates
this type of micro-credentialing professional learning experience. These flexible, interactive online learning platforms have the potential to empower teacher self-discovery (Spirrison, 2016)

Figure 1. *How Mico-Credentials can Impact Teacher Professional Learning* (cited in Schwartz, 2017)
Catholic education. Although studies are limited, there are certain features identified in research on professional learning in Catholic schools. Research on Catholic education highlights supporting the whole teacher, who serves as a model for students (Shimabukuro, 1999). Shimabukuro (1999) suggested Catholic school teachers should be committed to building community and participating in ongoing professional development. Furthermore, the Catholic educator often maintains a commitment to lifelong spiritual and religious growth and the formation of students' spiritualties. Shimabukuro argued that the Catholic educator values students' holistic and human development.

Additionally, Moore (2005) claims that Catholic schools support the intrinsic value of all staff members, and thus staff development must consider long-term growth of the individual. Moore’s research also asserts that the community aspect of Catholic schools encourages a spirit of inquiry. Moore argues that if teachers are to change, professional learning needs to focus on being responsive to student needs.

Darling-Hammond and McLaughlin (1995) support this focus on understanding students in all educational contexts. They claim that in the current age of accountability, an integrated professional development model is needed. The focus on continual personal growth and development of teachers remains at the forefront of efforts to improve teacher learning in both private and public education.

Characteristics of Professional Learning

There is a surplus of perception-based research on characteristics of professional learning; yet, there is a dearth of empirical research identifying effective features. A study by Garet and colleagues (2001) was key in filling this empirical gap.
Garet, Porter, Desimone, Birman, and Yoon (2001) utilized data from a national evaluation of a federal program supporting teacher professional development called the Eisenhower Professional Development Program. The researchers identified research-based characteristics of professional development “best practices” that were also utilized in the Eisenhower program. They created a scale describing these characteristics and empirically tested them to determine their impact on teacher outcomes, based on teacher self-reports of changes in content knowledge, skills, and classroom practice. Participants included a national probability sample of 1,027 mathematics and science teachers. Results found four key features positively impacted student learning: a focus on content knowledge, active learning, coherence with other learning activities, and the duration of the activity (Garet et al., 2001). When professional development was directly related to content taught in the classroom and involved hands-on learning for the teacher participants, it was more effective.

The following shared characteristics in professional learning experiences were found in high-achieving countries around the world, not including the U.S.: multiple opportunities for formal and informal professional learning, time allocated for professional collaboration, and embedded professional learning opportunities throughout the year. For example, in Sweden, there has been a shift from administrative-controlled prescribed teacher training to teacher-designed projects that relate to individual classroom concerns. Teachers meet in teams during work hours to collaborate and problem-solve (Wei et al., 2009). Additional characteristics surfaced in the literature on effective learning, including embedded experiences, reflective practice, and a focus on equity, which are each discussed next.
**Embedded experiences.** Professional learning should be differentiated, continuous throughout a school year and a teaching career, and embedded into the daily schedule (Acevedo, 2013; Wei et al., 2010). There are certain characteristics that are specific to job-embedded professional learning. Croft et al. (2010) identified several options for embedded experiences: (a) the professional development takes place in the classroom, in real time, with current students, and is centered on issues of actual practice; (b) the experience takes place in the classroom, nearly real time, away from students, and is centered on issues of actual practice; or (c) the experience occurs in the school, shortly before or after instruction, away from students, and is centered on issues of actual practice. Embedded experiences differ from traditional professional development, which often occurs outside of the classroom or even outside of the school. Embedded experiences can occur alone, one-on-one, or in teams.

Despite research advocating for embedded learning experiences, Birman et al. (2009) found that few teachers receive continuous embedded experiences. Birman et al.’s research analyzed results from two longitudinal studies, the National Longitudinal Study of No Child Left Behind and the Study of State Implementation of Accountability and Teacher Quality Under No Child Left Behind, and found that only 17% of teachers reported participating in professional development experiences related to previous professional development experiences. The majority of teachers (67%) reported that professional development experiences in one school year were designed to support state or district standards and assessments. Furthermore, 60% reported their professional development experiences were designed to support the school improvement plan. No matter the goals of teacher learning experiences,
creating opportunities for active, embedded learning can enhance the quality and impact (Garet et al., 2001; Knowles 1970, 1990).

**Reflective practice.** Learning experiences should also be reflective and focused on the learning of both students and teachers (Acevedo, 2013; Wei et al., 2010). When educational data from numerous countries were compared, Wei and colleagues (2009) found that the United States fell behind high-achieving countries in allotted time for collaborative and reflective practice. Effective professional learning should focus on effective teaching, curriculum and assessment, and leadership (Reeves, 2010). The literature repeatedly mentioned the need for teacher voice and participation in the development and implementation of professional learning. Teachers need opportunities to practice, reflect, apply, and reinforce learning (Reeves, 2010).

Additional research also advocates for reflection as an aspect of successful professional learning. For instance, Martin et al. (2014) identified five distinguishing characteristics of effective professional learning: instructive, reflective, active, collaborative, and substantive. Furthermore, Allen and Penuel (2015) conducted a study of two school sites over a 16-month period in which they used teacher interviews and artifacts to gauge teacher *sensemaking* in relation to professional learning. Sensemaking included how teachers process uncertainty, specifically in the implementation of reforms, such as new standards and curriculum. They found that teachers who were able to collaborate with colleagues dealt with conflict in their professional learning experiences more successfully. For example, science teachers were able to implement new curriculum more effectively when they collaborated...
about how the new standards aligned with their own learning goals. This type of reflective collaboration is a form of effective professional learning.

**Equity focus.** The increased cultural and linguistic diversity of the student population in the United States calls for professional learning that teaches equity pedagogy, which focuses on creating democratic, reflective students (McGee Banks & Banks, 1995). Equity pedagogy involves “teaching strategies and classroom environments that help students from diverse racial, ethnic, and cultural groups attain the knowledge, skills, and attitudes needed to function effectively within, and help create and perpetuate, a just, humane, and democratic society” (p. 152). Kohli et al. (2015) called for *critical professional development* (CPD) focused on creating teachers dedicated to social justice. The CPD model is based on Freire’s (1970) framework of dialogical action and has four key characteristics: (1) teacher engagement in the dialectical process: teachers communicate and respond to each other’s needs and goals; (2) community building around social justice goals; (3) shared power: teachers are viewed as experts and have control over professional development creation; (4) cultural synthesis of teachers: professional development is focused on critical analysis of cultural needs of students and teachers.

Professional learning within a CPD framework can include utilizing qualitative data to perform inquiry-based teacher professional learning, such as using lesson study, which is a collaborative teaching model (Pella, 2012). This form of teacher and classroom-based research has the potential to reach students from diverse backgrounds because it is focused and individualized. Data could include observations of student engagement and participation, work samples, and teacher or student reflections.
Teacher learning experiences should be data-driven, evaluated for improvement, research-based, and collaborative (Hirsh, 2007).

**Collaborative.** Numerous research studies reported both belief and practice changes for teachers following collaborative, active, and reflective learning experiences (e.g. Butler et al., 2004; Drits-Esser & Stark, 2015; Kuchey, Morrison, & Geer, 2009). Ball and Cohen (1999) further advocate for collaborative practice-focused experiences, such as planning lessons, evaluating student work, and developing curriculum. Professional discourse and case study discussions can build collegiality and improve standards of practice (Ball & Cohen, 1999). Many reform models of professional learning include professional collaboration, such as action research, mentorship, PLCs, coaching, and curriculum design. These models will be discussed below.

The Gates Foundation (2014) released a report on teacher professional learning in which they defined strong collaborative work environments as containing the following criteria: formal collaboration time build into the master schedule; shared instructional planning responsibilities (i.e., lessons planned in groups or on a rotating basis); and a positive culture around collaboration (i.e., grade-level/subject-area teams trust and support each other). In collaborative learning environments, teachers are active and reflective participants in communities of learning. Collaborative professional learning takes many forms in schools today, including PLCs, instructional coaching, peer coaching, mentorship, curriculum development, and lesson study. These formal and informal professional communities lead to teacher growth through the act of teaching, self-examination, and observations (Desimone, 2011).
Professional learning standards. Based on current research on professional learning, Learning Forward (2011), formerly the National Staff Development Council (NSDC), developed seven standards for professional learning that were utilized in this study. The Standards Assessment Inventory (SAI) survey used in this research was based on these standards. According to Learning Forward, effective professional learning will occur if the following standards are met:

- **Learning Communities:** Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.
- **Leadership:** Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.
- **Resources:** Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
- **Data:** Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.
- **Learning Designs:** Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.
• Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

• Outcomes: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards, teacher pedagogical content knowledge, and building professional learning communities (Learning Forward, 2011, p. 42). These standards provided the framework for the survey utilized in this study. The qualitative data were also analyzed for efficacy based on these professional learning standards.

**Teacher career stages, phases, and cycles.** An important and often ignored aspect of effective teacher professional learning is the phase of a teacher’s career cycle. Professional learning should consider motivational factors that inspire teachers to engage in growth opportunities (Guskey, 1986; Timperley et al., 2008). Research on teacher career stages and phases is extensive and continues to develop. Many early theories suggested teacher career development occurs in a linear cycle (i.e., Erikson, 1963; Kohlberg, 1969). However, later researchers (i.e., Day, 1999; Elliott, 1993; Fessler, 1995; Huberman, 1995) argued that stage theories that are linear in nature are oversimplified. Many early stage theorists failed to consider the continued evolving nature of teacher development in the later part of one’s career. Additionally, Burke and colleagues (1984) proposed that teachers move in and out of phases based on personal and organizational influences.
Furthermore, much of the research about teacher career cycles focused on external influences, such as environmental factors, including family crises, dispositions, life stages, and organizational factors, such as school regulations, societal expectations, and unions (Burke, Fessler, & Christensen, 1984). Fessler (1995) maintained that the leadership and management style of a school might be the strongest influence on a teacher’s growth. Fessler’s research identified characteristics of more modern stage theories that have grown out of more linear models but also acknowledged multiple levels of influence on teacher development.

Huberman’s (1995) research identified various stages of teacher career development, including: career entry and socialization, diversification and change, stock-taking, interrogations, midcareer, serenity, conservatism, and disengagement. Figure 2, created by Huberman, illustrates a schematic model of the sequences of a teacher career cycle, based on both empirical and conceptual research of teacher stages. In this model, the left-hand side of the cycle represents a more harmonious sequence, whereas the right-hand side is a more problematic sequence. Huberman argued that teachers move in and out of the various phases or themes throughout their career.
An important contribution of Huberman’s work was the identification of predictive factors of professional satisfaction later in career cycle, including teachers who spontaneously sought some form of role shift and teachers who identified particular affection for specific cohorts or classes. However, it is important to note that Huberman identified disengagement at the end of a teacher’s career, whereas other researchers such as Elliott (1993) advocated for an engagement of expert educators.

Perhaps the most thorough integration of the multiple facets of teacher development was Leithwood’s (1992) Interrelated Dimensions model, which advocated for an interaction between psychological development, professional development, and career cycle development, as seen in Figure 3.
This multi-dimensional model of development identifies the complexities of supporting teacher growth and can also serve as a diagnostic and development tool. Leithwood’s model combines the research of numerous predecessors (i.e., Fuller, 1969; Huberman, 1995; Kohlberg, 1969). This study will contribute to professional learning research, which lacks an integration of research on career cycles when investigating professional learning.
In summary, there are numerous research-based characteristics that can effectively support teacher learning, including a focus on content knowledge, active learning, coherence, and duration (Garet et al., 2001). Reform professional learning focuses more on embedded, collaborative, and reflective experiences. Adult learning should also be differentiated, with a focus on teacher career stages and the cultural diversity of the classroom. With the plethora of research-based characteristics of effective professional learning, schools should be able to create meaningful learning experiences for their teachers.

**Models of Professional Learning**

There are numerous models of professional development that schools can implement. When deciding on the best form, schools should consider performing a needs-assessment so teachers' suggestions for content and organizational needs are heard (Joyce & Calhoun, 2010). Desimone’s (2011) framework for successful professional development involves four steps: (a) Teachers experience professional development; (b) the experience increases teachers' knowledge and skills, changes attitudes and beliefs; (c) teachers use new knowledge, skills, attitudes, and beliefs to improve the content of their instruction, their approach to pedagogy, or both; and (d) the instructional changes that the teachers introduce to the classroom boost student learning. Furthermore, Blank and colleagues determined three traits of effective professional learning: (a) consistent with the teacher's school curriculum or learning goals for students and/or aligned with state or district standards for student learning or performance, (b) congruent to the day-to-day operations of schools and teachers, and (c) compatible with the instructional practices and knowledge needed for the teachers’
specific assignments (Blank, de las Alas, & Society for Research on Educational Effectiveness, 2010). These research-based characteristics are integrated into several of the current models of professional learning.

Examples of existent models of professional learning include individual inquiry, such as grants or stipends to pursue studies; personal or professional services provided by peers, such as teachers presenting on methods for instructional improvement; personal or professional services provided by supervisors or outside experts; action research; curriculum and instructional initiatives; and workshops (Joyce & Calhoun, 2010). Embedded methods of professional development have also become more common, such as grade or content level PLCs, peer observations, and coaching (Desimone, 2011).

One study (Gabriel, Day, & Allington, 2011) investigated the professional development needs of 30 exemplary fourth grade teachers working in high-poverty elementary schools. These teachers were selected from a national sample based on recommendations from local teachers, administrators, and university professors. Teachers were interviewed and three collective themes arose from the data regarding the influences on their own professional development: (a) specific kinds of professional development programs, including programs that “provided a systemic way to observe and interpret students’ work and actions” (p. 38); (b) collegial support, such as a mentor or peer support network; and (c) a sense of engaged autonomy, which means that teachers were engaged in both group and individual decision making, which made them feel trusted, valued, and supported as professionals. There were numerous models of professional development explored in the literature,
including PLCs, action research, a needs-based model, mentoring, coaching, curriculum design, and education partnerships.

**Professional learning communities.** Stewart (2014) argued that effective professional learning begins with successfully functioning PLCs. PLCs offer a “reflexive dialogical space, based on action research approaches, for engaging in pedagogical learning” (Feldman & Fataar, 2014, p. 1,525). There were specific characteristics found in the most effective PLCs. First, a shared vision for a school and collective community responsibility for results are vital to success (DuFour, 2014; Vescio, Ross, & Adams, 2008). A second vital component of PLC work was reflective dialogue and inquiry among members of a PLC, which allowed for frequent examination and discussion of teacher practice (Brodie, 2014; Darling-Hammond & Richardson, 2009). A third reoccurring theme in the literature was the importance of teachers using classroom data, both formatively and summatively, to inform their collaborative work and professional discussions about classroom practice (Vescio et al., 2008; Williams, 2012). Additionally, a PLC can provide a safe space for teachers to collaborate and focus on issues of social justice, including targeting the diverse cultural needs of their students (Feldman & Fataar, 2014).

**Action research.** Action research is one professional learning method with a strong research base. There are numerous forms of action research. One method involves teams of teachers interested in implementing a new innovation into their school visiting a site that already implements this strategy (Yendol-Hoppey & Dana, 2010). Observations and discussions with peers can help implementation. Action research "deepens understanding of the theoretical and conceptual underpinnings as
well as the nuts and bolts of implementation” (Yendol-Hoppey & Dana, 2010, p. 3). Action research can also involve teachers systematically studying their own classroom practice (Cochran-Smith & Lytle, 1993). Action research shares certain traits with Lesson Study, a Japanese model that is gradually gaining in popularity in the United States (Lewis, 2000). Lesson Study involves five distinctive characteristics: (a) lessons are collaboratively planned over a long period of time; (b) lessons are observed by other teachers; (c) lessons focus on broader educational goals; (d) lessons are recorded, through video, audio, notes, and/or student work; and (e) lessons are discussed.

**Teacher needs-based model.** Another model for professional learning is the teacher needs-based model (TNB). This model combines traditional and reform professional development characteristics and aims at sustaining learning over time (Lee, 2005). Features include hands-on activities, collaborative work, reflections, discussions, self-motivated practice, and in-service programs; often TNB includes district-university and/or community partnerships. Participants act as decision makers and are asked to connect their professional learning with their teaching practice. Lee (2005) investigated the impacts of the TNB model on mathematics teachers and found that teachers reported changes in attitudes and beliefs about teaching, including being reflective practitioners and creating student-centered classrooms.

**Mentorship.** In 2010, 80% of U.S. teachers with five or fewer years of experience reported having a mentor (Wei et al.), suggesting that schools seem to have recognized the research-based benefits of this model of teacher learning. Mentoring can curb teacher shortages, reducing the student impact and financial damages of high
teacher turnover (Villani, 2009). Villar and Strong (2007) performed a cost-benefit analysis to determine if one new teacher mentoring program was monetarily benefiting a district. Results found that, “Contrary to expectations, increases in teacher effectiveness yielded greater savings than the reduction in costs associated with teacher attrition” (p. 1). Data analysis revealed that, after five years, a $1.00 investment in the new teacher mentor program yielded a $1.88 return, saving resources for the district, local, and state communities. Mentor programs as a form of professional learning can benefit numerous stakeholders in education.

**Coaching.** Another model of embedded professional learning is instructional coaching, which involves a coach helping a teacher identify a skill that needs to be developed, practicing the specific skill, collecting data through observations, and providing feedback (Duchaine, Jolivete, & Fredrick, 2011). One study (Duchaine et al., 2011) found that teachers who received written performance feedback through coaching increased their behavior-specific praise statements for students. An additional study investigated the effects of literacy coaching over a two-year period and found significant differences in teachers who were coached regarding frequency of the use of literacy strategies, yet there were not significant increases in student achievement gains (Feighan & Heeren, 2009). There is a lack of research in measuring the effects of instructional coaching on student achievement.

**Curriculum design.** Collaborative curriculum design is another model for professional development. Drits-Esser and Stark (2015) investigated the impact of this method through a case-study research design. Researchers collected interview and survey data from 41 secondary biology teachers who participated in a five-day
summer institute where they collaboratively designed curriculum. Results indicated that teacher participants experienced shifts in their knowledge and beliefs about science and in their science teaching practice. Drits-Esser and Stark’s study also highlighted the value of active adult learning, professional collaboration, and reflection.

**Research partnerships.** One final method for professional learning is collaborative research partnerships, which often exist between universities and school districts. Butler and colleagues (2004) investigated the impact of one partnership on teachers’ professional learning over a two-year period. Results indicated meaningful shifts in teacher practice following collaboration with university researchers. Teachers were co-constructors on instructional activities, and teacher feedback revealed that self-reflection and student reflections deepened conceptual understandings. Teachers also reported improvements in student confidence, strategies for learning, self-direction, and control over their own learning. It is crucial that schools recognize the value of these research-based approaches when designing professional development opportunities for their teaching faculties.

**Private Education**

There is limited empirical research on professional development that has effectively supported Catholic school educators. One study (Lucilio, 2009) investigated the professional development needs of Catholic teachers ($n = 139$). Results indicated that teachers ranked professional development experiences that included hands-on participation the highest, followed by demonstrations, lectures, and sharing sessions. Teachers preferred content-specific experiences and instructional
strategies versus learning about research on classroom management. Teachers ranked mentoring and training as the experiences most likely to enhance teacher performance. Feedback also indicated a desire for teachers to be involved in the professional development process. Feedback from Lucilio’s (2009) survey research on Catholic educators aligns with research on the professional development needs and preferences of public school educators. Lucilio’s research provides a foundation for understanding the needs of Catholic high school teachers, yet current embedded learning models were not researched. This research study will help highlight the efficacy of more current reform models of professional learning based on national learning standards. The mixed methods approach will also provide deeper insight into both learning experiences and challenges that face educators at Catholic schools.

An additional study investigated the needs of approximately 250 K-12 teachers at 9 Christian schools in the Detroit metropolitan area (Montoro, Covrig, Freed, & Ledesma, 2012). Montoro et al.’s mixed methods study utilized the SAI survey instrument also used in this research and used follow-up focus groups. Results indicated that in regards to their own professional growth and development, teachers at these Christian schools were strongly influenced by their personal religious experiences and beliefs. Teachers felt that teaching was a calling, and this belief contributed to their desire to be high quality teachers. Most teachers at these schools experienced traditional professional development, such as workshops, in-service days, staff meetings, conferences, and the pursuit of graduate degrees. Major challenges in professional development included time and financial constraints; many teachers self-initiated their own learning through avenues such as internet research, reading
professional literature, self-reflection, teacher conversations, and student feedback. The results of Montoro et al.’s research at Christian schools will be compared to this research on Catholic schools.

**Impact of Professional Learning**

It is difficult to measure the efficacy of teacher learning. One of the only recognized forms of evidence in teacher change is a change in student achievement (Guskey, 1986). Fishman and colleagues (2003) created a model for measuring the impact of professional development, which included: (a) teacher knowledge, beliefs, attitudes, and enactment; (b) evidence of student performance; (c) curriculum; and (d) professional development design elements. Furthermore, there are numerous empirical studies that attempt to determine the impact of professional learning on both teachers and students. The difficulty in accurately connecting professional learning experiences to changes in practice or achievement led Guskey and Yoon (2009) to argue that more research is needed to discover methods for measuring the efficacy of professional development. Despite these limitations, there is research to support the benefits of professional development for both students and teachers.

**Student impact.** A primary goal of teacher professional learning is to increase student achievement (i.e., Butler et al., 2004; Joyce & Showers, 2002). West (2002) argued the ‘bottom line’ goal of professional learning for teachers should be to improve student academic performance while empowering teachers through self-improvement. Yoon et al. (2007) investigated the impact of professional development on student achievement. The researchers conducted a meta-analysis of 1,300 studies of the effects of professional learning on student achievement and narrowed their
analysis to nine studies that met the What Works Clearinghouse (WWC) evidence standards. In these studies, they found an overall average moderate effect (0.54) on student achievement following substantial teacher professional learning. Teachers who received an average of 49 hours of professional learning in one year increased their students’ achievement by about 21 percentile points. Additionally, Yoon and colleagues found positive and significant effects on student achievement in studies that provided at least 14 hours of professional learning in one year. Yoon et al. (2007) contended that professional learning impacts student achievement through three interconnected steps: (a) enhancing teacher knowledge and skills; (b) better knowledge and skills improve classroom teaching; and (c) improved teaching raises student achievement.

An additional study (Saxe et al., 2001) analyzed student academic achievement results after implementing three different types of professional learning for teaching fractions to elementary students. Results found that the group of teachers who received professional learning focused on problem solving and conceptual understanding of mathematics skills had the greatest student posttest scores. The group of teachers whose students did not show as significant of gains received support focused on teacher understanding of fractions, student thinking, and student motivation. The teachers who received the most integrated approach to student understanding showed the most gains.

Another study (McGill-Franzen et al., 1999) that involved 18 kindergarten classrooms and 377 students revealed statistically significant ($p < .05$) student achievement gains in kindergarten classrooms where teachers received professional
learning training on new literacy books. This randomized control study included three groups: kindergarten classrooms whose teachers received new literacy books and training, kindergarten classrooms whose teachers received new literacy books and no training, and control group kindergarten classrooms who received neither books nor training. Teachers who received training on the display and use of the literacy books in the classroom attended 30 hours of learning sessions, including three whole-day sessions and seven two-hour sessions. Student achievement data, gathered through assessments and observations, in classrooms where teachers received the training was statistically significantly higher than classrooms with no training. Additionally, statistically significant results were found in the number of books read aloud to students each week, with an average of 10.42 books in the classrooms with teachers who received training and an average of 5.43 in those who did not receive the training. These various studies highlight the potential positive impact on student learning when professional development is effective and relevant for teachers.

**Teacher impact.** Another goal of professional learning is to improve teacher pedagogical content knowledge (Little & National Education Association, 2006). It is clear that teachers must be able to integrate both their knowledge about the content and their knowledge about teaching. One study (Hill, Rowan, & Ball, 2005) investigated student mathematics achievement in relation to teacher content knowledge. The research involved two years of data collection from students and teachers in 89 participating schools and 26 comparison schools, all of which were in 42 districts in 15 states. Participants included 1,190 first graders, 1,773 third graders, 334 first grade teachers, and 365 third grade teachers. Student data were gathered from
student assessments and parent interviews, and teacher data were gathered from a teacher log and an annual questionnaire. Results found a significant relationship ($p < .05$) in first and third grade mathematics achievement gains in relation to teachers’ mathematical knowledge. More research needs to be done regarding the relationship between teacher knowledge and student achievement.

Research indicates that teacher perceptions about the potential for professional development to have a transformational impact are great. For instance, in one nationally representative survey of 890 teachers, Coggshall and Ott (2010) found that improving professional development would be either very effective (51%) or somewhat effective (44%) in improving teacher effectiveness. Furthermore, one qualitative research study reported that focus group participants believed ongoing professional development in conjunction with supportive school leadership would encourage teachers to teach in hard-to-staff schools (Shapiro & Laine, 2005).

Research indicates that professional collaboration has value in both public and private education. One study that investigated the impact on teachers of a systemic shift to learning-centered curriculum in Australian Catholic schools found that 93% of respondents agreed that interpersonal relationships with colleagues allowed them to do their job more effectively (Madden, Wilks, Maione, Loader, & Robinson, 2012). An additional study within the Catholic education context investigated the implementation of a two-year professional development program for science and math teachers at Catholic elementary schools and found positive outcomes for teachers (Kuchey et al., 2009). Participants included 21 school teams ($n = 24$ Science, $n = 24$ Math) teachers who met for monthly workshops during the academic year and for two weeks during
each summer session. Methodology included a pre- and post-survey on teacher self-efficacy, student achievement pre- and post-test data, and analysis of lesson plans using a rubric by outside faculty members who were content experts.

Results of Kuchey et al.’s (2009) study revealed that teacher content knowledge increased by a statistically significant amount ($p < .05$), as did Science and Math teacher self-efficacy. Also, student achievement gains of students taught by a teacher who was part of the professional development program were statistically significantly higher ($p < .05$) for third grade math students, yet not first and second grade students. Additionally, students in fifth and sixth grade science taught by a teacher who was part of the professional development program had statistically significantly higher gains than comparison students. Yet, fourth grade students at the comparison schools outperformed the intervention school students in science achievement gains. The features of this professional learning experience echo certain literature. However, there were additional unique features that may have improved efficacy, including selective recruitment of the teachers, which improved retention, and a financial incentive, as teachers were provided a small stipend. Perhaps these features should be explored in further research.

Despite the positive outcomes in numerous studies of professional development, a recent study conducted by The New Teacher Project reported no correlation between teacher professional learning and improvement of instruction (Sawchuk, 2015). The study compared surveys on professional learning experiences from over 10,000 teachers to teacher growth, which was measured with principal ratings, student test scores, and teacher ratings on particular skills. The survey asked
teacher perceptions of their own teaching practice, the time and type of professional development experiences they had, and desired forms of professional development experiences. Results found no connection between professional learning and teacher improvement. This research from The New Teacher Project (Jacob & McGovern, 2015) prompts questions about the efficacy of professional learning and the need to be clear and purposeful about designing effective learning experiences and methods for measuring efficacy.

Summary

This chapter summarized current literature on teacher professional development and how the characteristics and methods of professional development are constantly evolving to be focused on teacher learning, collaboration, and embedded methods of support. The chapter highlighted numerous characteristics of effective learning experiences, supported with empirical studies. Furthermore, several specific methods of providing teacher professional learning were defined, and empirical research regarding their efficacy was explored. Research from both Catholic and public educational contexts were highlighted, yet, there is a dearth of research on professional learning for Catholic educators. Finally, the impacts of professional learning experiences on both students and teachers were identified. The research base presented in this chapter will support the methodology explained in Chapter 3. The methods chosen for this study were grounded in research on professional learning standards and will help contribute to the lack of research on teacher professional learning experiences in Catholic secondary schools.
Chapter 3: Methodology

This chapter will discuss the methodology used in this mixed methods research study. This research aimed to investigate the professional learning experiences of educators at Catholic secondary schools and evaluate them based on national learning standards. A mixed methods approach “combines both quantitative and qualitative research in an effort to maximize the strengths of each form in one study” (Ary, Cheser-Jacobs, & Sorenson, 2006, p. 559). A pragmatic mixed methods research design was chosen with the aim of exploring the complexities of teacher professional learning more fully and providing deeper insight into teacher learning experiences (Creswell, 2009). The results from this study fill a meaningful gap in research on professional learning in Catholic education. The results from this study also highlight the need for future research to promote effective teacher learning and engagement.

Research Questions

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. Participant experiences were compared to research-based best practices set forth in Learning Forward’s (2011) Professional Learning Standards. The seven standards included: learning communities, resources, learning designs, outcomes, leadership, data, and implementation. This research will inform school leaders about the efficacy of professional learning practices, help identify barriers to professional learning, and provide a lens into
implementation methods that may better meet the needs of teachers. The research questions explored in this study included:

1. How well do teacher learning experiences at Catholic high schools align with nationally recognized standards for professional learning?
   a. Were there differences based on participant demographics, education level, department, and years of experience?

2. What are teacher identified qualities of effective professional learning experiences?

3. What are potential barriers or challenges to creating effective learning experiences for teachers in the Catholic school context?

This research gives voice to Catholic school educators about the quality of their professional learning experiences, which can then inform policies and practices.

Rationale for Methodology

This mixed methods study employed concepts of both quantitative and qualitative research in an overlapping methodology intended to increase the strengths of each form of research (Mills & Gay, 2016). An explanatory sequential design (Creswell, 2015) was employed, in which quantitative survey data were collected and analyzed in an initial stage, and these data subsequently informed the qualitative stage of data collection and analysis (Ary et al., 2006). This research was triangulated by utilizing multiple forms of data collection to increase internal validity (Merriam, 2009).

A mixed methods research design was best suited for this study because it provided the opportunity to investigate the quality of existing professional learning
experiences at each school, while also providing teacher voices regarding their learning experiences. Focus group participants helped provide deeper insight on survey responses and assisted in answering the research questions (Creswell, 2009). Focus group interviews can provide several potential benefits to research collection, including: identifying new leads, extending information, relating to existing elements, reinforcing trends, accounting for other information, providing more evidence for a theme, and qualifying or refuting existing information (Miles, Huberman, & Saldana, 2014).

The inclusion of four separate Catholic high schools in one large urban area provided the probability of greater generalizability to the larger population (Muijs, 2011). Generalizability "describes whether your results will hold true for subjects and settings beyond those in your study" (Morrell & Carroll, 2010, p. 269). The high response rate (92%) and large sample size \( n = 223 \) suggest high generalizability to the high school Catholic educator population in the same geographical region. Voluntary focus group interviews provided an opportunity to explore teacher perceptions of their learning needs, identified potential barriers to effective learning opportunities, and increased generalizability (Ruel, Wagner, & Gillespie, 2016). The multiple methods of data collection improved the validity and trustworthiness of this research (Golafshani, 2003).

**Setting**

There were four Catholic high schools that participated in this study. Each school was founded by a different religious order (i.e. Jesuit, diocesan, Benedictine, Daughters of Charity, La Sallian, Cristo Rey). However, to protect the anonymity of
the participating schools, the specific order of each school will not be identified in this research. Table 1 indicates overall information about each school.

Table 1

**Participating School Descriptor and Demographic Information**

<table>
<thead>
<tr>
<th>School</th>
<th>Student Population</th>
<th>Annual Tuition</th>
<th>% Student Population Catholic</th>
<th>% Students of Color</th>
<th>% Students Receiving Financial Aid</th>
<th>Financial Aid Awarded 2015-2016</th>
<th>% Students Attending College</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>300 – 400</td>
<td>&lt; $5K</td>
<td>40 – 50</td>
<td>80 – 90</td>
<td>80 – 90</td>
<td>$1 – 2 million</td>
<td>80 – 90</td>
</tr>
<tr>
<td>B</td>
<td>&gt; 1,000</td>
<td>$12 – 14K</td>
<td>70 – 80</td>
<td>20 – 30</td>
<td>20 – 30</td>
<td>$2 – 3 million</td>
<td>90 - 100</td>
</tr>
<tr>
<td>C</td>
<td>700 – 800</td>
<td>$12 – 14K</td>
<td>30 – 40</td>
<td>20 – 30</td>
<td>30 – 40</td>
<td>$1 – 2 million</td>
<td>90 - 100</td>
</tr>
<tr>
<td>D</td>
<td>300 – 400</td>
<td>$12 – 14K</td>
<td>40 – 50</td>
<td>0 – 10</td>
<td>20 – 30</td>
<td>$ 500 – 600K</td>
<td>90 - 100</td>
</tr>
</tbody>
</table>

Participants

There were a total of 223 educators who participated in the survey data collection. The majority of teachers were White (79%), and there was a higher percentage of Females (53%) than Males (46%). For analysis purposes, the ethnicity categories were collapsed into White ($n = 165, 79%$) and Nonwhite ($n = 27, 13%$). An additional 8% ($n = 17$) selected *I prefer not to answer*, which creates a limitation for disaggregating the data by race. In regards to years of experience, 67% of teachers had 11 or more years as an educator. This statistic includes non-teaching faculty serving as educators, such as counselors or administrators. Also, 82% of participants had at least a Master’s Degree. Participants indicated the department in which they worked, and
categories were collapsed to allow for disaggregation of the data. The highest number of participants taught Humanities \( (n = 70; \ 39\%) \), which included English / Language Arts, History, Geography, Economics, Government, Speech/Debate, Psychology, World Languages. The next largest category of participants was Science, Technology, Engineering, and Mathematics instructors (STEM), which included 47 (26%) individuals. See Table 2 for participant demographic and descriptor details.
Table 2

Overall Participant Demographics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>97</td>
<td>46</td>
</tr>
<tr>
<td>Female</td>
<td>111</td>
<td>53</td>
</tr>
<tr>
<td>Unidentified</td>
<td>2</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Race / Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>African American / Black</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Hispanic / Latino</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Native American / Alaskan Native</td>
<td>1</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>White</td>
<td>165</td>
<td>79</td>
</tr>
<tr>
<td>Multiple</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>I prefer not to answer</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>Experience level as an Educator</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>1</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Less than 1 year</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>1 – 4 years</td>
<td>23</td>
<td>11</td>
</tr>
<tr>
<td>5 – 10 years</td>
<td>39</td>
<td>19</td>
</tr>
<tr>
<td>11 – 16 years</td>
<td>44</td>
<td>21</td>
</tr>
<tr>
<td>17 – 25 years</td>
<td>48</td>
<td>23</td>
</tr>
<tr>
<td>More than 25 years</td>
<td>49</td>
<td>23</td>
</tr>
<tr>
<td>Highest Degree Completed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Missing</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>36</td>
<td>17</td>
</tr>
<tr>
<td>Master’s degree</td>
<td>161</td>
<td>77</td>
</tr>
<tr>
<td>Doctorate degree</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>Department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administration</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>Counseling</td>
<td>13</td>
<td>&lt; 1</td>
</tr>
<tr>
<td>Humanities</td>
<td>70</td>
<td>39</td>
</tr>
<tr>
<td>STEM</td>
<td>47</td>
<td>26</td>
</tr>
<tr>
<td>Theology</td>
<td>27</td>
<td>15</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>17</td>
</tr>
</tbody>
</table>

Following initial quantitative data analysis, focus group interviews were conducted at three of the four participating schools, and each focus group included three faculty members for a total of nine participants. All survey participants had an opportunity to volunteer to participate in the focus groups. Focus group participants
included four males and five females and were teachers from numerous content areas, including two STEM teachers, four Humanities teachers, and three Theology or Service Learning teachers. Administrators who volunteered to participate in the focus group interviews were not contacted due to the potential for discomfort among educators with having a supervisor present. Focus group interviewees all identified as White. One of the participants had a Doctorate Degree, and the remaining eight had Master’s Degrees. The years of experience ranged from one year to over 25 years.

**Design and Procedures**

This research study was conducted in person by the researcher during an all-school faculty meeting at each school. Participants included teaching faculty, administrators, and counselors at each school. A consent form was present in the first section of the Standards Assessment Inventory (SAI) instrument, so if participants agreed to take the survey, they granted consent. The survey link was emailed to all participants from an administrator at their school, and participants could access the survey on their cell phones, laptop computers, iPads or tablets, or on a school-provided computer in the room where the meeting took place.

All of the data collection for this study occurred in the fall of 2016. The researcher defended the dissertation proposal in August and received Institutional Review Board (IRB) approval in September. All survey data were collected in October 2016, and initial analysis occurred immediately. Each school received an individualized report on the SAI survey results in November 2016. Follow-up focus group interviews occurred in November 2016 at three of the four school sites. The quantitative and qualitative data from each school were combined for collective

The initial survey for this research was administered by the researcher at each school site during an all-school faculty meeting in the fall of 2016. Teachers were emailed a link to the survey by an administrator immediately prior to the meeting, and they were instructed to wait until the faculty was gathered to take the survey. This method allowed for a high response overall response rate (92%) at the four schools. The link was publicly displayed in case the email link failed. Participants answered the survey items during the in-service meetings. The survey took approximately 15 to 20 minutes, with certain participants needing extended time for open-ended responses. Teachers were able to take the survey by using their personal electronic devices or nearby school computers. One school’s meeting occurred in the library, and nearly half of the faculty took the survey on school computers in that room. The researcher had paper copies and pencils in case of technological problems. There was a technological issue at one school where the wireless Internet server became overloaded with users, and teachers dispersed to their classrooms or the hallways to reduce the burden on the network. The majority of educators at this school were able to complete the survey despite the technological problems.

Semi-structured focus group interviews were conducted following quantitative data analysis. Each focus group participant signed a consent form prior to the interview. The follow-up focus groups occurred at the school sites in November of 2016 and took approximately 45 minutes. Semi-structured, predetermined questions helped guide the conversation, yet there was room for flexibility and a natural flow to
occur during the interviews (Wilkinson & Birmingham, 2003). Questions were peer reviewed by a group of 14 doctoral students who provided feedback to ensure the elimination of ambiguous questions and provide opportunity for revisions. Interview questions related directly to the research questions for this study, specifically regarding the efficacy and characteristics of existent professional learning experiences, the unique nature of Catholic education, and the alignment with national learning standards. Following initial quantitative data analysis that indicated the Data standard was statistically significantly lower ($p < .05$) than all other standards, participants were questioned about data use related to professional learning. Sample questions included:

1. Adults learn professionally in many ways and formats; how do you best learn professionally? Do you think you have a voice in choosing professional learning experiences in your school?
2. Tell me about a favorite professional learning experience. What characteristics made this experience meaningful for you? What professional development experiences have you participated in this year? Did you find these experiences meaningful? What types of professional learning experiences would you like your school to provide to make them more beneficial to you? If you could design the professional learning experiences for the coming year, what would they look like?
3. How does your school use data to make decisions about professional learning and development? What forms of data do your school use?
4. Do you believe working at a Catholic school means teachers need particular types of learning experiences that a public school teacher may
not need? What types and why? Do you know your school’s mission statement; does the mission statement impact school culture? Does the mission of your school dictate the types of professional development offered?

5. Do you feel that working at a Catholic school impacts the quality or quantity of professional learning experiences you have? In what ways? Examples? Is there anything else I need to know about professional learning in a Catholic school?

These interviews were audio recorded and transcribed by the researcher. Participant identity remained confidential in the data analysis and reporting. Data were coded for both provisional and emergent themes. A comparison was made between survey results and qualitative feedback results to more deeply understand the learning experiences and needs of Catholic school educators and how well these experiences aligned with the Professional Learning Standards. Additionally, challenges or barriers to successful adult learning surfaced in both quantitative and qualitative data analysis. Data were also analyzed for characteristics unique to Catholic education.

**Instruments**

Several survey instruments were explored for potential use in this study. PsycTESTS was utilized to find tests and measures about teacher professional learning, and numerous survey instruments for measuring various levels of teacher professional development needs were found. The redesign of the Standards Assessment Inventory (SAI) was chosen based on the high validity and reliability testing and prior use in dissertations and publications. Permission was requested and
granted from Learning Forward (see Appendix A); thus, this instrument was used with permission of Learning Forward, www.learningforward.org. All rights reserved. The survey items are attached in Appendix B.

The original SAI instrument, developed in 2003, was a 60-item survey measuring a school’s professional development alignment with the 2001 National Staff Development Council’s (NSDC) 12 Standards for Staff Development (Denmark & Weaver, 2012). The construct validity of this instrument revealed acceptable to strong reliability coefficients in psychometric testing. Following Learning Forward’s revamping of the Standards for Professional Learning in 2011 from 12 to 7 standards, the SAI instrument was also redesigned. The seven Professional Learning Standards (Learning Forward, 2011) upon which the revised SAI is based include:

- **Learning Communities:** Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

- **Leadership:** Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

- **Resources:** Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.
• Data: Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

• Learning Designs: Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

• Implementation: Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

• Outcomes: Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards, teacher pedagogical content knowledge, and building professional learning communities (p. 42).

The validity testing of the new instrument, initially called SAI2, but currently called SAI, entailed a two-phase analysis. In phase I, a content and factor analysis of the original SAI items was conducted. In phase II, SAI items were administered to 2,323 teachers from 121 diverse schools. A pilot was given to 82 educators to give feedback on face validity of the instrument. Revisions were made and a revised SAI instrument with 60 items was created. Respondents could choose an answer according to a five-point frequency scale: Never-1, Seldom-2, Sometimes-3, Frequently-4, Always-5. Each of Standards for Professional Learning was addressed with seven to eight items. Further validity testing was conducted, including psychometric analyses examining construct validity, predictive validity with respect to Adequate Yearly
Progress (AYP), and reliability of the instrument. Based on the results of these analyses, “all items were supported as valid and reliable indicators of a general professional learning quality, and reliability estimates of a composite score of school professional learning quality computed by averaging over respondents and items within the same school indicated exceptionally high reliability” (Denmark & Weaver, 2012, p. 4).

Although the pilot of SAI contained 60 items, the final version of the instrument contained 50 items in a web-enabled survey, with approximately 7 to 8 questions for each of the 7 Professional Learning Standards. There was a five-point frequency scale for responses with a corresponding numerical value, ranging from Never (1) to Always (5). The response Don’t know was also an option, but it carried a "0" weight and was thus only analyzed for frequencies. The survey took approximately 15 to 20 minutes to complete and was designed to assess how well a school’s professional learning program aligns with Learning Forward’s (2011) standards. Sample questions, grouped by standard, included:

- Learning Communities: My school’s learning communities are structured for teachers to engage in the continuous improvement cycle (i.e. data analysis, planning, implementation, reflection, and evaluation); Learning communities in my school meet several times per week to collaborate on how to improve student learning.

- Leadership: My school’s leaders consider all staff members to be capable of being professional learning leaders; My school’s leaders regard professional learning as a top priority for all staff.
- Resources: In my school, time is available for teachers during the school day for professional learning; Practicing and applying new skills with students in my classroom are regarded as important learning experiences in my school.

- Data: My school uses a variety of student achievement data to plan professional learning that focuses on school improvement; My school uses a variety of data to monitor the effectiveness of professional learning.

- Learning Designs: In my school, teachers have opportunities to observe each other as one type of job-embedded professional learning; The use of technology is evident in my school’s professional learning.

- Implementation: A primary goal for professional learning in my school is to enhance teaching practices to improve student performance; Professional learning experiences planned at my school are based on research about effective school change.

- Outcomes: Professional learning experiences in my school connect with teacher performance standards (e.g. teacher preparation standards, licensing standards, etc.); My professional learning this school year is connected to previous professional learning.

The revised SAI survey instrument has been used in current doctoral education research on professional learning from numerous perspectives, including instructional coaching (Gaffney, 2015) and administrative support of Indian education (Olszewski, 2014). Earlier variations of the SAI survey instrument were also used in prior doctoral education research (Cogan et al., 2012; Montoro et al., 2012) and have been referenced in notable teacher professional development research (e.g., Curry &
Killion, 2009; Mindich & Lieberman, 2012; Wei et al., 2009). The Professional Learning Standards that SAI investigates are supported by reputable research on professional learning best practices (e.g., Hirsh, 2006; Vaden-Kiernan, Jones, & McCann, 2009; Wei et al., 2009). The content validity of this instrument is strong. Based on this research foundation, the Professional Learning Standards can be applied to any educational environment that supports adult learning, including Catholic schools.

The survey also included three open-ended questions created by the researcher. The open-ended questions included:

1. Can you describe one of your favorite professional development experiences? What characteristics made this experience meaningful for you?

2. Do you believe that working at a Catholic school impacts the quality or quantity of professional learning experiences that you have? Please explain.

3. Is there anything else I need to know about professional learning and development at a Catholic school?

**Ethical Considerations**

This research was completed with the highest regard to ethical considerations. Institutional Review Board (IRB) at the University of Portland granted permission to conduct this research study. Each participating school also granted approval prior to conducting any research. Each participant read and agreed to a consent form, and all participant personal information was protected using pseudonyms or numerically-
assigned codes. All data were maintained on a password-protected computer. The researcher had prior work experience in Catholic high schools, one of which was a participatory school in the study. However, the researcher was no longer employed with that institution or any of the participatory institutions and held no position of authority over any of the faculty participants.

**Role of the Researcher**

The researcher had approximately 10 years of teaching experience in both public and Catholic schools. She had taught in several different capacities, including adult education, middle school Special Education, and high school English and Religion. She has served as a mentor for new teachers and a supervisor for in-service teachers. She recently completed her Initial Administrative License at one of the participating Catholic high schools and is in her final year of the Doctor of Education in School Leadership and Development program at the University of Portland. The researcher worked as a Doctoral Research Fellow at the University of Portland for the three years of her doctoral degree program. This work included conducting district-driven research for local PK-12 schools in collaboration with university faculty as part of the Multnomah County Partnership for Education Research. These experiences led to a deep interest in learning how to support teachers effectively from both an administrative and a peer perspective. The researcher desired a deeper understanding of how to keep teachers engaged in their own growth, learning, and development.

The researcher attended Catholic schools for the majority of her education and retains a belief in the value of Catholic education in educating students with a focus on service and community. She also appreciates the sacrifices Catholic educators make to
teach at Catholic schools, including reduced salaries and extra-curricular duties that are often uncompensated. Within this research study, the researcher was consistently aware of her positionality as an unbiased researcher. She was deliberate about placing aside preconceptions of teacher experiences within Catholic education. In focus group interviews, she asked open-ended questions that allowed for honest responses from participants. Qualitative data were analyzed using multiple methods of coding to ensure dependability.

**Data Analysis**

The data collection used in this study consisted of a survey and focus group interviews. Quantitative survey data were analyzed using multiple data analysis procedures in SPSS. Descriptive statistics identified frequencies, percentages, means, and standard deviations of survey items, which were displayed using tables and appropriate graphics. A repeated measures Analysis of Variance (ANOVA) with Tukey post-hoc analysis and a Greenhouse-Geisser correction was used to investigate relationships between standards. These findings were provided for each school’s individual report. A Pearson’s $r$ correlation coefficient was also performed to investigate the relationships between standards. If results were statistically significant, the effect size was indicated in the results.

Furthermore, demographic data were disaggregated, including by gender, ethnicity, education level, department in which participants work, and years of experience. $T$-tests were performed to investigate differences by gender and ethnicity. One-way ANOVAs with Tukey post-hoc analyses were used to compare means by education level, department, and years of experience.
The results of the data analysis of years of experience were further analyzed utilizing Huberman’s (1995) research on stages of teacher career development. Huberman’s research identified themes and phases that correspond to years of teaching including: career entry and socialization, diversification and change, stock-taking, interrogations, midcareer, serenity, conservatism, and disengagement. This research study investigated whether Catholic high school teachers reported differentiated professional learning experiences based on various stages of their careers.

The qualitative data from the semi-structured interviews were recorded and transcribed. Qualitative data from the open-ended survey questions were also analyzed. All of these data were coded loosely with pattern coding to identify categories, themes, and relationships (Miles et al., 2014). The relevant text was coded for repeating ideas, creating common themes, which were connected to theoretical constructs, and summarized in a theoretical narrative (Auerbach & Silverstein, 2003). Several types of coding were employed in the textual analysis, including descriptive, In Vivo, and values coding (Saldana, 2009). Descriptive coding was used to assign labels to data, and In Vivo coding was used to identify relevant direct quotations from participants (Miles et al., 2014). Finally, values coding was also employed in data analysis to identify participant values, attitudes, and beliefs about professional learning.

Summary

The purpose of this explanatory sequential mixed methods study was to investigate the professional learning experiences of Catholic school educators and
compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. This research identified teacher perceptions of the quality of professional learning experiences of secondary educators at Catholic schools. This study utilized quantitative and qualitative data collection and analysis to provide strong internal validity. Participants in this study included Catholic school educators at four Catholic high schools in a metropolitan area in the Pacific Northwest. Instrumentation included the SAI survey, which had been thoroughly tested for validity and reliability and used in several previous research studies. Data analysis included numerous quantitative and qualitative methods of disaggregation and coding. Research was performed ethically, and participant identities were protected. Results of the data analyses will be reported in Chapter 4.
Chapter 4: Results

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. This chapter presents the results of the quantitative and qualitative data analyses, including results from the Standards Assessment Inventory (SAI) survey data, consisting of 50 frequency scale items and three open-ended questions. The SAI survey was created around seven Professional Learning Standards (Learning Forward, 2011), and these standards will be redefined in this chapter. Additional data from focus group interviews were transcribed and coded, and both provisional and emergent themes will be presented.

There were 223 individuals who were emailed a link to the survey during an all-school gathering at each of the four participating schools while the researcher was present. Of these individuals, 205 participants were included in the overall data analysis. The survey response rate was 92%. The researcher made certain rules regarding participant inclusion in the final data analysis. Only participants who answered 25 questions (50%) or more of the survey were included in the final data set. Additionally, participants who answered “Don’t know” to four or more (over 50%) of the survey items in any one standard were also eliminated because their inflated means skewed the data; for instance, one participant answered “Always (5)” to one question and “Don’t know” to the other seven questions within a standard. Thus, the mean was 5, which was an inaccurate portrayal of the data. The mean responses and standard deviations for all questions within each standard are presented below. Results also
include the number and percentage of participants who answered “Don’t know” for each question. In each standard’s results table, key findings are highlighted in the tables, most notably high percentages of “Don’t know” answers, which is further discussed below.

Initial data analysis investigated the relationship between items within each standard. A one-way Analysis of Variance (ANOVA) with a Greenhouse-Geisser correction was used to determine statistical significance between items. These findings were provided for each school’s individual report. For this report, the overall mean per item and the overall means per standard are reported. An ANOVA with repeated measures with a Greenhouse-Geisser correction was used to investigate differences between the overall means of the seven Professional Learning Standards. If results were statistically significant, the $p$ value was indicated in the results. The results of these data analyses are indicated in the following tables. It should be noted that repeated measures ANOVAs analyze significance for groupings that have the same number of responses. Thus, when the overall means for each standard were compared, if a participant responded “Don’t know” to a question, that response was eliminated from the mean. However, “Don’t know” responses were included in the single item descriptive statistic analysis and indicated in the following tables.

**Don’t know responses.** One key finding in this research was the high number of participants who answered “Don’t know” to survey items within each standard, especially within the Data standard. As indicated in Figure 4, the Data standard had 69 respondents who answered “Don’t know” to four or more questions within the standard. This disproportionately high number of missing data calls for further
research into the cause of the uncertainty among participants in answering questions about data related to professional learning. The Outcomes standard also showed 28 participants with four or more “Don’t knows” within the standard items, which may be a result of survey fatigue, since this standard’s questions were the final seven questions of the survey. Survey fatigue relates to the effort and time participants invest in taking a survey, and research has found that longer surveys have lower response rates (Sharp & Frankel, 1983).

Figure 4. Participants Answering “Don’t Know” to Four or More Items Per Standard

Of the 20 participants who answered “Don’t know” to 50% or more of the total number of survey items, 9 were male and 11 were female. There were no consistent trends found in the demographic information about these individuals. The number of years in education was fairly evenly split with the highest percentage of 30% \((n = 6)\) having 5 to 10 years of experience and 10% \((n = 2)\) having over 25 years of experience. Furthermore, there was no consistency in the departments in which these
participants worked, ranging from Electives to Administration to Humanities. It appears that “Don’t know” responses did not follow any particular trend regarding the participants; they are not inherently different based on demographics.

**Reliability.** The internal consistency and reliability of the SAI instrument were analyzed based on the results in this research. A Cronbach’s alpha was conducted, which is an analysis used to identify “the extent to which all the variables that make up the scale are measuring the same thing” (Muijs, 2011, p. 217). The items within each learning standard were analyzed. The results of the Cronbach’s alpha per standard are presented in Table 3. Results for all standards showed high reliability ($\alpha > 0.75$), and Data and Outcomes standards were $\geq .90$.

Table 3

*Internal Reliability Analysis Results for Each Professional Learning Standard*

<table>
<thead>
<tr>
<th>Professional Learning Standard</th>
<th>Number of Items</th>
<th>Cronbach’s alpha ($\alpha$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning Communities</td>
<td>7</td>
<td>.81</td>
</tr>
<tr>
<td>Leadership</td>
<td>7</td>
<td>.83</td>
</tr>
<tr>
<td>Resources</td>
<td>7</td>
<td>.80</td>
</tr>
<tr>
<td>Data</td>
<td>8</td>
<td>.92</td>
</tr>
<tr>
<td>Learning Designs</td>
<td>7</td>
<td>.84</td>
</tr>
<tr>
<td>Implementation</td>
<td>7</td>
<td>.77</td>
</tr>
<tr>
<td>Outcomes</td>
<td>7</td>
<td>.90</td>
</tr>
</tbody>
</table>

*Note. Meaningful relationship between items $\geq 0.70$.*

*“Don’t know” answers were considered missing data and not included in the analysis.*
Research Question One: Alignment with Professional Learning Standards

The first Research Question was addressed through both quantitative and qualitative data analysis. Quantitative survey data were gathered from the results of the SAI survey instrument, which contained 50 items with approximately seven to eight questions for each of the seven Professional Learning Standards. A frequency scale for responses with a corresponding numerical value was used to analyze the descriptive statistics for each standard: Never-1, Seldom-2, Sometimes-3, Frequently-4, Always-5. The means and standard deviations for each standard and per school are provided in Table 4.

An ANOVA with repeated measures with a Greenhouse-Geisser correction was used to determine whether there were statistical differences between the means of each standard in the collective data from the four schools. The analysis of data from all schools combined revealed statistically significant differences among the means of the standards, $F(5.25, 703.40) = 55.07, p < .001$. The Leadership standard ($M = 3.71; SD = .63$) was statistically significantly higher ($p < .05$) than all other standards. The Data standard ($M = 2.88; SD = .78$) was statistically significantly lower ($p < .05$) than all other standards. The Implementation standard ($M = 3.48; SD = .64$) was statistically significantly higher ($p < .05$) than all other standards except Leadership. The implications behind these findings will be discussed in Chapter 5. See Table 4 for descriptive statistics for each standard.
Table 4

*Overall SAI Survey Mean Results by Standard and Per School*

<table>
<thead>
<tr>
<th>Standard</th>
<th>Overall</th>
<th>School A</th>
<th>School B</th>
<th>School C</th>
<th>School D</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>M</td>
<td>SD</td>
<td>N</td>
<td>M</td>
</tr>
<tr>
<td>Learning Comm.</td>
<td>205</td>
<td>3.23</td>
<td>.66</td>
<td>25</td>
<td>3.23</td>
</tr>
<tr>
<td>Leadership</td>
<td>205</td>
<td>3.71*</td>
<td>.63</td>
<td>26</td>
<td>3.62</td>
</tr>
<tr>
<td>Resources</td>
<td>202</td>
<td>3.16</td>
<td>.70</td>
<td>25</td>
<td>3.02</td>
</tr>
<tr>
<td>Data</td>
<td>140</td>
<td>2.88*</td>
<td>.78</td>
<td>17</td>
<td>2.77</td>
</tr>
<tr>
<td>Learning Designs</td>
<td>197</td>
<td>3.25</td>
<td>.67</td>
<td>23</td>
<td>3.00</td>
</tr>
<tr>
<td>Implementation</td>
<td>195</td>
<td>3.48*</td>
<td>.64</td>
<td>24</td>
<td>3.38</td>
</tr>
<tr>
<td>Outcomes</td>
<td>179</td>
<td>3.37</td>
<td>.71</td>
<td>20</td>
<td>3.13</td>
</tr>
</tbody>
</table>

*Note.* Frequency scale 1 (Never) to 5 (Always)

N does not include “Don’t know” answers.

If an individual had four or more “Don’t knows” within the standard items, they were eliminated.

* p < .05.

A Pearson’s $r$ correlation coefficient was also performed to analyze the relationships between each of the Professional Learning Standards. Table 5 displays the Pearson correlation coefficients for the seven Professional Learning Standards used in the SAI survey with the approximately 200 teacher participants. The correlations were all statistically significant ($p < .01$). All of the correlations were strong, with $R^2$ values ranging from 36% to 61%.
Table 5

*Correlation Coefficients for Professional Learning Standards for Educators at Catholic High Schools*

<table>
<thead>
<tr>
<th>Learning Standard</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Learning Communities</td>
<td>205</td>
<td>.63*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Leadership</td>
<td>202</td>
<td>.63*</td>
<td>.65*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Resources</td>
<td>200</td>
<td>.63*</td>
<td>.65*</td>
<td>.67*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Data</td>
<td>140</td>
<td>.70*</td>
<td>.60*</td>
<td>.67*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Learning Designs</td>
<td>195</td>
<td>.64*</td>
<td>.65*</td>
<td>.73*</td>
<td>.70*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Implementation</td>
<td>193</td>
<td>.61*</td>
<td>.60*</td>
<td>.64*</td>
<td>.76*</td>
<td>.74*</td>
<td></td>
</tr>
<tr>
<td>7. Outcomes</td>
<td>179</td>
<td>.67*</td>
<td>.62*</td>
<td>.63*</td>
<td>.73*</td>
<td>.74*</td>
<td>.78*</td>
</tr>
</tbody>
</table>

*Note. *p < .01.*

In order to further answer the first research question: *How well do teacher learning experiences align with nationally recognized standards for professional learning?* data from all sources were compared to Learning Forward’s (2011) seven Professional Learning Standards Results, including: learning communities, resources, learning designs, outcomes, leadership, data, and implementation. Quantitative data were analyzed per item and per standard. The highest possible mean score, both per item and per overall standard, was five, which would indicate that participants believed that item was “Always” present in the school’s professional learning practices. The qualitative data from the survey open-ended questions and the follow-up focus group interviews were also analyzed in relationship to these standards. Details of the results per standard are included below.
Learning communities. Learning Forward (2011) defined the Learning Communities standard as:

Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment (p. 42).

The overall mean for participants at all schools in the Learning Communities standard on the SAI survey was 3.23 (SD = .66), indicating that participants overall responded “Sometimes (3)” and “Frequently (4)” to the items. Table 6 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 6 also includes the number of “Don’t know” responses per item.
Table 6

*Learning Communities Standard Results Per Item*

<table>
<thead>
<tr>
<th>Learning Communities Items</th>
<th>$n$</th>
<th>$M$</th>
<th>$SD$</th>
<th>$n$ Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>205</td>
<td>3.23</td>
<td>.66</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>1. My school system has policies and procedures that support the vision for learning communities.</td>
<td>201</td>
<td>3.79</td>
<td>.82</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>2. Learning communities in my school meet several times per week to collaborate on how to improve student learning.</td>
<td>196</td>
<td>2.21</td>
<td>1.06</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>3. Learning community members in my school believe the responsibility to improve student learning is shared by all stakeholders, such as all staff members, district personnel, families, and community members.</td>
<td>200</td>
<td>3.89</td>
<td>.95</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>4. In my school, some of the learning community members include non-staff members, such as students, parents, community members.</td>
<td>175</td>
<td>2.65</td>
<td>1.21</td>
<td>33</td>
<td>16</td>
</tr>
<tr>
<td>5. My school's learning communities are structured for teachers to engage in the continuous improvement cycle (i.e., data analysis, planning, implementation, reflection, and evaluation).</td>
<td>199</td>
<td>3.19</td>
<td>.97</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>6. In my school, learning community members demonstrate effective communication and relationship skills so that a high level of trust exists among the group.</td>
<td>197</td>
<td>3.60</td>
<td>.81</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>7. All members of the learning communities in my school hold each other accountable to achieve the school's goals.</td>
<td>190</td>
<td>3.23</td>
<td>.90</td>
<td>19</td>
<td>9</td>
</tr>
</tbody>
</table>

*Note.* Frequency scale 1 (Never) to 5 (Always).

“Don’t know” answers were counted as missing data.
Qualitative feedback revealed that participants had various ways of defining learning communities, yet there seemed to be a general sense of community present in each school. One survey participant stated, “The school community works together to improve all of our life long learning options.” A few of the participating schools had actual Professional Learning Communities (PLCs) that met regularly. This form of professional learning garnered both positive feedback and criticism. For instance, one survey participant reported that PLC teams were his favorite professional development experience: “Teachers are engaged in real-time thinking and decision-making about how to improve student learning and teacher learning within the context of the school environment and culture.” Another participant mentioned that PLC time was used for collaborative planning, reflecting on units, and also became a time to mentor a new teacher. In contrast, however, one focus group participant criticized the ‘silo’ nature of their self-selected PLC groups, stating: “We are with people who are kind of like minded, so we don’t hear from other people who might challenge us to think about things differently.” Teachers had positive and negative perceptions of PLCs.

Qualitative feedback also highlighted certain challenges present in developing effective learning communities. For instance, one participant stated, “Often there is not a clear plan [for professional learning]. Often we try something for a year or two and then move onto the next trend. The turnover in faculty makes it difficult to create a professional learning community.” Another participant echoed the same challenge: “With high rates of teacher turn-over, low salaries, a challenging population of students, I feel like my school is too busy with present crises and troubles at hand to focus on long term growth.” Building effective learning communities seemed to be
impacted by various external factors.

Leadership. Learning Forward (2011) defined the Leadership standard as:

Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning (p. 42).

The overall mean for participants at all schools in the Leadership standard was 3.71 ($SD = .63$), indicating that participants overall responded between “Sometimes (3)” and “Frequently (4)” to the items. An ANOVA with repeated measures with a Greenhouse-Geisser correction found that the Leadership standard was statistically significantly higher ($p < .05$) than all other standards. Table 7 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 7 also includes the number of “Don’t know” responses per item.
Table 7

<table>
<thead>
<tr>
<th>Leadership Standard Items</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>205</td>
<td>3.71*</td>
<td>.63</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. My school's leaders provide teachers with equitable resources to support our individual and collaborative goals for professional learning.</td>
<td>198</td>
<td>3.50</td>
<td>.82</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>9. My school's leaders are active participants with other staff members in the school's professional learning.</td>
<td>198</td>
<td>3.74</td>
<td>.85</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>10. My school's leaders advocate for resources to fully support professional learning.</td>
<td>203</td>
<td>3.81</td>
<td>.83</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>11. My school's leaders regard professional learning as a top priority for all staff.</td>
<td>203</td>
<td>3.73</td>
<td>.92</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>12. My school's leaders cultivate a positive culture that embraces characteristics such as, collaboration, high expectations, respect, trust, and constructive feedback.</td>
<td>206</td>
<td>3.79</td>
<td>.89</td>
<td>1</td>
<td>.5</td>
</tr>
<tr>
<td>13. My school's leaders speak about the important relationship between improved student achievement and professional learning.</td>
<td>203</td>
<td>3.51</td>
<td>.96</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>14. My school's leaders consider all staff members capable of being professional learning leaders.</td>
<td>189</td>
<td>3.92</td>
<td>.90</td>
<td>18</td>
<td>9</td>
</tr>
</tbody>
</table>

Note. Frequency scale 1 (Never) to 5 (Always). “Don’t know” answers were counted as missing data. *p < .05.

As previously mentioned, the Leadership standard was statistically significantly higher than all other standards. Due to the independent nature of Catholic education, the leadership of the school seemed to be a large determinant of the
quantity and diversity of professional learning experiences for faculty members. For instance, one survey participant stated, “Professional learning in a Catholic school is very dependent upon the administration. If they value it, it will happen. If not, it is up to the teacher.” Many participants reported support from administrators regarding their own learning: “We are lucky to have an admin that supports quality personalized learning in house.” Another survey participant stated, “Our school leaders are very encouraging and regularly green-light professional development opportunities, but finding the time to work on these practices is very difficult.”

Several educators, particularly at one of the four participating schools, focused on the teacher-led nature of professional learning, and participants overwhelmingly reported a sense of autonomy and freedom in their own learning and teaching. One participant stated, “I appreciate having the freedom to introduce ethical issues into the classroom.” Another stated, “The ability to be autonomous and not part of a district makes it possible to structure professional development for the needs of this particular school.” This autonomy seemed to have positive implications for teacher learning, including building trust, flexibility, freedom, and choice, leading to improved practice. Table 8 identifies several participant responses regarding autonomy afforded them in a Catholic school.
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Sample Participant Quotations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>This school gives teachers a lot of autonomy to teach in their own way and to be authentic. Because of this, the teachers really love teaching and they teach what they love...This is a faith-based community. They actually hire good teachers and trust them to do their job.</td>
</tr>
<tr>
<td>Flexibility</td>
<td>I think [working at a Catholic school] allows for more flexibility and we have more say in what is done as opposed to being told this is what we are doing. Also, because it is a smaller school we have a tighter sense of community and know what is going on in each other's classrooms more.</td>
</tr>
<tr>
<td>Freedom</td>
<td>My co-workers are not bound by the bureaucratic standards that a lot of public schools are required to comply with. Therefore, professional learning experiences are richer and therefore more effective.</td>
</tr>
<tr>
<td>Choice</td>
<td>Professional learning may not be mandated in the same way it is in some public schools, but opportunities are available for those who want to seek them out. We also have freedom to make choices about curriculum and implementation.</td>
</tr>
<tr>
<td>Improve Practice</td>
<td>I have worked in public and Catholic education and I feel in the Catholic school setting, professional development is more about improving practice for our students, instead of completing [continuing education credits] for license renewal or accreditation.</td>
</tr>
</tbody>
</table>

Although most feedback about autonomy was positive, there were comments criticizing the freedom teachers have at Catholic schools. For instance, one survey participant stated, “Sometimes I think we as Catholic schools feel we are better than others…a bit entitled and that we don't need professional development or the need to
change.” Similar to the Learning Community standard, participant feedback highlighted both the positive and negatives related to the Leadership standard.

**Resources.** Learning Forward (2011) defined the Resources standard as:

Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning (p. 42).

The overall mean for participants at all schools in the Resources standard was 3.16 ($SD = .70$), indicating that participants overall responded “Sometimes (3)” and “Frequently (4)” to the items. Table 9 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 9 also includes the number of “Don’t know” responses per item.
### Table 9

**Resources Standard Results Per Item**

<table>
<thead>
<tr>
<th>Resources Standard Items</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>202</td>
<td>3.16</td>
<td>.70</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>15. Practicing and applying new skills with students in my classroom are regarded as</td>
<td>194</td>
<td>3.81</td>
<td>.86</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>important learning experiences in my school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. Teachers in my school are involved with monitoring the</td>
<td>178</td>
<td>2.98</td>
<td>.92</td>
<td>30</td>
<td>14</td>
</tr>
<tr>
<td>effectiveness of the professional learning resources.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Professional learning expenses, such as registration and consultant fees, staff, and</td>
<td>188</td>
<td>2.78</td>
<td>1.14</td>
<td>19</td>
<td>9</td>
</tr>
<tr>
<td>materials, are openly discussed in my school.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. In my school, time is available for teachers during the school day for</td>
<td>201</td>
<td>2.74</td>
<td>1.03</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>professional learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Teachers in my school are involved with the decision-making about how</td>
<td>170</td>
<td>2.44</td>
<td>1.08</td>
<td>37</td>
<td>18</td>
</tr>
<tr>
<td>professional learning resources are allocated.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. Professional learning is available to me at various times, such as job</td>
<td>198</td>
<td>3.37</td>
<td>.98</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>embedded experiences, before or after-school hours, and summer experiences.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. Teachers in my school have access to various technology resources for professional</td>
<td>194</td>
<td>3.89</td>
<td>.86</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>learning.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* Frequency scale 1 (Never) to 5 (Always).  
“Don’t know” answers were counted as missing data.

Qualitative data from participant feedback on the Resources standard varied based on school. The two key resources highlighted as critical to effective professional learning were time and money, which will be discussed below. When asked to compare professional learning in Catholic education to opportunities offered at public
schools, many participants reported fewer opportunities: “There's so much extra stuff we are asked to do, and it leaves little time for us to spend deepening our professional learning.” There were also several Theology teachers who specifically highlighted a lack of adequate Theology curriculum and pedagogical training for supporting non-Catholic students and an overall lack of meaningful professional learning experiences related to teaching Theology.

**Time.** Across all schools, a lack of time to support professional learning, especially during the school year, was a repeated code. Additionally, numerous participants mentioned personally feeling like they wore “five hats” or were “expected to do more with less.” One participant stated:

> The number one stumbling block to effective professional development, in my opinion, is lack of time to really deepen, develop, and apply new understandings. We often start conversations and initiatives that quickly lose steam because we don't consistently provide time to extend that learning.

There was also concern from certain participants about a lack of time to adequately support student needs: “The range of student ability is huge and often times the students' needs are greater than our expertise, resources, and time.”

**Money.** Qualitative feedback revealed great variation in participant perspectives on adequate financial resources available for professional learning. For instance, participants from one school in particular reported adequate and even abundant monetary resources to support professional learning. Yet, participants from another school repeatedly focused on the financial difficulties associated with professional learning. These results relate to the student tuition and funding structures
of each school. However, several participants from all schools, both in survey responses and in focus groups, reported feeling a financial burden associated with pursuing professional learning experiences not provided by the school. For instance, one participant stated, “With salaries already lower, it's an extra burden to finance my own professional development outside of school-sponsored speakers/events.” However, not all participants felt burdened by financial restraints. For instance, one survey participant stated, “[My school] is very supportive of PD. If you find a program, they will help pay for it.” Various funding structures of participating schools impacted educator access to professional learning funds, options for reimbursement, and opportunities offered to faculty.

**Data.** Learning Forward (2011) defined the Data standard as:

Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning (p. 42).

The overall mean for participants at all schools in the Data standard was $2.88 (SD = .78)$, indicating that participants overall responded “Seldom (2)” and “Sometimes (3)” to the items. An ANOVA with repeated measures with a Greenhouse-Geisser correction revealed that the Data standard was statistically significantly lower ($p < .05$) than all other standards. Table 10 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. It is important to note that within certain items of the Data standard, over 30% of participants answered “Don’t know,” as highlighted in grey in Table 10.
### Table 10

**Data Standard Results Per Item**

<table>
<thead>
<tr>
<th>Data Standard Items</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>140</td>
<td>2.88*</td>
<td>.78</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>22. Some professional learning programs in my school, such as mentoring or coaching, are continuously evaluated to ensure quality results.</td>
<td>159</td>
<td>2.85</td>
<td>.99</td>
<td>50</td>
<td>24</td>
</tr>
<tr>
<td>23. In my school, teachers have an opportunity to evaluate each professional learning experience to determine its value and impact on student learning.</td>
<td>185</td>
<td>2.98</td>
<td>.92</td>
<td>22</td>
<td>11</td>
</tr>
<tr>
<td>24. In my school, various data such as teacher performance data, individual professional learning goals, and teacher perception data, are used to plan professional learning.</td>
<td>149</td>
<td>2.71</td>
<td>1.05</td>
<td>60</td>
<td>29</td>
</tr>
<tr>
<td>25. My school uses a variety of student achievement data to plan professional learning that focuses on school improvement.</td>
<td>137</td>
<td>2.80</td>
<td>1.04</td>
<td>70</td>
<td>33</td>
</tr>
<tr>
<td>26. In my school, teachers use what is learned from professional learning to adjust and inform teaching practices.</td>
<td>181</td>
<td>3.36</td>
<td>.77</td>
<td>27</td>
<td>13</td>
</tr>
<tr>
<td>27. My school uses a variety of data to monitor the effectiveness of professional learning.</td>
<td>130</td>
<td>2.72</td>
<td>.97</td>
<td>79</td>
<td>38</td>
</tr>
<tr>
<td>28. A variety of data are used to assess the effectiveness of my school’s professional learning.</td>
<td>125</td>
<td>2.78</td>
<td>1.01</td>
<td>84</td>
<td>40</td>
</tr>
<tr>
<td>29. In my school, how to assess the effectiveness of the professional learning experience is determined before the professional learning plan is implemented.</td>
<td>117</td>
<td>2.65</td>
<td>1.05</td>
<td>90</td>
<td>43</td>
</tr>
</tbody>
</table>

Note: Frequency scale 1 (Never) to 5 (Always)
“Don’t know” answers were counted as missing data.
* *p < .05.*
The statistically significant low results in the Data standard quantitative analysis led to investigating qualitative feedback regarding data and professional learning. Responses from participants echoed a lack of knowledge on how to use data effectively. As noted previously, the Data standard had numerous “Don’t know” responses from participants, and the participant feedback revealed similar confusion about data. For example, when asked in the focus group about data use in professional learning, one participant stated:

The other kinds of data that other schools might use like standardized test data, we don’t have as much of, first of all. And what we do have usually shows that our students are doing very well compared to national standards. And so, that can be a double-edged sword. I mean, on the one side, everybody goes, yes, good, we’re good! No problem, pat on the back. But that still means we need to grow. And then on the other hand, it doesn’t really tell us where we need to grow necessarily. So, yeah, it’s something we struggle with I think. Another participant reiterated this point, stating, “We must look deeper than test scores, which are typically already high, to see indicators of impact on student learning.”

Additionally, feedback from both survey and focus group participants reflected a hesitancy of using data to drive decision-making. For instance, one survey participant stated, “I am also wary of the whole data-driven craze because data gleaned in non-scientific settings is notoriously unreliable. I think an old principal of mine said it best: teaching is an art, not a science.” Furthermore, a focus group participant voiced frustration at receiving feedback from data that was gathered by
administrators: “A couple times, usually at the end of the year, we’ve been asked to sort of like what would you like to see, and what could you use professional development on, and you submit your personal view, and then it goes into a void, so we don’t get any reporting back.” Certain feedback reflected skepticism about both producing data and also about analyzing data for meaningful feedback.

Despite the poor feedback in regards to data, there were participants who mentioned meaningful professional learning experiences regarding data. One educator said that conferences were a favorite experience, “where [the] latest research is presented in a motivational way and supplemented by peer conversations.” Another stated that attending a conference “resonated with my own teaching experience and helped to clarify some questions I have carried, with clear data and recommendations to educators.”

**Learning designs.** Learning Forward (2011) defined the Learning Designs standard as:

> Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes (p. 42).

The overall mean for participants at all schools in the Learning Designs standard was 3.25 (SD = .67), indicating that participants overall responded “Sometimes (3)” and “Frequently (4)” to the items. Table 11 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 11 also includes the number of “Don’t know” responses per item. In the first question of this standard, 31% of participants answered “Don’t know,” as indicated in grey.
Table 11

Learning Designs Standard Results Per Item

<table>
<thead>
<tr>
<th>Learning Designs Standard Items</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>197</td>
<td>3.25</td>
<td>.67</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>30. In my school, teachers' backgrounds, experience levels, and learning needs are considered when professional learning is planned and designed.</td>
<td>141</td>
<td>3.04</td>
<td>1.03</td>
<td>65</td>
<td>31</td>
</tr>
<tr>
<td>31. The use of technology is evident in my school's professional learning.</td>
<td>203</td>
<td>3.89</td>
<td>.85</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>32. Teachers in my school are responsible for selecting professional learning to enhance skills that improve student learning.</td>
<td>193</td>
<td>3.55</td>
<td>.89</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>33. Professional learning in my school includes various forms of support to apply new practices.</td>
<td>188</td>
<td>3.25</td>
<td>.89</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>34. In my school, participation in online professional learning opportunities is considered as a way to connect with colleagues, and to learn from experts in education.</td>
<td>170</td>
<td>3.02</td>
<td>1.09</td>
<td>38</td>
<td>18</td>
</tr>
<tr>
<td>35. In my school, teachers have opportunities to observe each other as one type of job-embedded professional learning.</td>
<td>199</td>
<td>2.98</td>
<td>1.05</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>36. Teachers' input is taken into consideration when planning school-wide professional learning.</td>
<td>171</td>
<td>2.99</td>
<td>.99</td>
<td>36</td>
<td>17</td>
</tr>
</tbody>
</table>

Note. Frequency scale 1 (Never) to 5 (Always). “Don’t know” answers were counted as missing data.

In the qualitative feedback regarding Learning Designs, several participants focused on how the mission, traditions, and charisms or values of their particular schools influenced the design of their professional learning experiences. For instance, one teacher said:
The wider idea of caring for individuals that accompanies the Catholic, private school model, does benefit both me and my students. It is a mindset difference as opposed to a curriculum difference that allows for more freedom of personalization, both in terms of our professional development and in terms of what we are able to then do when it comes to applying our professional learning in our classrooms.

Much of the feedback on how the mission of a school is integrated into professional learning focused on holistic education. For instance, one participant said, “It’s not so much that being a Catholic school necessitates that we examine our curricula in vastly different ways (when compared to public or secular institutions), but that spirituality and more holistic personal growth are discussed, focused on, and encouraged.” Another respondent mentioned a similar sentiment: “My concern is with my students as whole human beings versus simply as learners. I care about their hearts, their souls, their journey on this earth beyond mere performance in this place and time.” The apparent dedication of these educators to the mission of their schools, according to one focus group member, can lead to a commitment to Catholic education: “I think that something that keeps teachers long term is an orientation towards the mission.” Although many participants spoke about mission in a positive light, there was also criticism: “[Professional Learning is] often tied to Catholic identity, which is great, but not often centered on learning objectives or student-centered techniques/outcomes.”

In addition to a focus on mission as a driver of adult learning, participants reported high expectations for faculty and students. One survey participant stated, “We
maintain a commitment to excellence.” Another said, “Our school has very high expectations for professional learning.” Learning designs seemed to focus on teacher improvement in various capacities, including developing teaching skills, content-knowledge, and educating teachers on issues relevant to their students.

Feedback also focused on the potential for Catholic school professional learning designs to be “outdated” or “behind the curve” in their approach to professional learning: “Catholic schools…can be stuck in older ways of instruction/teaching because of the compliant clientele we tend to serve and the tradition-based nature to our institutions.” Another suggested, “Catholic schools need to be aware of what professional development is happening in the public realm and offer an adapted program that's similar.” Learning designs seemed to focus on content, pedagogy, and integrate a commitment to the mission statement and values of the individual schools.

**Implementation.** Learning Forward (2011) defined the Implementation standard as:

> Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change (p. 42).

The overall mean for participants at all schools in the Implementation standard was 3.48 (SD = .64), indicating that participants overall responded “Sometimes (3)” and “Frequently (4)” to the items. An ANOVA with repeated measures with a Greenhouse-Geisser correction revealed that the Implementation standard was statistically significantly higher (p < .05) than all other standards except Leadership.
Table 12 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 12 also includes the number of “Don’t know” responses per item. In two items, over 30% of respondents answered “Don’t know,” as highlighted in grey.

Table 12

*Implementation Standard Results Per Item*

<table>
<thead>
<tr>
<th>Implementation Standard Items</th>
<th>( n )</th>
<th>( M )</th>
<th>( SD )</th>
<th>( n ) Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>195</td>
<td>3.48*</td>
<td>.64</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>37. A primary goal for professional learning in my school is to enhance teaching practices to improve student performance.</td>
<td>189</td>
<td>3.92</td>
<td>.83</td>
<td>17</td>
<td>8</td>
</tr>
<tr>
<td>38. Teachers in my school receive on-going support in various ways to improve teaching.</td>
<td>194</td>
<td>3.43</td>
<td>.87</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>39. My school has a consistent professional learning plan in place for three to five years.</td>
<td>142</td>
<td>3.30</td>
<td>1.24</td>
<td>64</td>
<td>31</td>
</tr>
<tr>
<td>40. My school’s professional learning plan is aligned to school goals.</td>
<td>151</td>
<td>3.79</td>
<td>.96</td>
<td>56</td>
<td>27</td>
</tr>
<tr>
<td>41. In my school, teachers individually reflect about teaching practices and strategies.</td>
<td>191</td>
<td>3.78</td>
<td>.85</td>
<td>15</td>
<td>7</td>
</tr>
<tr>
<td>42. Professional learning experiences planned at my school are based on research about effective school change.</td>
<td>142</td>
<td>3.41</td>
<td>.84</td>
<td>65</td>
<td>31</td>
</tr>
<tr>
<td>43. In my school, teachers give frequent feedback to colleagues to refine the implementation of instructional strategies.</td>
<td>185</td>
<td>2.79</td>
<td>.90</td>
<td>22</td>
<td>11</td>
</tr>
</tbody>
</table>

Note. Frequency scale 1 (Never) to 5 (Always).

“Don’t know” answers were counted as missing data.

* \( p < .05 \).

As previously mentioned, the Implementation standard was statistically significantly higher (\( p < .05 \)) than all other standards, except Leadership. However, the
feedback regarding implementation, particularly from educators from one of the four participating schools, focused heavily on a lack of consistency in the professional learning experiences over time. For instance, one participant stated, “It seems like we are doing a different type of professional development every year.” Another stated, “Often, professional development is momentary and we have very little time to observe, discuss, and/or reflect. Each year, the topic changes, and we don't come back to or review past topics.” Many participants mentioned high teacher turnover as a key reason for this inconsistency. However, feedback, especially in the focus group interviews, focused on a current positive trend in the learning experiences of teachers: “In the last two years there has been a more effective plan in action, better funded, more clearly focused on curriculum, and with teachers in the lead.”

**Outcomes.** Finally, Learning Forward (2011) defined the Outcomes standard as:

> Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards, teacher pedagogical content knowledge, and building professional learning communities (p. 42).

The overall mean for participants at all schools in the Outcomes standard was 3.37 ($SD = .71$), indicating that participants overall responded “Sometimes (3)” and “Frequently (4)” to the items. Table 13 identifies the overall standard mean and presents the individual item means that comprise the overall standard mean. Table 13 also includes the number of “Don’t know” responses per item.
Table 13

**Outcomes Standard Results Per Item**

<table>
<thead>
<tr>
<th>Outcomes Standard Items</th>
<th>n</th>
<th>M</th>
<th>SD</th>
<th>Don’t Know</th>
<th>% Don’t Know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall standard mean</td>
<td>179</td>
<td>3.37</td>
<td>.71</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>44. Professional learning at my school focuses on the curriculum and how students learn.</td>
<td>192</td>
<td>3.34</td>
<td>.82</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>45. Professional learning in my school contributes to increased student achievement.</td>
<td>136</td>
<td>3.35</td>
<td>.80</td>
<td>70</td>
<td>33</td>
</tr>
<tr>
<td>46. Professional learning experiences in my school connect with teacher performance standards (e.g., teacher preparation standards, licensing standards, etc.).</td>
<td>145</td>
<td>3.11</td>
<td>1.07</td>
<td>61</td>
<td>29</td>
</tr>
<tr>
<td>47. All professional staff members in my school are held to high standards to increase student learning.</td>
<td>189</td>
<td>3.86</td>
<td>.94</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>48. In my school, professional learning supports teachers to develop new learning and then to expand and deepen that learning over time.</td>
<td>181</td>
<td>3.34</td>
<td>.87</td>
<td>24</td>
<td>11</td>
</tr>
<tr>
<td>49. Student learning outcomes are used to determine my school's professional learning plan.</td>
<td>126</td>
<td>3.13</td>
<td>1.01</td>
<td>79</td>
<td>38</td>
</tr>
<tr>
<td>50. My professional learning this school year is connected to previous professional learning.</td>
<td>185</td>
<td>3.42</td>
<td>1.07</td>
<td>22</td>
<td>11</td>
</tr>
</tbody>
</table>

Note. Frequency scale 1 (Never) to 5 (Always).
“Don’t know” answers were counted as missing data.

Qualitative data regarding the efficacy of professional learning outcomes were varied, potentially due to the autonomy in learning experiences reported by numerous participants. One respondent stated, “Too many teachers rely on individual and idiosyncratic learning opportunities for their professional development experiences.” In contrast, however, another participant stated, “I have always been able to determine
my best needs in terms of professional development and have been extremely engaged.” Many participants mentioned interactions with students as the key to being a successful educator. For example, one survey participant stated, “I feel like the professional development is more raw, centered around experiences, and in the moment with students, than sitting in a professional development meeting with only teachers, talking and checking boxes. It's about doing, rather than talking.”

**Research Question 1a: Differences Based on Participant Descriptors**

Further disaggregation of the survey data was performed based on participant demographics. Multi-variate analysis, or analyzing data per standard rather than per item, was performed using a t-test for gender and ethnicity. An ANOVA with Tukey post-hoc analysis in SPSS was used to analyze results disaggregated by school, education level, department, and years of experience as an educator. Table 14 represents the overall results disaggregated by each category.

**Gender.** Data analysis using a t-test for independent samples investigated differences in participant responses based on gender. Mean differences between males (n = 97) and females (n = 107) were not statistically significant (p > .05).

**Ethnicity.** For analysis purposes, the race / ethnicity categories were collapsed into White (n = 165, 79%) and Nonwhite (n = 27, 13%). An additional 8% (n = 17) selected “I prefer not to answer,” which creates a limitation for disaggregating the data by race. An independent samples t-test for White and Nonwhite participants revealed no statistically significant (p > .05) differences per mean standard responses.

**Education.** A one-way ANOVA was run to compare means by the highest degree of education that participants had completed. There were statistically
significant \((p < .05)\) differences in two of the standards: Resources \((F(2, 198) = 6.47, p = .002)\) and Data \((F(2, 136) = 3.14, p = .046)\). For the Resources standard, Tukey post-hoc analysis revealed that individuals with Doctorate degrees \((n = 10, M = 3.76)\) had a statistically significantly higher mean score than individuals with Master’s degrees \((n = 155; M = 3.07)\). However, Tukey and Scheffe post hoc analyses did not identify statistically significant differences among groups.

**Department.** The survey results were further disaggregated by the academic department in which participants identified as working. Of the 210 participants, 20\% \((n = 42)\) identified more than one department in which they worked. However, for the purposes of this research, the participants were only identified with one department. Furthermore, in the initial survey, there were numerous options for department identification. For analysis purposes, categories were collapsed with an intention of combining similar subject areas. The following categories were used:

- Administration (Administrators and Instructional Coach)
- Counseling
- Humanities (English / Language Arts, History, Geography, Economics, Government, Speech/Debate, Psychology, World Languages)
- STEM (Mathematics, Science, Technology / Media Arts)
- Theology / Religion / Campus Ministry / Service Learning
- Other: Electives, Library, Performing & Fine / Visual Arts, English Language Learners, Health / Physical Education, Athletics, Music (Choir, Band, Vocal), Special Education
Table 14 displays the means and standard deviations of each group. An ANOVA showed that there were statistically significant differences among the Learning Communities \( (F(5, 199) = 3.04), p = .012 \), and the Data standards \( (F(5, 134) = 3.69), p = .004 \). Tukey post-hoc analysis revealed that within the Learning Communities standard, Administrators \( (n = 18) \) reported a statistically significantly lower mean \( (M = 2.84) \) than participants identifying as Other \( (n = 30, M = 3.52) \). Furthermore, within the Data standard, Tukey post-hoc analysis revealed that individuals in the Other \( (n = 21) \) category had a statistically significantly higher mean \( (M = 3.42) \) than individuals identified as Administrators \( (n = 16; M = 2.67) \), Humanities \( (n = 47; M = 2.80) \), and STEM \( (n = 30; M = 2.61) \). Implications of these findings will be discussed in Chapter 5.

**Years of experience.** Survey results were further disaggregated by years of experience as an educator. The categories used on the official SAI instrument were used in this research as well and include:

- Less than one year
- 1 – 4 years
- 5 – 10 years
- 11-16 years
- 17 – 25 years
- More than 25 years

Table 14 displays the means and standard deviations of each group. It is interesting to note that the number of participants who responded to the Data standard items dropped dramatically in all experience groups except for the Over 25 year
teachers \((n = 42)\). The majority of the 25+ year teachers were able to answer four or more of the Data questions while many in their peer groups answered “Don’t know” to four or more questions in that standard.

A one-way ANOVA showed statistically significant \((p < .05)\) differences among groups within several of the standards, including Learning Communities \(F(5, 199) = 2.39, p = .039\), Resources \(F(5, 196) = 2.36, p = .041\), Data \(F(5, 134) = 3.13, p = .011\), Learning Designs \(F(5, 191) = 3.05, p = .011\), and Outcomes \(F(5, 173) = 2.92, p = .015\). However, a Tukey post-hoc analysis identified no significant differences within the Learning Communities standard. In the Resources standard, a Tukey post-hoc analysis revealed that educators with less than one year of experience \((n = 6)\) had a statistically significantly higher \((p < .05)\) mean than teachers who had been teaching for 11 to 16 years \((n = 44)\). In the Data standard, a Tukey post-hoc analysis revealed that educators with less than one year of experience \((n = 4)\) had a statistically significantly higher \((p < .05)\) mean than teachers in the three mid-level experience groups, from 5 to 25 years \((n = 80)\). In the Learning Designs standard, a Tukey post-hoc analysis identified no significant differences within groups. In the Outcomes standard, a Tukey post-hoc analysis identified no significant differences within groups. Table 14 contains the mean and standard deviations of each of the standards disaggregated by the previously mentioned categories.
Table 14

**SAI Survey Results by Standard Per Gender, Ethnicity, Education, Department, and Years Experience**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Learning Communities</th>
<th>SD</th>
<th>n</th>
<th>Leadership</th>
<th>SD</th>
<th>n</th>
<th>Resources</th>
<th>SD</th>
<th>n</th>
<th>Data</th>
<th>SD</th>
<th>n</th>
<th>Learning Designs</th>
<th>SD</th>
<th>n</th>
<th>Implementation</th>
<th>SD</th>
<th>n</th>
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Note. Frequency scale 1 (Never) to 5 (Always). 
N does not include “Don’t know” answers. 
If an individual had four or more “Don’t knows” within the Standards, they were eliminated. 
* p < .05.
Research Question Two: Qualities of Effective Professional Learning Experiences

Qualitative data from both the open-ended survey questions and the focus group interviews were coded to answer the second research question. Overall, participants were able to identify numerous effective learning experiences they have received as Catholic school educators. Open-ended survey responses to the question, *Can you describe one of your favorite professional development experiences? What characteristics made this experience meaningful for you?* solicited numerous examples that were grouped into descriptive categories: local or school-based collaborative experiences, national or international peer collaborative experiences outside of school, service or faith-focused experiences, outside expert or training, academic learning, and content-based experiences. Deeper analysis of these data produced specific characteristics of the most meaningful learning experiences of teachers, including: collaborative, reflective, relevant, content-focused, and self-directed.

Collaborative. The collaborative experiences were the most frequently mentioned by teachers and took many forms, including school-based experiences, such as Professional Learning Communities (PLCs), peer observations, teacher research groups, curriculum design, and cross-curricular peer collaboration. Collaborative experiences occurring outside of school included conference attendance, summer learning, workshops, and international immersion experiences. One respondent stated, “I have continued to try to observe other teachers as often as I can because I always learn from watching others.” When discussing Catholic school learning experiences specifically, one focus group participant stated, “So much of
what we do with the students is relational based, so I think observing people who have
done that well for a number of years becomes really important.”

Another form of collaboration highlighted as valuable was content-focused
learning. One participant said, “I enjoy collaborating with colleagues that are in my
same field. It was practical useful information that I could apply right away.”

Participant feedback related to conference attendance focused on being invigorated by
the collaborative learning experience, as exemplified by this statement:

I’ve had really valuable professional development that both energized me and
my passion for the work I do and also showed me different approaches to
teaching and allowed me space to play with them when I wasn’t worried about
all the other things I need to do for my classes.

Both the time and the physical space outside of the school building seemed to be
important factors in collaborative learning experiences.

Additionally, several participants highlighted the value of learning from
veteran teachers. One focus group participant described a favorite learning experience
when she was a new teacher and had to collaboratively plan a unit with veteran
teachers. She stated, “I was surrounded by all these people who totally cared … and it
kind of gave me this sense of relief that okay, I can do this, even if I don’t fully know
what I’m doing next unit … and that was helpful to have their, you know their
wisdom.” One new teacher said in a focus group that veteran teachers are “sources of
inspiration” because, “I don’t know if I’d have the energy to do it for more than
another 10 years frankly.” Overall, much of the feedback focused on the value of peer-
to-peer collaboration through a variety of learning experiences.
Reflective. Many participants mentioned experiences that inspired reflection as the most meaningful forms of professional learning. For instance, one stated, “Courageous conversations helped me see institutionalized racism through the eyes of others.” Another said:

The Teacher Research Groups have been the most meaningful to me because they include faculty members from across disciplines, meet regularly throughout the school year, and offer the opportunity to reflect upon my own practice and to be vulnerable as a learner with my peers.

Numerous respondents highlighted meaningful experiences that took them away from the physical school building. For instance, one focus group participant stated:

I really learn through journey, through going away, through heightened, different experiences where your world shifts a little bit, and the physical removal from the school space helps you feel less like you’re at work and more like you can think differently about things because any time I’m in this building, I’m thinking about my grading and my lesson planning and my kids and things going on with them.

Additionally, there was a frequent mention by participants about how the school’s mission statement and values, which often include reflection, impact professional learning. One participant related the mission to reflective practice: “There is a focus on mission and why we do what we do, and I find that fuels my positive practice.” Another focus group participant mentioned that her Professional Learning Community (PLC) is an opportunity for reflection, which she found to be practical. Additionally, several participants mentioned retreats as a form of reflective learning.
For instance, one focus group participant shared:

I love half-day retreats…I just really…love stories. And like, there’s … regular talk that goes on in the faculty lounge, but in terms of focusing our conversation around core questions about why we do what we do, what are the joys and sorrows and difficulties and challenges, what gives us life, what drains us, I feed off of that stuff.

Various forms of collaborative reflection, including retreats, conferences, PLCs, and cultural trainings all seemed to be a meaningful learning experiences for participants.

**Relevant.** Many respondents focused on the need for relevant, practical learning experiences that both relate to teacher content and pedagogy but also to the student populations which they teach: “Teachers need … material that is relevant to them right then, that is useful, and that is going to result in something tangible that they can then go use in the classroom.” One respondent stated that the most meaningful experience was “a visit to a sister school during which I was able to shadow the director of a program we were attempting to duplicate…It was directly related to the goals of my position and provided much concrete and specific applications.”

Additionally, summer conferences or trainings seemed particularly relevant to teachers:

Attending an [Advanced Placement] Summer Institute was my favorite professional development experience. I came away from the session with clear skills and strategies that could be used in my classes the next year and in the future. Additionally, it was one of the most enjoyable experiences as I was
surrounded with other teachers that were on a similar knowledge level of the content.

Furthermore, participants mentioned the desire for standards-based or licensure-related professional learning experiences.

Many participants mentioned the need for learning experiences that relate to their students’ needs. One focus group participant stated, “[Learning experiences are] really driven by the nature of our students and where they’re at in their learning and the skills that they need to develop.” Another focus group participant stated, “I think there are some areas that we all have in common because of the kids we teach, so we have a certain population, and therefore, professional learning, for instance for us, about teenage girls is really helpful and that’s across the board helpful.” Another focus group participant mentioned the importance of relationship building with students at the school level rather than spending time going to an outside conference: “The relationship piece that you have with kids is so vital and so important here to being a successful teacher, that it’s just always kind of about being around here.”

**Content-focused.** Numerous participants highlighted content-focused professional learning experiences as the most effective. One participant stated, “I attended an [international] conference ... The learning was content specific and exposed me to new texts, theoretical frameworks, and approaches to my craft. I was surrounded by people passionate about the work I do in my content area.” Another respondent stated, “I find travel, classroom, and workshop experiences which focus specifically on my subject area of History to be the most valuable forms of professional developmental. These experiences help me to bring History more fully
Self-directed. Participants repeatedly mentioned the desire for choices in their own professional learning experiences. It appeared that many teachers were responsible for their own learning, which was seen as both a positive and a negative. For instance, one veteran teacher stated, “How much [professional development] you choose to do is really up to you.” Another participant stated, “I’m a big believer in choice…particularly people who are doing things well sharing it with others who are maybe looking for new ways of doing that.” One preferred learning experience was to have numerous breakout sessions on particular topics where teachers can choose to attend the most relevant to them. Conferences were the most frequently cited meaningful learning experiences, which also offer choices for participants. One participant stated, “I think kind of the key is really teacher want, you know, what are their needs, and again, choice, and also the choice of when to pursue it.”

The theme of self-directed learning emerged most clearly in the focus group interviews, and it also related to a need for differentiation: “[Professional learning] is so dependent on the field that we’re in and the level … of experience that each teacher brings.” Another stated, “The move towards individuals having some say into what is … the most helpful for them. That, to me, is a really positive move.”

Research Question Three: Barriers to Effective Learning

Feedback from both the survey responses and focus group interviews highlighted numerous challenges or potential barriers to effective adult learning experiences for educators, including understanding what professional learning entails, providing adequate resources, the need for differentiation, teacher engagement, and
remaining current in research and practice.

**Defining professional learning.** Several survey participants mentioned a lack of clarity in the use of the words “professional learning.” The researcher attempted to use the more commonly understood “professional development” interchangeably, both in the survey open-ended questions and in the focus group interviews, yet participants asked numerous questions during the administration of the survey, and qualitative responses revealed confusion. One survey participant stated, “I am a bit unclear if professional learning is all faculty meetings or just PLCs?” A few of the focus group participants wondered if “professional opportunities,” such as curriculum and department teams, retreats, or book clubs were considered professional learning. Additionally, certain participants appeared to have a negative preconception of professional learning that impacted their feedback. For instance, one new teacher stated, “I’m just kind of wary of professional development in general…I remain unconvinced that anybody can learn how to be a better teacher simply by sitting through professional development.” This perspective echoes research on defining professional development from a traditional perspective.

**Resources and differentiation.** One of the major challenges repeatedly mentioned was a lack of resources, especially time and money, as previously mentioned. The lack of resources seemed to occasionally directly relate to a lack of differentiation, especially with topics such as technology. For instance, one focus group participant mentioned having a full teaching load but also being responsible for working with individual teachers on technology. This individual felt burdened with the inability to do both jobs effectively. Furthermore, when speaking about one particular
technology training, another focus group participant remembered: “I ended up in a group and … one woman was in tears, one person’s like this was way over my head, and I’m thinking oh I got a good idea over there in that corner, and one of my colleagues who’s pretty Mac savvy was just like that was too easy.” Adequate resourcing and the need for differentiation were identified as challenges for effective professional learning.

**Engagement.** Furthermore, there was a concern for how to keep educators engaged after the first few years of teaching. A few of the focus group participants mentioned a lack of support following new teacher mentorship or training. One teacher highlighted a lack of support for mid-level teachers:

> How do we continue to ignite that fire and that passion for the teachers who have … been teaching for a long time? How do we continue to animate the vision in those teachers and share that collective knowledge and wisdom with the younger teachers and keep it alive?

The uncertainty of how to maintain teacher engagement for veteran teachers was also mentioned. One 25-year veteran teacher in a focus group interview shared:

> I’m not interested in the methodology and ... all these ideas about how to teach better. To me, I’ve taken teaching and choreographed it in a way and maybe it’s my age, I don’t know what it is, but I’m still like, I love being in front of kids and talking to kids and getting kids to talk.

This veteran teacher mentioned repeatedly a passion for the content he teaches as the key to his engagement in his profession.

Responses regarding engagement not only focused on experience level of
teachers, but they also highlighted the need to understand where people are professionally and personally: “It’s not even so much the years taught… it’s that and stage of life, because we don’t operate in these vacuums of professional world, personal world.” One survey respondent said that creating an individualized plan to improve practice, in addition to individualized meetings with a professional development coordinator “felt as if my time and personal curiosity was valued and, therefore, I was able to really commit myself to the research and practice.” Responses also focused on the holistic development of faculty members that they value in Catholic education: “Most Catholic schools focus on faith formation of their faculty, which gets at personal spirituality, identity, and integrity.”

**Remaining current.** There was feedback from several participants who felt Catholic schools were not as current as public schools in the area of professional learning. For instance, one participant stated, “When I began at my current Catholic school, I felt like I jumped back 20 years in time.” Another participant who had worked in public schools supported by a union reported feeling “quite a shock” when she started teaching in a Catholic school because professional learning “was much less quality than in the public school professional development that I had had.” Another stated, “I feel like I have less professional learning experiences than my colleagues that work in public schools.” However, several people mentioned that the quality of professional learning has improved over time, and they seemed optimistic about the future of professional learning at their schools:

I have found since I started here a positive change in the development, in educational formation experiences, both especially in light of the digital
literacy, using creative ways to use technology as well as some of the workshops … that we’ve had that have included things on the multiple learning styles.

One participant summarized, “There’s definitely, there’s been progress, but there’s work to be done.”

**Summary**

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. In this chapter, the quantitative and qualitative data analyses were reported. The chapter included descriptive statistics per item of the SAI survey and analysis per Professional Learning Standard. In addition, the data were presented per Research Question, including coded qualitative data from survey open-ended responses and focus group interviews. Chapter 5 will interpret the statistically significant findings and other themes that emerged from the data analysis and provide implications for future research.
Chapter 5: Discussion

The purpose of this mixed methods study was to investigate the professional learning experiences of Catholic school educators and compare these experiences to national learning standards. This study aimed to better understand how professional learning could be meaningful and relevant for educators. Professional learning research indicates a multi-faceted problem with existent models. Despite years of research on characteristics of effective professional learning, teachers report little value in professional learning experiences and overall low job satisfaction. Another challenge is a lack of resources to support effective learning experiences for educators, including both time and money. Furthermore, there is a severe lack of research on professional learning experiences in Catholic school environments.

Redefining professional development through the lens of adult learning is a first step to making experiences more meaningful and relevant for educators. Additionally, it is important that research on professional learning considers differentiation in terms of teacher career phases and the cultural needs of teachers and students. Schools can utilize research on professional learning standards to help ensure efficacy and conduct reflective program evaluation. Utilizing best practices, such as Garet et al.’s (2001) four keys to effective learning: content knowledge, active learning, coherence with other learning activities, and the duration of the activity, can also increase the efficacy of learning experiences for educators. Meaningful adult learning experiences have the potential to keep teachers engaged and dedicated to their professions, which could lead to improved job satisfaction and greater retention of high quality teachers.
This research sought to better understand how to create effective, meaningful adult learning experiences for Catholic school educators through a mixed methods approach. This research study included a 50-item quantitative survey to evaluate learning experiences using nationally recognized standards for professional learning. Participants included 223 educators working in four Catholic high schools, followed by focus group interviews at three of the participating schools, each consisting of three educators (n = 9). The survey response rate of 92% indicates high generalizability to Catholic high schools in the same urban area. An explanatory sequential design (Creswell, 2015) was employed, in which quantitative and open-ended survey data were collected and analyzed in an initial stage, and these data subsequently informed the qualitative stage of data collection and analysis (Ary et al., 2006). This research was triangulated by utilizing multiple forms of data collection to increase internal validity (Merriam, 2009).

There were several significant findings in both the quantitative and qualitative data analyses that will be discussed below. Key findings included statistically significant differences (p < .05) between certain learning standards and high numbers of “Don’t know” responses, which all warrant further discussion. Additionally, qualitative data analysis helped provide deeper insight into several of the quantitative findings. Each of these findings will be discussed in more depth below. Results are organized by research question. This chapter also includes recommendations for future research, particularly regarding professional learning in the Catholic school context and the need to integrate equity into research on effective professional learning.
Research Question One: Alignment with Professional Learning Standards

The first Research Question was: *How well do teacher learning experiences align with nationally recognized standards for professional learning?* There were several findings that warrant discussion. First, quantitative data analysis of the SAI survey results found statistically significant differences between certain professional learning standards. The frequency scale for item responses included: *Never*-1, *Seldom*-2, *Sometimes*-3, *Frequently*-4, *Always*-5. The overall mean score for each standard is presented in Figure 5.

Figure 5. *Overall Mean of Each Professional Learning Standard*

![Graph showing overall mean of each professional learning standard](image)

Note. Frequency scale 1 (Never) to 5 (Always).

Analysis of the relationships between standards was performed using an ANOVA with repeated measures with a Greenhouse-Geisser correction, which revealed statistically significant differences between the means of certain standards.
(F(5.249, 703.396) = 55.067, p < .001). The Leadership standard (M = 3.71; SD = .63) was statistically significantly higher (p < .05) than all other standards. The Data standard was statistically significantly lower (p < .05) than all other standards (M = 2.88; SD = .78). The Implementation standard (M = 3.48; SD = .64) was statistically significantly higher (p < .05) than all standards, except Leadership. Each of these findings will be further discussed below.

A Pearson’s r correlation was performed to further analyze the relationship between the variables in each Professional Learning Standard. The correlations between the seven standards were all statistically significant (p < .01). All of the correlations were strong, with $R^2$ values ranging from 36% to 61%. These findings indicate that each of the standards is strongly related. However, the statistical differences found in the correlation and ANOVA analyses suggest that the SAI has practical significance in analyzing various aspects of professional learning within a school. School leaders can utilize this assessment measure to help better understand the efficacy of their adult learning programs.

Data analysis revealed that the overall mean score on the SAI survey (n = 205) for the Leadership standard (M = 3.71; SD = .63) was statistically significantly higher (p < .05) than all other standards. The highest possible mean per item and per standard was five, meaning that participants answered “Always” to the items; “Frequently” had a value of four. Based on the content of individual items, this finding suggests that participants in this study felt their administrators prioritized professional learning and were collaborative participants in the school’s learning communities. For instance, 63% of participants responded “Frequently (4)” or “Always (5)” to the question: My
school's leaders cultivate a positive culture that embraces characteristics such as, collaboration, high expectations, respect, trust, and constructive feedback. The qualitative feedback echoed the quantitative results, suggesting administrators empowered faculty with control of their own learning experiences.

Furthermore, results from the Data standard on the SAI survey (n = 140) were statistically significantly lower (p < .05) than all other standards. The highest possible mean per standard was five, meaning that participants answered “Always” to the items. The overall mean for the Data standard was 2.88 (SD = .78), indicating that participants believed these items were present “Seldom (2)” or “Sometimes (3).” Questions in this standard focused on whether professional learning experiences were evaluated to ensure high quality results, and whether a variety of data were used to plan professional learning. On the question, In my school, various data such as teacher performance data, individual professional learning goals, and teacher perception data, are used to plan professional learning, nearly half of the participants (47%) responded Never, Seldom, or Sometimes. The participant responses to the data items indicated a lack of knowledge on if or how data are used to drive professional learning practices in their schools.

An important finding within this standard was the high number of “Don’t know” responses in this standard. Four of the eight items had over 30% of respondents answering “Don’t know.” The high “Don’t know” responses were predominantly focused on the use of student data to drive decision-making regarding professional learning, school improvement, and evaluating the efficacy of programs. This finding suggests that secondary Catholic school teachers in this study were largely unaware of
how and what data were being used to guide and evaluate professional learning at their schools. Perhaps the autonomy that several participants mentioned as a positive attribute of working at a Catholic school hindered robust collection and use of data. For instance, one participant stated: “We are not held back by reporting obligations, yet we communicate often with parents and children.” There also seemed to be a mistrust of data and a lack of understanding what data actually are, which could be impeding its use. Data appeared to be a clear area of improvement for professional learning in Catholic schools.

Finally, results from the Implementation standard on the SAI survey ($n = 195$) were statistically significantly ($p < .05$) higher than all other standards except Leadership ($M = 3.48; SD = .64$). Results suggested that participants felt that professional learning was focused on both improving student performance and teaching practice. For example, 63% of participants answered “Frequently (4)” or “Always (5)” to the question: *A primary goal for professional learning in my school is to enhance teaching practices to improve student performance.* There also seemed to be a high level of reflection on teaching practice, with 61% of participants answering “Frequently (4)” or “Always (5)” to the question: *In my school, teachers individually reflect about teaching practices and strategies.* The use of reflective practice was echoed in qualitative feedback from participants.

Prior research highlights the ability of reflection to aid adult learning (Dewey, 1997). Furthermore, research on adult learning theory (Knowles, 1970) and experiential learning theory (Kolb, 1984) emphasize the value of reflection, especially in collaborative learning experiences. Wei and colleagues (2009) found that the United
States fell well behind high-achieving countries in allotted time for collaborative and reflective practice; perhaps Catholic education is a place to begin analyzing the prevalence and impact of reflective practice in the U.S.

Interestingly, there were two items in the Implementation standard in which 31% of participants answered “Don’t know.” One question was related to the school having a consistent professional learning plan in place for three to five years, and the other was about using research about effective school change to plan professional learning experiences. These responses suggested that faculty members were unaware of the planning details behind learning experiences. If schools do have a consistent professional learning plan from year to year, this plan should be made clear to faculty. Furthermore, the lack of knowledge about research-based practices echoes results about the lack of knowledge about data usage. It is suggested that Catholic school leaders integrate research-based best practices and communicate the rationale behind professional learning experiences to their teachers.

Comparison Studies

Although this research was not a comparative study, a recent study (Cracco, 2015) also used the SAI instrument to evaluate the efficacy of professional learning in public education. Cracco (2015) surveyed 111 teachers at 11 magnet schools in New York’s Public School District. It is important to note that the participants in the New York study were quite different than participants in this research study. Participants in Cracco’s study were 96% PK to 8th grade teachers, 81% female, and 64% White. Teachers were all working at New York City magnet schools that had received federal funding to support job-embedded professional development. The target population
was 600 teachers at 20 schools, yet only 111 teachers at 11 schools participated, meaning the response rate was quite low (19%). Cracco found that teachers at schools who reported higher SAI ratings regarding professional learning also had statistically significantly higher English Language Arts student scores. There was no significant relationship with Mathematics scores.

Table 15 indicates the participant responses on the SAI survey in both Cracco’s (2015) study on public magnet school educators and this research study on Catholic school educators. A Cohen’s $d$ analysis is also reported in Table 15, and results indicated a moderate to large effect size between the two sample sizes across the seven Learning Standards, with Catholic teachers having lower scores in every standard. Despite these results indicating higher scores from public school educators, the differences in the sample sizes and participant demographics, especially the fact that the public school teachers had recently received extensive professional learning, create limitations in generalizing these findings. Future comparative research is needed to compare public and Catholic school professional learning experiences to understand if this pattern holds across subsequent samples.
Table 15

Comparison of Mean Scores on SAI Survey for Catholic and Public School Educators

<table>
<thead>
<tr>
<th>Professional Learning Standards</th>
<th>Catholic Secondary Teachers in the Pacific Northwest ($n = 223$)</th>
<th>New York Magnet School Teachers ($n = 111$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
<td>$SD$</td>
</tr>
<tr>
<td>Learning Communities</td>
<td>3.23</td>
<td>.66</td>
</tr>
<tr>
<td>Leadership</td>
<td>3.71</td>
<td>.63</td>
</tr>
<tr>
<td>Resources</td>
<td>3.16</td>
<td>.70</td>
</tr>
<tr>
<td>Data</td>
<td>2.88</td>
<td>.78</td>
</tr>
<tr>
<td>Learning Designs</td>
<td>3.25</td>
<td>.67</td>
</tr>
<tr>
<td>Implementation</td>
<td>3.48</td>
<td>.64</td>
</tr>
<tr>
<td>Outcomes</td>
<td>3.37</td>
<td>.71</td>
</tr>
</tbody>
</table>

Note. Frequency scale 1 (Never) to 5 (Always).

Differences Based on Participant Descriptors

Research question 1a was: Were there differences based on participant demographics, education level, department, and years of experience? Results of the data analysis found statistically significant differences ($p < .05$) when the data were disaggregated by the following participant descriptors: education levels, departments in which participants worked, and years of experience as an educator.

First, there were statistically significant differences ($p < .05$) found in the education level of participants within the Resources standard ($F(2, 198) = 6.47$), $p = .002$. Participants holding a Doctorate degree ($n = 10$) had a statistically significantly higher mean score than participants with a Master’s degree ($n = 155$). This finding suggested that perhaps individuals with a Doctorate degree felt more access to resources to continue their education or professional learning.
Next, when data were disaggregated by department, there was statistical significance found in the Learning Communities standard results ($p = .012$). A Tukey post-hoc analysis revealed that participants identifying as Other ($n = 30$) reported a statistically significantly higher mean than Administrators ($n = 18$). The Other category includes Electives, Library, Performing & Fine / Visual Arts, English Language Learners, Health / Physical Education, Athletics, Music (Choir, Band, Vocal), and Special Education. Perhaps individuals in these departments have a greater sense of community and collegial collaboration through extracurricular events such as sports, plays, or musical performances. Additionally, this finding indicates that possibly administrators were more critical of the efficacy, goals, or practices of learning communities in the schools. Perhaps administrators were not as integrated into the greater learning community and may have felt more isolated than teaching faculty, and thus rated the Learning Community items differently. Clearly, the administrator perspective of this standard is unique and may warrant further research.

Furthermore, within the Data standard, Tukey post-hoc analysis revealed that individuals in the Other ($n = 21$) category had a statistically significantly higher mean ($M = 3.42$) than individuals identified as Administrators ($n = 16; M = 2.67$), Humanities ($n = 47; M = 2.80$), and STEM ($n = 30; M = 2.61$). This finding suggested that individuals in the Other category were perhaps using data differently than others in the school. Further research could examine data use within different departments, including what data are used and how. These questions are particularly important due to the statistically significantly lower results in the Data standard.

Also in the Data standard, a Tukey post-hoc analysis revealed that educators
with less than one year of experience \((n = 4)\) had a statistically significantly higher \((p < .05)\) mean than teachers in the three mid-level experience groups, from 5 to 25 years \((n = 80)\). These results should be interpreted cautiously because of the small number of new teachers in this category; however, this finding may indicate that new teachers received more exposure to the value and use of data in their teacher education programs, which may have carried over to the classroom. Furthermore, according to Huberman’s (1995) Teacher Career Cycle, teachers in years one to three are in both the survival and discovery mode of teaching. These new teachers may be more open to discovering how to use data in their own learning.

When data were disaggregated by years of experience in the Resources standard, a Tukey post-hoc analysis revealed that educators with less than one year of experience \((n = 6)\) had a statistically significantly higher \((p < .05)\) mean than teachers who had been teaching for 11 to 16 years \((n = 44)\). This finding suggested that new teachers at Catholic high schools might have received more resources and training than mid-level teachers. Qualitative responses echoed strong mentorship support for new teachers that tapered off in subsequent years. This finding calls for potentially providing more resources to promote professional engagement for mid-level teachers.

One method to solicit engagement of both mid-level and veteran teachers could be through mentorship of new teachers or peer-to-peer mentorship. Qualitative feedback in this study, especially in focus group interviews, revealed that many teachers learned from veteran teacher colleagues. Collaborative learning experiences that involve self-reflection, such as mentorship, can provide a mutually beneficial learning experience for teachers at any stage of their careers (Villar & Strong, 2007).
Prior research indicates that building professional networks, such as mentors and professional learning communities, can lead to teacher growth through the act of teaching, self-examination, and observations (Desimone, 2011). Mentorship can also improve teacher retention, and resources spent on high teacher turnover can be allocated to support teacher learning (Villani, 2009).

**Research Question Two: Qualities of Effective Professional Learning Experiences**

The second research question was, *What are teacher identified qualities of effective professional learning experiences?* The qualitative feedback, both from the open-ended survey questions and the focus group interviews, revealed several key characteristics in effective professional learning at Catholic schools that reflect findings in prior research. The most frequently mentioned qualities were: collaborative, reflective, relevant, content-focused, and self-directed. These qualities are similar to several prior studies identifying effective traits, including Garet et al.’s (2001) empirical research of professional learning features that positively impacted student learning, including: a focus on content knowledge, active learning, coherence with other learning activities, and the duration of the activity. Furthermore, Desimone (2011) included collective participation as a key quality, which is similar to collaboration.

Numerous researchers have also advocated for reflective practice regarding professional learning (Darling-Hammond, 2008; Martin et al., 2014; Reeves, 2010; Wei et al., 2010). In Montoro et al.’s (2012) research utilizing the SAI survey instrument on teacher learning at Christian schools in Detroit, there was also a finding that teachers were self-reflective. Additionally, reflection is an aspect of experiential
learning theory, which views learning as a lifelong process that requires self-reflection (Dewey, 1997). Overall, reflection seems to be a meaningful trait in teacher professional learning in any context.

Furthermore, it appeared that Catholic school educators felt a strong sense of autonomy and control over their learning experiences. This feeling of autonomy and choice regarding professional learning differs from prior research on public school teacher perceptions, which has found that teachers feel a lack of power in planning and implementing their own learning experiences (Acevedo, 2013; Bill & Melinda Gates, 2014; LaCursia, 2011). Additionally, prior research suggests a greater potential for satisfaction in professional learning if teachers are given more power and choice (Bill & Melinda Gates, 2014; Guskey, 2002; Lee, 2005), which seemed to be true in this research study. Based on data analysis and coding of the qualitative feedback, autonomy over teacher learning experiences seemed to have positive results in teacher outlook. For instance, one participant stated, “This school gives teachers a lot of autonomy to teach in their own way and to be authentic. Because of this, the teachers really love teaching and they teach what they love.” Participant comments mentioned that their sense of freedom led to a trusting environment, flexibility in learning, and a perception of improved classroom practice.

The characteristics of effective professional learning experiences that emerged in this data analysis relate to adult learning theory (Knowles, 1970, 1990), which advocates for learner engagement in self-directed learning experiences. Learning content must be applicable and relevant to adult learners. This research can extend the theoretical foundation of adult learning theory to support learning in Catholic
educational contexts. The collaborative nature of effective adult learning experiences found in this research also supports experiential learning theory (Kolb, 1984).

These findings suggested that there are common best practices that can be applied to teacher learning no matter the educational setting. Further, it seemed that effective learning experiences in Catholic education are not unique; adult learning experiences have shared characteristics no matter the context.

Research Question Three: Barriers to Effective Learning

The third research question was, What are potential barriers or challenges to creating effective learning experiences for teachers in the Catholic school context? Challenges to effective learning in the Catholic school context were revealed in the data analysis, including difficulty in defining professional learning, a lack of available resources, a need for teacher engagement over time, and remaining current in research and practice. The data revealed confusion among participants in how schools define professional learning, which seemed to impede perceptions of efficacy in quality and implementation. Participants were often unclear about what experiences qualified as professional development and if professional learning was different from professional development. Furthermore, there was confusion about which groups within a school were considered professional learning communities, especially if that terminology was not used in a particular school. There was also confusion about how to define data.

It is recommended that school leaders clearly define professional learning for their own school communities. As adult learners, educators need to understand why particular learning experiences are important in order to gain meaning from them (Knowles, 1970). Furthermore, adult learners need to know the purpose and the goal
Another barrier to effective learning experiences reported by educators in this study was a lack of resources and differentiation, which seemed related. Often, participants experienced a “one-size-fits-all” model of professional learning that ignored teacher individual needs. These types of experiences have been criticized in prior research on professional learning (Allen & Penuel, 2015; Kohli & Pizarro, 2016). Coggshall et al. (2012) found that effective learning experiences were built around the individual strengths, interests, and needs of teachers as adult learners.

A lack of resources, particularly time and money, was a repeated theme in the data analysis. Resource allocation for professional learning experiences varied greatly per school. School leaders should be aware that professional learning research indicates financial benefits for embedded learning opportunities, such as new teacher mentorship. For instance, one study revealed a $1.88 return for every $1.00 spent, largely due to reduced teacher turnover (Villar & Strong, 2007). Despite potential benefits, a lack of time for embedded learning opportunities in the daily schedule was a repeated theme at all four participating schools. This finding supported prior research indicating the U.S. has much fewer opportunities for embedded learning experiences, such as co-planning, peer coaching, and PLCs, than similar developed nations with high academic achievement, such as Japan, Singapore, and Finland (Wei et al., 2009). Furthermore, prior research indicated a similar lack of resources at Christian schools that also impeded opportunities for learning (Montoro et al., 2012).

Furthermore, this research identified a need for more differentiation based on the experience level of teachers. Qualitative research revealed that teachers at various
stages of their careers voiced different needs for learning, especially in regards to technology. The need for differentiated learning based on a teacher’s career cycle is supported in both research on stages of teacher career development (Huberman, 1995; Leithwood, 1992) and in teacher professional development research (Acevedo, 2013; Wei et al., 2010).

Another challenge found in data analysis was the need to keep teachers engaged in their own learning, especially mid-level and veteran teachers. Feedback from participants seemed to call for more support in the form of collaborative mentoring, which was mainly focused on new teachers. Veteran teachers voiced a passion for their content areas as the key to staying engaged in teaching. Numerous research studies echoed the need for a focus on content in teacher learning (Birman et al., 2000; Garet et al., 2001; Stewart, 2014). Thus, school leaders would benefit from tapping into this passion for content knowledge in ways that allow for more teacher leadership in content-based professional learning experiences.

The final challenge regarding effective professional learning was for Catholic schools to remain current in practices of teacher professional learning. No notable prior research was found comparing current professional learning practices in public versus private schools. However, in this research, qualitative feedback from participants repeatedly revealed a belief that their learning experiences seemed to be both less frequent and less current than their public school colleagues. However, there were also numerous participants whose only teaching experience was in Catholic schools. Despite these criticisms, there was mention of positive changes and growth in professional development programing, and participants felt strong independence in
choosing their own learning experiences, which was viewed positively.

**Limitations**

There were several limitations that must be highlighted in this research. First, the scope of the study was limited to educators in four Catholic high schools in one urban environment in the Pacific Northwest. This research utilized convenience sampling due to location and time constraints. In order to increase generalizability, this study would need to be replicated in different environments, preferably using random sampling. Furthermore, there were limitations in the disaggregation of participant demographic data. For instance, the racial categories were only White and Nonwhite, due to low numbers of people identifying in other racial categories. Additionally, 8% (n = 17) did not provide an answer for ethnicity, causing further limitations to understanding if Nonwhite participants may have answered differently. Participants were also assigned to only one department for disaggregation purposes, although 20% selected more than one in which they worked. The ability to find differences between demographic groups was a challenge.

Another limitation surrounds instrumentation. Although the survey instrument had strong validity testing, it was a self-report tool, so there was an assumption that participants reported honestly. Self-reporting also adds subjectivity. There was also the risk of a non-response error if participants failed to answer certain questions. The abundance of “Don’t know” answers, especially within certain standards, created a limitation. Due to the high numbers of “Don’t know” responses, it is suggested that the survey developers, Learning Forward, consider shortening the survey, either by limiting the number of items per standard or by decreasing the number of standards.
However, despite the ambiguity that accommodated the “Don’t know” responses, it may have been that many of the “Don’t know” responses could translate to “Never” or “Seldom,” indicating that the true mean scores for Data were actually even lower than what was obtained. The results were still valuable in revealing an obvious lack of knowledge in certain areas of professional learning.

The final limitation of this study was the lack of clarity regarding certain terms used in data collection, especially the term “professional learning” itself. Certain schools used different language to describe their professional development programs, and it was not clear how inclusive participants should be in questions about professional learning. For instance, participants asked if staff or department meetings were considered professional learning communities, or if the survey was only referring to specific professional learning community groups. Similarly, it appeared that most educators were more familiar with the term “professional development” but not familiar with professional learning. The researcher attempted to use these terms interchangeably, both in the survey open-ended questions and in the focus group interviews, yet participants asked numerous clarifying questions during the administration of the survey. Additionally, the wording on certain survey items seemed confusing and lengthy for participants. At one school, the researcher heard a participant say, “The question says ‘all,’ so I am going to answer ‘never.’” Another participant was heard saying, “If it’s just too wordy, I’m putting ‘Don’t know.’” It is recommended that Learning Forward consider whether the same information can be garnered through a shorter survey with clear and concise language.
**Recommendations for Future Research**

Several recommendations for future research surfaced during this study. First, there was a need to clearly define and broaden definitions related to professional development, including professional learning itself, professional learning communities, and data. These terms caused confusion for participants, and both professional learning research and practice could be improved if these definitions were clearer.

Second, future research is needed to further investigate how professional learning experiences vary at Catholic schools under the auspices of specific religious orders. Due to protecting the anonymity of the schools that participated in this study, the specific order of each school (i.e. Jesuit, diocesan, Benedictine, Daughters of Charity, La Sallian, Cristo Rey) was not identified, and the school’s results were analyzed collectively rather than compared. A future comparative study of Catholic schools of different orders could reveal both the successes and challenges of supporting teachers using these particular models, which could lead to improving professional learning for educators through inter-school collaboration. A comparative study of teachers at Catholic and public schools could also reveal interesting findings. If the SAI survey is used, definitions could accommodate terminology to help reduce the number of “Don’t know” answers.

With high rates of attrition in the field of education, research is also needed to explore teacher turnover in relation to professional learning. This research has prompted questions of whether a mission-driven school setting improves teacher retention and how reflective practice impacts teacher learning in Catholic education.
This and prior research (e.g., Hunt et al., 2002; Khmelkov, 2001) suggests a mission-focus for Catholic educators, yet how this trait impacts adult learning and teacher retention needs further exploration. Additionally, findings suggested that administrators have different perspectives in certain standards, especially Learning Communities, so further research on professional learning surrounding Catholic school administrators could highlight these experiences.

Furthermore, in the current age of accountability, Catholic schools should consider methods for effectively using data to support student and teacher learning. This study highlights the need to make changes in how schools define, collect, and use data. Future research could also investigate the relationship between age of teachers and the use of data. One method for improving data use in both Catholic and public school settings is to redefine data beyond the scope of standardized test data, which can have the dual benefit of making data more meaningful and effective and also providing a needed cultural perspective for teacher learning (Pella, 2012).

Future professional learning research, including on Learning Forward’s (2011) professional learning standards and SAI survey instrumentation, would benefit from including equity as a standard for effective teacher learning. Research indicates that culturally responsive pedagogy (CRP) can have positive outcomes for all students, but especially for students of color (Howard & Terry, 2011; Ladson-Billings, 1995). The increasing diversity of the student populations at Catholic and public schools, coupled with the white majority of teachers (National Center for Education Statistics, 2013), calls for a focus on how to effectively teach diverse populations. Research on CRP indicates that teacher professional learning surrounding CRP, especially when
incentivized, can improve and change instruction (Howard & Terry, 2011). Ladson-Billings (1995), a leading CRP researcher, advocates for teacher learning that involves teacher reflection on race and ethnicity in order to help understand the race and culture of their own students. This research study found that Catholic school teachers were reflective, so integrating CRP into teacher professional learning may be a natural and important next step for meeting the needs of all students.

Learning Forward (2011) can perhaps learn from the Coalition of Essential Schools (CES; 2017), which was originally founded with nine research-based principles for differentiating schools to best meet the diverse needs of students. However, CES added a tenth principle called “Democracy and Equity,” which states: “The school should demonstrate non-discriminatory and inclusive policies, practices, and pedagogies. It should model democratic practices that involve all who are directly affected by the school. The school should honor diversity and build on the strength of its communities, deliberately and explicitly challenging all forms of inequity” (para. 10). Incorporating a professional learning standard focused on cultural inclusion and equity could help improve teacher learning and practice.

Finally, online learning platforms, such as Twitter and micro-credentialing, may be options for improving the access and affordability of professional learning experiences. Additionally, embedded professional learning experiences, such as PLCs, could potentially improve other aspects of professional learning as well, such as data use. Teachers must learn to use student and teacher data to assess and find solutions to immediate problems of practice (Croft et al., 2010). Overall, future research could
investigate the intersectionality between learning standards, such as learning communities and data, leadership and outcomes, and data and equity.

**Implications for Professional Practice**

Several implications for professional practice can be garnered from this research. First, administrators in both the public and private sectors may consider empowering adult learners with more autonomy and control over their own professional learning experiences. This study suggested positive outcomes in teacher satisfaction and classroom learning related to the sense of freedom and choice in professional learning activities.

This research also highlighted a serious lack of practitioner knowledge of how schools can and do use data to effectively support teacher learning. It is suggested that Catholic school leaders take explicit measures to integrate a data-driven culture into their schools. Most schools lack policies on how to effectively use data to improve student or teacher learning (Farley-Ripple & Buttram, 2015). However, there are indications that existent social networks within a school provide a natural environment for professional learning, especially related to data sharing and inquiry (Farley-Ripple & Buttram, 2015). Thus, providing learning experiences that utilize these collaborative social structures to encourage and support collaborative professional relationships about data could be more effective.

Additionally, findings from this research suggested a need for more teacher knowledge and transparency on how to use data effectively. Potentially a teacher-led data team could help provide more transparency to faculty about what data are being used to drive decisions regarding policy and practice. Additionally, schools could
build partnerships with colleges or universities to help increase capacity for analyzing data and provide recommendations for using data effectively. Furthermore, it is recommended that teaching faculty be trained on the value of using student data in goal setting, assessment, and evaluation. If faculty members become competent with data usage, they can also teach students to use it effectively to measure their own growth. These skills can transfer to college level learning and also into professional life.

Moreover, this research revealed the importance of training teachers at Catholic schools on the mission statement of the school and how to integrate this mission into planning, curriculum, and classroom practice. It was clear that certain schools excelled at mission integration more than others, but qualitative feedback clearly highlighted an overall dedication to the individual school’s mission by teachers. Teachers who were dedicated to the school’s mission and values were dedicated to their particular school, not simply Catholic education in general. Emphasizing mission for new and experienced teachers and providing opportunities to collaborate on how to integrate the mission into lesson planning could potentially improve job satisfaction.

**Conclusion**

This research provided a model for professional learning program evaluation that could be replicated in Catholic or public school settings in the future. Professional learning is a key to keeping teachers engaged and dedicated to their professions and to motivating teachers as adult learners. Evaluating the efficacy of professional learning with a valid instrument, such as the SAI survey, and also receiving qualitative
feedback from teachers, can provide deep insight into both successes and challenges of existing professional learning models in schools. Recommendations from this research can be used to guide planning, implementation, and evaluation of professional learning.

This research revealed many aspects of professional learning in Catholic schools that can help guide professional learning leaders, both teachers and administrators, in developing meaningful learning experiences for faculty members. Notably, this study underscored the importance of integrating prior research findings on characteristics of effective professional learning, including collaborative, reflective, relevant, content-focused, and self-directed. It also appeared that Catholic schools in this research were, overall, effectively empowering teachers with choice in their learning experiences, which contrasts prior perception-based research on teacher choice in professional learning experiences in the public school setting. Perhaps further research on teacher satisfaction in Catholic education will provide deeper insights into methods for positively engaging teachers in their own learning.

Finally, this research calls for a need to add an equity lens to how professional learning is developed and implemented for educators teaching increasingly diverse student populations. Perhaps one participant summarized this need best: “I am still looking forward with some hope that our professional development will focus on equity training, cultural competency, and student-led systems which, I believe are sorely needed for all staff, faculty and development departments.”

In order to inspire and retain high quality teachers, educators must be supported as adult learners and empowered to develop and implement their own
learning experiences based on differentiated needs. Professional learning experiences must utilize years of research-based best practices, with a focus on embedded collaboration and relevant content learning. Additionally, using data and resources effectively and defining terminology around professional learning are critical for effective professional learning. One teacher identified her most effective professional learning experience: “Teachers were engaged in real-time thinking and decision making about how to improve student learning and teacher learning within the context of the school environment and culture.” If school leaders use research-based methods for providing these meaningful experiences for educators, professional learning has the power to improve practice, increase student achievement, and engage adult learners.
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Appendix A

Learning Forward Permission Letter

July 29, 2016

Rebecca Smith
Doctoral Fellow
University of
Portland
School of Education, MSC
149 5000 N. Willamette
Blvd. Portland, OR 97203

Dear Rebecca,

Learning Forward grants you permission to use the Standards Assessment Inventory (SAI) in your research for your doctoral dissertation as an instrument to assess the professional learning needs of teachers in Catholic high schools in the Portland area.

Please ensure that this credit line appears in your work in reference to the SAI:

“Used with permission of Learning Forward, www.learningforward.org. All rights reserved.”

Good luck in your research in pursuit of your Doctorate.

Sincerely,

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Appendix B

Standards Assessment Inventory (SAI)
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Experience level as an educator:
- Less than 1 year
- 1 – 4 years
- 5 – 10 years
- 11 – 16 years
- 17 – 25 years
- More than 25 years

Please identify the department in which you work (mark all that apply)
- Administration
- Counseling
- Electives
- English / Language Arts
- Health / Physical Education
- Library
- Mathematics
- Music (Choir, Band, Vocal)
- Performing & Fine / Visual Arts
- Science
- Social Sciences (History, Geography, Economics, Government, Speech/Debate, Psychology)
- Special Education
- Theology / Religion / Campus Ministry / Service Learning
- World Languages
- Other (Please specify) ____________________

Gender
- (text box entry)

Ethnicity
- African American or Black
- Asian
- Hispanic / Latino
- Native American / Alaskan Native
- Pacific Islander
- White
- Multiple
- I prefer not to respond
What is the highest degree you have completed?
- Bachelor's degree
- Master's degree
- Doctorate degree

SURVEY ITEMS All items in the SAI use the following frequency scale items as responses:
- Never
- Seldom
- Sometimes
- Frequently
- Always
- Don’t know

**Standard: Learning Communities** - Professional learning that increases educator effectiveness and results for all students occurs within learning communities committed to continuous improvement, collective responsibility, and goal alignment.

1. My school system has policies and procedures that support the vision for learning communities.
2. Learning communities in my school meet several times per week to collaborate on how to improve student learning.
3. Learning community members in my school believe the responsibility to improve student learning is shared by all stakeholders, such as all staff members, district personnel, families, and community members.
4. In my school, some of the learning community members include non-staff members, such as students, parents, community members.
5. My school's learning communities are structured for teachers to engage in the continuous improvement cycle (i.e., data analysis, planning, implementation, reflection, and evaluation).
6. In my school, learning community members demonstrate effective communication and relationship skills so that a high level of trust exists among the group.
7. All members of the learning communities in my school hold each other accountable to achieve the school's goals.

**Standard: Leadership** - Professional learning that increases educator effectiveness and results for all students requires skillful leaders who develop capacity, advocate, and create support systems for professional learning.

8. My school's leaders provide teachers with equitable resources to support our individual and collaborative goals for professional learning.
9. My school's leaders are active participants with other staff members in the school's professional learning.
10. My school's leaders advocate for resources to fully support professional learning.
11. My school's leaders regard professional learning as a top priority for all staff.
12. My school's leaders cultivate a positive culture that embraces characteristics such as, collaboration, high expectations, respect, trust, and constructive feedback.
13. My school's leaders speak about the important relationship between improved student achievement and professional learning.
14. My school's leaders consider all staff members capable of being professional learning leaders.

**Standard: Resources** - Professional learning that increases educator effectiveness and results for all students requires prioritizing, monitoring, and coordinating resources for educator learning.

15. Practicing and applying new skills with students in my classroom are regarded as important learning experiences in my school.
16. Teachers in my school are involved with monitoring the effectiveness of the professional learning resources.
17. Professional learning expenses, such as registration and consultant fees, staff, and materials, are openly discussed in my school.
18. In my school, time is available for teachers during the school day for professional learning.
19. Teachers in my school are involved with the decision-making about how professional learning resources are allocated.
20. Professional learning is available to me at various times, such as job embedded experiences, before or after-school hours, and summer experiences.
21. Teachers in my school have access to various technology resources for professional learning.

**Standard: Data** - Professional learning that increases educator effectiveness and results for all students uses a variety of sources and types of student, educator, and system data to plan, assess, and evaluate professional learning.

22. Some professional learning programs in my school, such as mentoring or coaching, are continuously evaluated to ensure quality results.
23. In my school, teachers have an opportunity to evaluate each professional learning experience to determine its value and impact on student learning.
24. In my school, various data such as teacher performance data, individual professional learning goals, and teacher perception data, are used to plan professional learning.
25. My school uses a variety of student achievement data to plan professional learning that focuses on school improvement.
26. In my school, teachers use what is learned from professional learning to adjust and inform teaching practices.
27. My school uses a variety of data to monitor the effectiveness of professional learning.
28. A variety of data are used to assess the effectiveness of my school's
professional learning.

29. In my school, how to assess the effectiveness of the professional learning experience is determined before the professional learning plan is implemented.

**Standard: Learning Designs** - Professional learning that increases educator effectiveness and results for all students integrates theories, research, and models of human learning to achieve its intended outcomes.

30. In my school, teachers' backgrounds, experience levels, and learning needs are considered when professional learning is planned and designed.
31. The use of technology is evident in my school's professional learning.
32. Teachers in my school are responsible for selecting professional learning to enhance skills that improve student learning.
33. Professional learning in my school includes various forms of support to apply new practices.
34. In my school, participation in online professional learning opportunities is considered as a way to connect with colleagues, and to learn from experts in education.
35. In my school, teachers have opportunities to observe each other as one type of job-embedded professional learning.
36. Teachers' input is taken into consideration when planning school-wide professional learning.

**Standard: Implementation** - Professional learning that increases educator effectiveness and results for all students applies research on change and sustains support for implementation of professional learning for long-term change.

37. A primary goal for professional learning in my school is to enhance teaching practices to improve student performance.
38. Teachers in my school receive on-going support in various ways to improve teaching.
39. My school has a consistent professional learning plan in place for three to five years.
40. My school's professional learning plan is aligned to school goals.
41. In my school, teachers individually reflect about teaching practices and strategies.
42. Professional learning experiences planned at my school are based on research about effective school change.
43. In my school, teachers give frequent feedback to colleagues to refine the implementation of instructional strategies.

**Standard: Outcomes** - Professional learning that increases educator effectiveness and results for all students aligns its outcomes with educator performance and student curriculum standards, teacher pedagogical content knowledge, and building professional learning communities.
44. Professional learning at my school focuses on the curriculum and how students learn.
45. Professional learning in my school contributes to increased student achievement.
46. Professional learning experiences in my school connect with teacher performance standards (e.g., teacher preparation standards, licensing standards, etc.).
47. All professional staff members in my school are held to high standards to increase student learning.
48. In my school, professional learning supports teachers to develop new learning and then to expand and deepen that learning over time.
49. Student learning outcomes are used to determine my school's professional learning plan.
50. My professional learning this school year is connected to previous professional learning.

**Open-ended questions:**

1. Can you describe one of your favorite professional development experiences? What characteristics made this experience meaningful for you?
2. Do you believe that working at a Catholic school impacts the quality or quantity of professional learning experiences that you have? Please explain.
3. Is there anything else I need to know about professional learning and development at a Catholic school?