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**PROFESSIONAL DEVELOPMENT: TEACHER AS LEARNER FOR
DIFFERENTIATED INSTRUCTION**

by
Marilyn L. Castellano

A Dissertation

Submitted to the
Department of Educational Services and Leadership
College of Education
In partial fulfillment of the requirement
For the degree of
Doctor of Education
at
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March 31, 2014

Dissertation Chair: MaryBeth Walpole, Ph.D.

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Dedications

In loving memory of Angelo Joseph Castellano (1945 – 2000),

Beloved father of Andrea, Joseph, Louise, Francesca Isabella,

Grandfather of Michelangelo, Angelo Luca, Elena Sophia, Emmanuel Angelo,

And to my chairperson, Dr. MaryBeth Walpole, who awakened my mind and inspired my
journey along the path.

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Abstract

Marilyn L. Castellano
PROFESSIONAL DEVELOPMENT: TEACHER AS LEARNER FOR
DIFFERENTIATED INSTRUCTION
2015-2016
MaryBeth Walpole, Ph.D.
Doctor of Education

This action research study sought to investigate a sample of urban Catholic school teachers' perceptions of how an exploration of differentiated instruction through embedded professional development changed their traditional one-size-fits-all pedagogical practices to a model that addressed students' diverse academic needs. Research studies provide evidence that a one-size-fits-all recipe of instruction continually fails to build students' capacity to learn. Interviews are the primary source to elicit teachers' perceptions of changed pedagogical practices. In conjunction with classroom observations, a focus group formed to better understand the rationale for the principles of differentiated instruction, make sense of the practice, and determine if new knowledge changed participants' thinking and behavior about teaching and learning. Findings indicated that research, workshops, reflection, deeper conversations, personal mastery, and shared visions within embedded professional development transformed the culture of instruction. Further, in an attempt to explore the many dimensions of differentiated instruction guided by my actions as the school leader, participants freed themselves from habits of isolation, created the foundation for a learning community, and built professional and personal efficacy.

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Chapter 1

Teacher as Learner for Differentiated Instruction

This chapter begins with an overview of the background and context of the action research project followed by the problem statement, purpose, and research questions. I anticipated that the practical experiences generated from this action research study would inform teachers' pedagogical practices and offer new insights to school principals who endeavor to promote professional development for differentiated instruction. This action research project employed qualitative case study methodology to clarify the phenomenon of the study.

The action research participants included 12 teachers from pre-kindergarten through grade eight employed in an urban Catholic school. Also included is a review of leadership-theory-in-use; leadership defined; leadership development, servant, feminist, and transformational leadership; and leading with trust. The chapter concludes with a reflective summary.

Background and Context

Armed with 20 years of experiential knowledge and fortitude as a public school administrator, I embraced my new role as principal of an urban Catholic school with an ideology that supported responsive, personalized learning for all. I aspired to lead a highly academic school supported by a rich academic network. From the first day forward, I pressed on and connected easily with the 300 students with their wide varying interests and modes of learning. As a novice teacher, I taught for nine years in a Catholic school. Now, decades later, I returned as a leader who rejoiced in being home again!

Being the new school leader, however, I faced a daunting task to gain the trust and support of faculty members. What could *they* be thinking? Could I, as leader from a public school environment, call forth an inner moral code and value system to support their faith-seeking mission and traditional pedagogical milieu? As the school year began, we all treaded lightly.

Before long, however, I discovered a pattern of declined enrollment, multiple budgetary constraints, and an instructional environment frozen in time. Neatly appointed rows of desks framed teachers' almost exclusive pedagogy of frontal teaching, lecturing, and the completion of workbook pages. The factory model of learning translated into the pervasive practice of one-size-fits-all instruction in every classroom. Group work remained obsolete despite skill level of students. Classroom visits also revealed curriculum manuals covered with thin layers of dust. In essence, teachers' pedagogical practices appeared fossilized within a narrow array of textbooks and workbooks to guide the instructional domain.

Consequently, the influx of English language learners appeared unnoticed, mainly because teachers witnessed students' use of a healthy social language. Students could meet and greet each other with ease. However, it became apparent to me that just below the surface, students' academic language suffered because few students participated in class discussions or read well with comprehension. Nevertheless, instead of best practices to meet different pathways to teach and learn, classroom pedagogies remained rooted in a one-size-fits-all instructional model at every grade level.

Moreover, the restricted culture of instruction flourished despite the drastic demands of the *No Child Left Behind* law (NCLB) and the core curriculum content

standards mandated by the Diocesan Office of Education (Leos, 2004). Standardized test data also showed the harsh reality of many students' failure to thrive across grade levels. To supplement knowledge of this reality, I shared with teachers the 2006 grade eight test data for 22 students who sought admission to a Catholic high school. Results showed mean NCE (Normal Curve Equivalent) as follows: Reading (53.5), Language (50.0), and Mathematics (45.0). Additionally, the story of our school revealed technological innovations lacked use despite a well-equipped computer lab, wireless computers on a cart, listening centers, and relevant software.

Further, based on initial observations and continuous dialogue, I determined professional development was not a new concept for the teachers. In addition to weekly and extended day monthly faculty meetings, each year teachers attended two all day conferences sponsored by the Superintendent of Schools' office. Despite good intentions, however, teachers seldom sustained or practiced the skills, methodologies, or theories presented during workshops or conferences.

Hence, in the first months as principal of the school site, I pondered whether a collaborative approach to learning best practices through the prism of differentiated instruction might help teachers explore the instructional framework rooted in our school. Current research on learning states that good teaching begins with good relationships (DuFour, DuFour, Eaker & Many, 2006; Reeves, 2009; Tomlinson, 1999, 2003; Wheatley, 2002). Thus, I reflected upon the intention to build good relationships.

Additionally, could we establish a foundation to explore and understand the changes needed to improve instruction within our school through embedded professional development? Pope John Paul II once said that we do not ask a mountain to move, but

that we take one pebble away each time we visit the mountain. Indeed, movement needed to support change.

For weeks I pondered if the practices of pedagogy could be changed within the structure of an action research project framed within a professional development paradigm? I made the assumption that change was possible and I resolved to be the catalyst for that change through the strength of my leadership. As such, I gave birth to a journey to reshape or build teachers' capacity to transform instruction through this action research project.

From the start, I heeded advice to develop a language to talk about high quality responsive teaching or differentiated instruction (Tomlinson & Allan, 2000). But, I also understood the difficulty of the journey. I moved forward with the expectation for teachers to refashion their mental models, deal with impediments to change and take challenging leaps into new directions (Kotter, 2008; Kotter & Rathgeber, 2005; Senge, 2006).

Problem Statement

As the new principal of an urban Catholic school, I observed an instructional environment that demonstrated a one-size-fits-all pedagogy despite the schools' population being increasingly diverse in terms of students' academic, cultural, ethnic, and linguistic backgrounds. Many students bridged a chasm between the languages and cultures of two diverse worlds. In every classroom from pre-kindergarten to grade eight, students with advanced academic abilities shared the same lessons with peers who struggled with an array of readiness skills (Tomlinson, 1995, 1999; Tomlinson & Allan, 2000; Tomlinson & Eidson, 2003).

According to Reeves (2004, 2008), educators in many schools are often challenged by this complexity to meet the myriad needs of learners. Apparently, a school's teach to the middle approach to an instructional design functioned for decades with the expectation that most students would meet with success (Gregory & Chapman, 2007; Reeves, 2004; Smutny & Von Fremd, 2004; Tomlinson, 1999, 2003; Tomlinson & Eidson, 2003). Nevertheless, research provides evidence that the one-size-fits-all recipe of instruction continually falls short of building students' capacity to learn (Csikszentmihalyi, 1993; Gregory & Chapman, 2007; Pollock, 2007; Sprenger, 2003; Tomlinson, 1999, 2003; Tomlinson & McTighe, 2006). A one-size-fits-all delivery system fails to ensure that learners develop important mentally and affectively engaged schoolwork, yet this traditional model still dominates in school settings today (Ehly, 2009; Gregory & Chapman, 2007; Sprenger, 2003; Tomlinson, 1999, 2003; Tomlinson & Allan, 2000; Tomlinson & McTighe, 2006; Wiggins & McTighe, 1998). Further, many students in a one-size-fits-all instructional paradigm may feel marginalized if they struggle with the curriculum, speak a primary language other than English, or have diverse learning needs.

Purpose and Research Questions

This action research project maintained a two-fold purpose. First, the study sought to explore a sample of urban teachers' perceptions of how an investigation of the principles and practices of differentiated instruction through embedded professional development changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the diverse academic needs of students. Specifically, I assumed expectations for differentiated instruction within the

cycles of an action research study would support a transformation of fixed classrooms throughout our school into flexible, thoughtful, responsible places of learning. I also assumed participants would feel an enhanced sense of empowerment and professional efficacy as they forged into new pathways to teach and learn.

Furthermore, this action research project became the entrée to reflective practices for participants to improve pedagogy through philosophical and behavioral changes. Through exploration, articulation, and the courage of participants to share ideas (Izzo, 2006; Osterman & Kottkamp, 2004), changes made during and as a result of this action research addressed issues of equity and equality of opportunity for all learners. Thus, in the move to understand the philosophy of differentiation, a sense of urgency sprang naturally from the need to examine how a one-size-fits-all instructional paradigm remained a poor fit for many students (Kotter, 2008; Tomlinson & Allan, 2000).

A second equally important purpose of this action research study examined my espoused leadership platform through the filter of leadership for differentiated instruction and the five disciplines defined by Senge (2006): systems thinking, personal mastery, mental models, shared vision, and team learning. Subsequently, I unearthed a differentiated instructional framework for participants through knowledge building, change initiatives, coaching, care, research, and reflective practices. Further, as a researcher participant or sometimes as a transformative architect, I allowed myself to progress through this action research project through a spectrum of metaphoric labyrinth pathways. Why the labyrinth?

Over several decades, five visits to Chartres Cathedral outside Paris, France made a lasting visual impression upon me through the symbolism portrayed by the labyrinth (c.

1200) inlaid in the nave pavement. My practice as a teacher and later as a principal often led me to experience numerous metaphoric labyrinth journeys that lead in all directions. Some pathways enriched my teaching and leadership experiences, while others awakened hidden dreams into kaleidoscopes of meaningful conversations. Palmer (2007) reminds us how education is not the filling of a pail, but the lighting of a fire.

Thus, within the context of this action research project, both participants and I followed a plethora of meanderings through continuous cycles of growth and fires. Cycles of professional development, whether positive or negative, moved our pilgrimages toward new knowledge, an attitude for change, and ethical challenges. Different pathways also fostered a sense of urgency to face my espoused leadership platform and the interplay of my leadership actions. In turning to one another, moreover, we hollowed out the foundation for a professional learning community from day one, although I did not know it at the time. Such behavior fits with Wheatley's (2002) reminder to not be separated. She entreats us to notice what we care about and assume that others share our dreams.

Furthermore, as site-based professional development evolved, the impetus shifted participants' concentration from how to teach students to how to become students themselves. Through months of exploration within a professional development paradigm, participant teachers practiced skills as they investigated the rationale, techniques, and tools to make differentiated lessons possible. Nevertheless, although in pursuit of high levels of personal mastery, participants understood the time constraints of committed practice. Consequently, to shed light on participants' perceptions of how or if they

learned an extension and refinement of their pedagogical practices, I addressed the following research questions (Appendix A Overview of Information Needed):

1. To what extent did participants perceive an exploration of the principles and practices of differentiated instruction through embedded professional development prepared them to change their traditional instructional practices?
2. How did participants develop the knowledge, skills, attitudes, and values they perceived essential to change pedagogical practices?
3. To what extent did participants perceive certain factors in their systematic inquiry into the principles and practices of differentiated instruction resulted in enhanced feelings of empowerment and professional efficacy?
4. To what extent did participants perceive certain factors impeded their pursuit of knowledge, consistency, and pedagogical innovations grounded in the principles and practices of differentiated instruction?
5. How did this action research study help me examine my espoused leadership platform through the filter of Senge's (2006) five learning disciplines and my leadership for differentiation?

Of note, research indicates that effective teachers know their students (Eaker, DuFour, & Burnette, 2002; Tomlinson, 1999, 2003; Tomlinson & Eidson, 2003). In essence, effective teachers operate with the premise that all students learn at different levels and in different ways (Pollock, 2007; Sprenger, 2003; Tomlinson, 1995, 1999, 2003; Tomlinson & Allan, 2000; Wong & Wong, 2009). Hence, an exploration of differentiated instruction through ongoing workshops, conferences, faculty meetings, focus group study, and dialogue became the roadmap to change our pervasive one-size-

fits-all instructional framework. For almost three years, participants attempted to acquire the knowledge, skills, attitudes, and values they perceived essential to strengthen pedagogical abilities and embrace the principles and practices of differentiated instruction (Appendix B Principles of Differentiated Instruction).

Chapter 2

Leadership Theory-In-Use

Leadership is ultimately behavior (DePree, 1992; Giuliani, 2002; Zigarmi, Fowler, & Lyles, 2007). It means ability to inspire and persuade through empathy and trust (Bennis, 1989, 1994). CEO of Herman Miller, DePree (1992) concurs. He argues that the best people working for organizations are like volunteers. They could probably find good jobs in any number of groups, but they choose to work somewhere for reasons less tangible than salary or position. They build covenantal relationships that induce freedom and share commitment to ideas, issues, values, goals, and to management process. Words such as love, warmth, and personal chemistry are pertinent because covenantal relationships fill deep needs and promote a meaningful work milieu.

Personal History

I was about seven years old when I rang the doorbell of a very beautiful home to beg for flowers. When a man in a black suit and white bowtie opened the door, I politely asked for some flowers from his garden for my May shrine. I explained that all the children in my Catholic school created a home shrine to the Blessed Mother during the month of May and I searched for flowers because the soil in my yard was bare. I walked, along with another second grader, all the way from the other side of town, from the streets with row-houses to the section with the mansions, and chose his house after seeing a multitude of flower gardens along the side yard and in the back. The man gave a wonderful smile and asked us to wait in the foyer.

Before long, he returned with an armful of flowers, accompanied by a distinguished-looking man. Not only was the second gentleman curious to hear about our

expedition, but he praised me for my devotion to the Blessed Mother. I recall great joy upon leaving the house holding flowers and their words of kindness embedded in my memory. I also remember running all the way home! But, as an extremely shy child in school, how had I the courage to beg for flowers from strangers?

Although many years later, I vividly recall that image of a small girl waiting for flowers in the highly polished foyer with its black and white geometric patterned marble floor and translucent chandelier tacitly placed overhead. Reflecting on that childhood incident, I believe a strong sense of purpose motivated my actions. Although only seven years old, I intuitively knew I could accomplish much if I set my mind to it. Maybe I was a child from a disadvantaged family, but I possessed a determination to find a garden with flowers. To this day, I still remember the kindness of the older gentleman, but little did I know my friend and I met the mayor of the city of Boston!

For certain, the connection between hard work and determination became clear to me at a young age. As such, I purposely disassociated from my surroundings as I took diverse steps to stretch beyond the aspirations of high school classmates and neighborhood friends. Originally, there was only one girl in my high school graduating class destined to attend college, but it was not me. As the fourth of six children, my parents did not speak of the possibility of college. Nevertheless, I prayed hard and worked tirelessly to actualize my ambition of higher education. Along with that desire, I passionately longed to be connected to the world of the Catholic Church. Consequently, I entered the religious community of the Sisters of Charity.

Through the goodness of the Sisters of Charity, I fulfilled my dream to attend college. I also lived in the traditions of servant leadership and nurtured the practice of

reflection which blanketed the mission of our religious community. The gift of higher education and a collaborative community also ignited a fire in my heart to always learn and serve.

Years later, when I moved from classroom teacher to principal, my work ethic evolved through learning stages about the best practices of teaching, leadership paradigms, and serving others with compassion. It appeared that each pathway I traversed represented going into and out of labyrinth journeys of obstacles or accomplishments. Upon reflection, I realized the full effect of those journeys as I sought to define my authentic self as a leader and the extent of how I put theory into practice (Argyris, 1982).

Labyrinth Metaphor

The symbol of a labyrinth became a meaningful artifact during a high school trip to France with my older brother. The labyrinth in Chartres Cathedral, inlaid in black stone on the floor midway up the nave, was designed between the years 1194 to 1260 for the spiritual journeys of pilgrims who could not visit the Holy Land. Men and women entered the labyrinth from the west rim by foot or on their knees and traveled inward, meditating. One thousand feet later, the pilgrim hoped to meet God in the middle (Miller, 1996; Steves, 2012).

When standing on the labyrinth in Chartres Cathedral, my brother and I intuitively felt bonded to that giant configuration of wisdom and spirituality. Many events during that summer led the two of us to dedicate our future lives in the service of the Catholic Church. The symbol of the Chartres labyrinth affects me personally to this day because it reminds me of my brother, who, when studying for the priesthood, drowned at his seminary.

His life ended at age 22, but he remains a model for leadership. My brother demonstrated compassionate behavior, emphatic trust in the goodness of people, and joy in work. For me, the image of the labyrinth compliments the memory of my brother and the significance of a journey towards true leadership, compassion, and kindness.

As a school leader, I hold this image as a mental model. With innovative possibilities, I remember the Chartres labyrinth for its symbolism of strength and inspiration. Further, encounters with colleagues, students, and parents often resembled a pilgrim's meandering as I attempted to be a spiritual, moral, and ethical leader.

I envisioned myself as a pilgrim walking the ancient labyrinth. As a human condition, I reflected upon the labyrinth to sustain me. It served as a metaphor for how God brings creation to life or more realistically, how leadership evolves through struggles, challenges, and a determination to enact change.

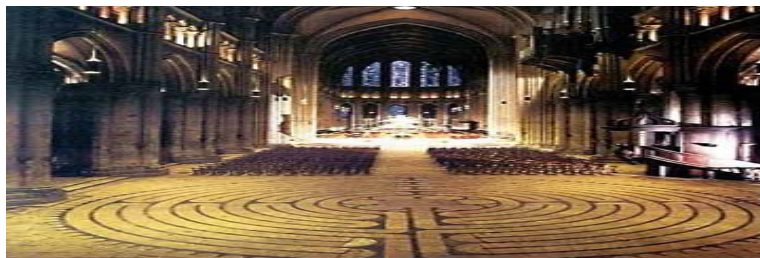


Figure 1. Chartres Cathedral.

I not only traversed numerous labyrinth paths to perform the dance of change, but also to seek wisdom through study and to ease my passage into deeper levels of care

within our learning community. Perhaps, then, it is by God's grace that the pathways solidly intersected into my personal platform of servant, feminist, and transformative leadership as miraculous changes grew out of this action research project.

Leadership Paradigm

Sometimes our actions create our reality (Senge, 2006; Wheatley, 2002, 2005). We see the world through our paradigms or frames of reference. These frameworks may influence our thought processes, actions, and capacity to envision the future.

My educational leadership platform actualized within a changed learning landscape through the lens of servant, feminist, and transformational leadership. As such, I fostered an awareness of ever-present and inevitable changes through an examination of my ethical beliefs, behaviors, and values. For instance, through my habit of journal writing and reflective practice, a greater appreciation for my colleagues emerged from a conscious awareness of their sincere contributions. I also became a more joyful administrator.

Bolman and Deal (2003) point out that a learning organization that is filled with complexity, surprise, deception, and ambiguity will find it hard to extract lessons for the future. Yet, we are told, an increasingly turbulent, rapidly shifting environment requires contemporary organizations to learn better and faster just to survive. In such an environment, the centerpiece linking classroom instruction and student achievement – the teacher as learner – must be recognized (Zepeda, 2008).

Further, as we grew in knowledge and acceptance of one another, we inadvertently created a climate of personalization. Teachers demonstrated a deeper commitment toward the school's mission along with an understanding of how to

complement one another's achievements. Gradually, change led to an intrinsic sense of connectedness through shared leadership, dialogue, and participants' study of new pedagogical skills.



Figure 2. Connectedness.

In other words, team learning took root. Senge (2006) calls this phenomenon an “alignment,” because as a group of educators, we willed to function as a whole. Our individual energies harmonized through a commonality of purpose, a shared leadership, and an effort to master the practices of dialogue and discussion. As the school leader, I walked beside participants, not in front of them and our beloved pastor, who first questioned my transformative vision for instruction as too difficult for teachers, offered his support.

Leadership Defined

Definitions of leadership abound. McGregor Burns (1978) states: “Leadership is one of the most observed and least understood phenomena on Earth” (p. 2). A leader, he asserts, is one who induces followers to act for certain goals represented by values, wants, or needs. Both leader and follower possess aspirations and expectations. But,

McGregor Burns also posits that leaders and followers become active agents for change, capable of self-determination, of transforming their “contingency into destiny” (p. 143).

In a like manner, Wheatley (2002) posits the term leadership as the leader who has more faith in the capacity of others than they do in themselves. Kotter (1996, 2005, 2008) recognized leadership in terms of what the future should look like, aligning people with that vision, and inspiring them to turn a vision into a reality despite obstacles. Batten (1989) viewed leadership for the next decade as the development of a clear and complete system of expectations to identify, evoke, and use the strengths of resources, especially people, in a variety of situations.

Researchers describe leadership as ensuring that there is strong and evolving clarity about the purpose and direction of the organization which, in turn, serves each of its members (Culver, 2009; DePree, 1992; Marzano, 2003; Wheatley, 2002). Thus, leadership in the 21st century workplace functions on principles, new people skills, and the ability to engage in collaboration for effective work relationships. In a like manner, sustainable leadership reflects a strong and unswerving sense of moral purpose (Hargreaves & Fink, 2006). There exists a driving sense of purpose that stretches well beyond oneself. It is the creation of a human community held together by the work bond for a common purpose.

Senge (2006) observes leadership as organic, dynamic, ambiguous, and practical. It is the capacity of a human community to shape its future by creating a tension that ignites energy, articulates a vision, and accepts reality. Senge (2006), more than other researchers, influenced my thinking about leadership because his five disciplines for the art and practice of a learning organization fit my circumstances.

The five disciplines, namely, systems thinking, personal mastery, mental models, shared vision, and team learning illuminated how I might ignite the spark of genuine learning by a focus on what really mattered. As such, I reframed my conversations with the teachers. The disciplines gave me a new vision of work as relationships, not in terms of isolation. Hence, I allowed a creative tension to explode within me to first understand the principles and practices of differentiated instruction before I set expectations for change.

Consequently, to collaborate for a culture of differentiated instruction, be passionate about participants as learners, and effect change initiatives through professional development, my leadership-in-action threaded through three leadership theories: servant leadership (Baker & O'Malley, 2008; Barth, 1990; Culver, 2009; Greenleaf, 1998, 2008; Wheatley, 1999), feminist leadership (Gilligan, 1993; Noddings, 2005; Sernak, 1998), and transformational leadership (MacGregor Burns, 2003; Hackman & Johnson, 2009; Kouzes & Posner, 2002; Senge, 2006).

Servant Leadership Journey

From an early age, I governed by a framework of servant leadership. The theory of servant leadership is associated with the leadership theory of Greenleaf (1970, 1996, 1998, 2008). His model of servant leadership emphasizes service to others, a holistic approach to work, shared power in decision-making, and growth toward community. Based on the work of Greenleaf, servant leadership is a life-long process to develop characteristics that include listening, growth, empathy, healing, awareness, persuasion, conceptualization, foresight, stewardship, commitment to the growth of others, and building community.

In, *Servant Leadership* (1970), Greenleaf defined two kinds of leaders: strong natural leaders and strong natural servants. The natural leader takes control, gives orders, and makes decisions. On the other hand, the natural servant assumes leadership only if she sees it as a way to serve. I wanted to serve the needs of teachers in my care. As a leader, I planned and acted to spur teachers to action.

To serve those they lead may appear idealistic, but it is also pragmatic (Senge, 2006). Senge (2006) once asked a colonel the reason servant leadership was held in high esteem by the Marine Corps? He learned that in combat, soldiers only follow commanding officers whom they trust. According to the colonel, when people's lives are at stake, these officers are perceived as having the soldiers' well-being at heart. As followers, Marines must be fully convinced of their leaders' integrity.

Both Greenleaf (1970) and Wheatley (1999) promote the concept that a leader possesses courage to recognize the great human capacity that exists in others. But, Wheatley (2002) also takes servant leadership to mean a search to find each other. Fixation should not be on activities that repair things, but rather on the process of bringing people together. Like Senge (2006) and DePree (1989, 1992), Wheatley credits trust for the possibility of finding one another and for raising expectations to unimaginable heights because it encapsulates a belief in the potential of others. Collins' (2001) central point echoes the same credence by describing the level five leader as one who focuses attention away from his own ego toward the success of his organization. It is learning the difference between the ego and the spirit (Chopra, 2001; DePree, 1992).

Formative Servant Leadership

I viewed my appointment as principal of a small, urban Catholic school as an authentic practice ground for analyzing how I exemplified the elements of servant leadership. But, was I compelled to serve others first, build community, and embrace a sense of stewardship by a sense of duty or was I devoted to the theory of servant leadership for my own sake? I believe I acted on the principles of servant leadership because I first focused on the highest needs of teachers. Student achievement meant a movement of teachers beyond mediocrity of instruction. Teachers learn first became my motto.

Confident that the model of differentiated instruction served a collective value for all, I respected the pliability and strength of teachers' openness to their role as learners. I also recognized and benefited from my past mistakes of leadership. I learned along with participants to share resources, support teachers' growth with patience, and admit my need to research wide and deep. It followed naturally that I might encounter the tension acknowledged by Senge (2006).

As such, I avoided looking for answers. Instead, I greeted teachers with the words, "Tell me about ...," because I wanted to respect and encourage conversations. In Cycle 1 of this action research, I attempted to support the learning of participants through shared readings and discussions, but I could not insulate them from the realities of change. By leading change, I determined that my own personal growth meant the empowerment of participants to realize their potential as change agents and leaders.

Of course, I kept in mind that in the milieu of Catholic schools for over a century, teachers lived the tenets identified in the servant leadership framework, but they rarely

expected to be identified as leaders, especially as change agents. However, just as Greenleaf (1998) professed, servant leadership began with the natural feeling that one wants to serve first and service flowed out of the tradition of Catholic school education, especially service to the poor. Therefore, with a penchant toward this leadership paradigm, I empowered teachers to meet their personal mental models within the change process through dialogue, shared readings, and workshops.

Throughout, I professed being a servant leader rather than a leader in the control others (Greenleaf, 1998; Hackman & Johnson, 2009; Reeves, 2004). To this end, I often positioned myself at the center for decision making to promote a greater sense of efficacy and responsibility in teachers. But, I never abdicated my accountability. Instead, I encouraged teachers to take risks to learn and share the tenets of differentiated instruction. It energized me when teachers experienced success as leaders and received credit for their achievements. However, I did not give up leadership by sharing. If anything, knowledge and behavior transformed everyone through the language of leadership.

For instance, through professional development activities, I discovered teachers' leadership potential in opportunities that gave empowerment to their creative genius. However, to unfold a culture of participatory, non-hierarchical leadership, conditions must naturally exist. As it happened, professional development increased participants' breadth and depth of knowledge as I shifted the school's history of top-down leadership from the hierarchical pyramid to the curves of a circle (Kouzes & Posner, 1987, 2002; Marzano, 2003). Circles, as symbols of collaboration, mirrored the pathways of the labyrinth as we searched for equality and a common purpose to learn best practices.

Building Servant Leadership

Whether I made sense of my world retrospectively through positive or critical reflections, I constructed my future by looking at past experiences. L'Engle (1996) reminds us that if we limit ourselves to the age that we are, and forget all the age that we have been, we diminish our truth. Not surprisingly, my past experiences served as fieldwork for a servant leadership structure.

For instance, the combination of my family culture, the link to experiences in many school settings, and a proclivity to serve fortified my inclination to work for the good of others. Further, my education in a Catholic elementary school, high school, and college placed me in a milieu where the gospel message of Jesus as servant leader permeated each school's philosophy and mission statement. It is also significant that, according to the old stories, the empowerment of the assembled believers during the time of Jesus appeared grounded in a servant leadership paradigm.

Therefore, if leadership is rooted in my past and the best predictor of the future rests in my past, then the memory of my fourth grade teacher summoning me to monitor a first grade class remains powerful to this day. I would like to believe that the teacher recognized my potential to lead with diligence. Likewise, as captain of the girls' school choir, I developed a strong work ethic out of a sense of duty. I was the only choir member who, despite snow, sleet, or freezing temperatures, never missed singing the 6:30 a.m. Requiem Mass. I never sought recognition in these childhood instances. I just liked to serve.

Service became so deeply anchored within me that I not only embraced the gospel message to serve, but I also internalized President John F. Kennedy's vision to give of

oneself on a larger scale. In many ways, the vitality of that time resonated at a persuasive level for me. I made a vocational decision based on the ideals of political leaders and the dedicated teachers who inspired me to find meaning in life. Thus, along with five of my classmates, I accepted the fundamental charism of the Sisters of Charity by entering their religious community. I embraced a life of service and a devotion to the paradigm of servant leadership.

But, my choice to leave home and family at age 18 was not exceptional. It was an era when the Catholic Church successfully inspired huge numbers of its youth to become servers in its mission through a commitment to the priesthood or religious life. Moreover, there was a natural progression of finding ways to serve for the sake of others that was modeled daily within my own family. Of my three older brothers, two joined the military service and the third entered the seminary to study for the priesthood. Senge et al. (1990) believe there is a connection between what is and what we would like. In my ideal world, I wanted to serve others.

Distinctive Attributes

The study of leadership within the context of this action research project enlightened my understanding of the strong parallels between the mission of my religious congregation and the characteristics Greenleaf (1998) enumerated as a servant leadership platform. In 1859, for instance, my religious community began its teaching mission with almost identical dispositions as tools for an effective Catholic school leader: stewards of human resources, builders of a just society, supporters of the social purpose of education, and advocates for systematic improvement. Thus, as a member of a religious community

or as a school leader today, the practice to reflect upon the values and beliefs of servant leadership still inform the motivation for my leadership behavior.

Thus, with a commitment to engage teachers in an exploration of differentiated instruction, I created opportunities for shared leadership and to learn regardless of challenge or position (Hewitt & Weckstein, 2011; Opitz & Ford, 2008; Tomlinson & Allan, 2000). Learning opportunities occurred during weekly faculty meetings, selected teacher presentations, attendance at conferences, and media clips on the philosophy and principles of differentiated instruction. To differentiate instruction was not mandated, but the framework necessitated a design of professional development to encourage each participant's individual capacity to learn and accept changes in instructional practices.

Behavior becomes more ethical when a great thing, not one's ego, is at the center of attention (Covey, 1990; Palmer, 2009). As principal, I promoted differentiated instruction, but the activities and dialogue of participants pushed the exclusive one-size-fits-all instruction to change one-step at a time. In the process, we faced challenges, but I encouraged teachers to air grievances because I put trust in the virtues of differentiated instruction, a collaborative workplace, and participants' dedication. It took everyone to create a climate for growth and opportunity.

I listened with empathy to participants, Rachel and Deborah. They believed their traditional instructional model adequately prepared students for this new century. It took months of patience, dialogue, and journal writing, however, before the two teachers acknowledged that academic issues of inequality and inequity prevailed within our school. With a better understanding of differentiation and greater efficacy, however, they moved to change their dedicated pedagogical practices.

Servant Leadership Model

The list of servant leaders is long and impressive. But, in addition to my brother, I found servant leader qualities in my mother compelling. No one uttered the word leader when speaking of my mother, but an encounter with such a strong, deeply caring woman gave witness to the essential traits of a servant leader.

My mother did not face armored tanks, but as a young woman, she risked her life to save an elderly woman from eminent danger. Newspapers acknowledged the story of her bravery, but my mother never spoke of the incident. She lived to make life better for others and her actions came from those relationships. Indeed, although not born with power or privilege, my mother possessed a stewardship and strength difficult to emulate.

When I was a child, my mother planned a train trip from New England to California so her six children could experience the newly opened Disney Land, the magnificence of the Golden Gate Bridge, and along the route, the Grand Canyon. Despite limited resources, my mother aimed to elevate our global awareness. My mother orchestrated an expedition with quiet fortitude. For me, it categorized the full depth of her strength. Is not gratitude also at the very heart of servant leadership (Baker & O'Malley, 2008; Palmer, 2007)?

As I examined my leadership capacity and structure, I realized my mother exhibited the purest version of a servant leader in her quest to improve the quality of life for her children. My mother remains my ideal model of leadership. Each day, her spirit helps me find my voice in the beauty and harmony of interconnected relationships.

Manifested Characteristics

Research tells us that a servant leader is one who empowers others to recognize the talents they already possess (Culver, 2009; DePree, 1989, 1992; Greenleaf, 1996). I think of a servant leader in terms of caring. Surely, we may not always remember what someone says or does, but we do not forget how they made us feel (Anderson, 2005; Humes, 1991).

An illustration of how a teacher perceived care came from Abigail, a pre-kindergarten teacher. She is the beautiful mother of two adult children. As an interviewee for this action research study, she revealed that when we met on a hot July morning to first discuss the philosophy of differentiated instruction, I asked the secretary to hold all telephone calls. Abigail spoke of that lucid moment in an interview two years later. She said she never forgot that meeting and how special she felt as an educator of very young children. Abigail assumed herself unworthy of such undivided attention because she worked with pre-school children.

This extraordinary, yet humble teacher illuminated the holiness of others' personal dignity. Abigail also reflected the fragility of our school's culture as she opened my heart to the true value of listening. Batten (1989) says that we must care enough to really listen positively. This, he asserts, means respecting people for who they are and for their contributions. At a later time, Abigail served as the quintessential model for her design of innovative differentiated lessons and technical excellence.

Feminist Leadership Journey

Senge (1990) asserts a connection between what is and what we would like. As a change agent for school improvement, I needed to nurture or, more succinctly, open my

heart to followers (Baker & O'Malley, 2008; Noddings, 2005; Sernak, 1998; Wheatley, 2002). To be effective, I recognized how the theories of servant leader and feminist leadership intertwined. Alas, my proclivity for balance spurred momentum because I believed the care of servant and feminist leadership are the bedrocks of successful education (Cantando, 2009; Noddings, 2005; Wheatley, 1999). Hence, although my theory-in-use appears primarily rooted in service, I achieve balance in the realm of feminist leadership, the second emergent force of my leadership platform.

Key assumptions exist within the feminist theory paradigm. Researchers suggest men in leadership positions often seek to accomplish goals while achievement for women leaders builds connections between and among individuals (Baker & O'Malley, 2008; Batten, 1989; Gilligan, 1993; Noddings, 2005). Nevertheless, researchers also support high expectations for personal growth for everyone when trying to care

To me, feminist leadership is not solely meant to embrace the masculine spirit or to preserve a man-made world. In my case, it means to infuse the elements of feminist behavior or nurturing into one's activities regardless of gender as borne out within my own family. As a feminist school leader, I stretched my efforts to care, but I also worked within the structure of goals. One example involved a single mother of a third grade boy who shared she was dying of AIDS. Who would take care of her son? Compassion gripped me as I created goals that could ease her worry. Unfortunately, we cannot do all that we aspire to do. The boy's mother died three weeks later and he left our school to live with a distant relative.

Caring also dominated my outreach actions when a recent graduate received a prison sentence, or the time a family became homeless. I attempted to visit the prison, but

met with more success when I found an apartment for our family in need. Hence, as servant leadership built an individual's sense of worth, aspects of feminist leadership gained balance through my penchant to care.



Figure 3. Leadership Platform.

I cared for teachers' construction of pedagogy and personal growth through the framework of professional development. As such, I believe my feminist leadership did not merely shift, but rather merged with the tenets of servant leadership. If Greenleaf (1996) taught us anything, it is that servant leadership is a desire to serve others, but he made it clear that it takes enormous courage. It also takes courage and balance to care.

Could I promote equity and instructional equality for every learner without courage to fight the good fight for teachers' understanding of differentiated instruction? No, I needed courage as a connecting thread throughout my labyrinth journeys to serve, appreciate, and to open my heart to others. But, it also took pure grit to break down barriers to change the status quo.

How could I expect participants to be more open and willing to learn and grow than I? As the school leader, I committed to my personal mastery by reading over 50 leadership books from the worlds of business and education, enrolled in graduate courses at a local university, attended two national educational conferences, and practiced listening skills with diligence.

Moreover, to evolve as a learning community, an ethos of care for teachers must prevail (Glickman, 2002; Marzano, 2003; Noddings, 2005; Wren, 1995; Zepeda, 2008). Therefore, I sought balance to maintain harmony within our organization. Caring, connectedness, sensitivity, and embracing an individual's expectations are considered key factors of a feminist leader (Gilligan, 1993; Kouzes & Posner, 2002; Noddings, 2005; Sernak, 1998; Wheatley, 1999). Central to the success of any meaningful growth or change is the establishment of clear expectations about behavior.

Feminist Leadership Characteristics

In many ways, I desired my journey of care and collaboration to mirror the mission statement exemplified in the leadership pledge of the Marriott Corporation. According to Batten (1989), each year, leaders in the Marriott Corporation rededicate their pledge to excellence in leadership. Leaders promise to set the right examples for workers by their own actions in all things, show a sincere interest in individuals, appreciate workers' efforts, praise accomplishments, and use every opportunity to teach workers how to help themselves advance in skill level and responsibility.

Confident that care motivated my behavior, I also ascribed care with gratitude to the belief that an effective leader encourages the hearts of individuals. Articulating an ideal self on the path toward a leadership of care requires self-awareness (Batten, 1989).

Hence, as a feminist leader, I balanced power with care and responsibility with nurturing. The balancing exercises helped articulate a vision for pedagogical transformation.

Although they seldom agreed, I encouraged participants to explore one or two elements of differentiation and to focus on a single subject area. In their eagerness to please, however, they attempted to differentiate instruction for all subjects – an impossible goal. Further, although it took months of interaction with teachers to expand our professional horizons, an ethic of care became the gateway to accept a renewed pedagogy.

Schools are special places in which people care about teaching and learning, and like some organizations, schools can transform into small families (Sergiovanni, 1992). We almost became one of those schools through this action research project. Could I believe authentic leadership emerged from the core commitments within my leadership actions, not from external tomes or mandated standards? I cared about teachers' professionalism as educators. I encouraged participants to grow their knowledge.

Above all, by distributing literature, showing relevant videos, and providing workshops within the school setting as well as beyond, teachers' capabilities flourished. Most teachers trusted my eagerness, patience, and guidance to help them personalize learning. But, along with trust, I felt compelled to care or as Sernak (1998) wrote, to be a vehicle for giving care. I wanted my actions to perpetuate a learning environment bursting with trust and respect for everyone (Baker & O'Malley, 2008; Covey, 1990; Stephenson, 2009).

I am confident an example of care coupled with knowledge emerged when 95 teachers from five neighboring schools attended a conference on differentiating

instruction at our school. Acting as ambassadors, the project participants conducted mini-workshops called ‘Goldmines of Ideas’ for our guest teachers. The opportunity to showcase their understanding of differentiated instruction resulted in the action research participants recognizing the distinction between professional development knowledge and real life teaching knowledge. Not only did they rejoice in the positive responses from visiting teachers, but they soared to even higher expectations for themselves. In short, our study and research was put to work and it felt great! One may say learning about differentiated instruction began at faculty meeting discussions, but it reached a level of success during the five schools’ conference.

Feminist Leadership Support

In feminist leadership, caring in a broader sense means modeling, dialogue, and practice (Kouzes & Posner, 2002; Noddings, 2005; Wheatley, 1999). But, leaders must know their own boundaries before venturing to deal with the culture and values of others (Sernak, 1998; Wheatley, 1999). To achieve this, I articulated my ideal self on a pathway toward becoming a competent feminist leader through reflection and journal writing. I never intended to work against the patriarchal order of a Catholic school, but rather to bring the experiences of the women and girls within our organization to full light. It was never a question of how many male teachers worked in the school or the old prejudices against women, but rather to value women’s voices in human development. Gilligan (1993) called this a potential revolution, but I simply wanted their voices heard.

Being a reflective practitioner involves new insights, but it also permits personal risks (Goleman, Boyatzis, & McKee, 2002; Osterman & Kottkamp, 2004). Yes, I acknowledged the anxieties and fears within me as a leader, but I survived through the

strength of prayer, truthfulness, and drive. Reflective practice strengthened my fight to be a leader who honored collaboration, but it also grounded me in a new way of thinking about connections. I held the premise that our school participants needed to work and to live in relationships, not in the isolation of a classroom in which they often took refuge.

Similarly, along with a reflective mindset, I kept a journal to record daily encounters and unravel authentic ways to modify my behavior. This practice illuminated my integrity and respect for people along with my openness to change. Without a doubt, a faithfulness to writing served as a powerful source of renewal. I purchased a beautiful journal book with a soft red cover that I loved to hold. I intended to enjoy the art of writing and make it a peaceful experience.

Culture of Care

Researchers, in an effort to examine a culture of care within different school settings, named a caring school as an open climate environment (Noddings, 2005; Palmer, 2007). It is about even the smallest of children yearning for approval. It is an educational setting supportive of cohesiveness and positive learning.

If this is the case, a snapshot of my principal's office revealed a fabric of care through the artifacts of stuffed animals, small rocking chairs, landscape paintings, children's books, and a Royal Dalton tea set. Although only artifacts of the place, they mattered to me in terms of a warm school culture. Being served a cup of hot tea by the principal revives one's spirit! Competent educators offer their expertise, care, and talents in a true spirit of co-responsibility for the success of all learners (Baker & O'Malley, 2008; Sernak, 1998; Zoul, 2010).

I could not count how many times Luca (pseudonym), a four year old boy adopted from a Central American orphanage, took his daily rest in my office. Luca disrupted his classmates during nap time with ease. Upon his arrival, I gave a mat, book, and a large German shepherd toy dog to Luca with a reminder not to sleep, but rest his eyes. Luca always slept.

To again illustrate a milieu of care, I share a story that weaves together servant and feminist leadership (Hackman & Johnson, 2009). For years, the teachers' dining room was located behind a wobbly partition within the students' cafeteria. Children enjoyed popping their heads into the teachers' area and waving as they headed for the girls' bathroom. Teachers never complained, but as principal, I felt passionate about respecting teachers' privacy and comfort.

It took an empty classroom, a minimum of four hours, gallons of golden yellow and autumn red paint, and five volunteers to create a showcase faculty lounge. The story is dramatized by a donation of area rugs from Home Depot, a conference table and leather chairs purchased from a Habitat for Humanity store, and several works of art from our library.

Although not the original plan, the faculty room moved beyond an oasis for hard working teachers to the school's portal into the world of differentiated instruction. In that risk-free domain, participants shared experiences, knowledge, values, and personal opinions as they explored the many dimensions of instructional practices. Fundamentally, I could not take full responsibility for the learning of all teachers, but I could work to create a caring culture of kindness, collaboration, and trust. Painting walls for a teacher

lounge served to break down the isolation walls of classrooms. We grew to share good food and lots of laughter. Tea and cookies always helped.

As a feminist leader, I often admired my husband because he personified the virtue of care (Hackman & Johnson, 2009; Noddings, 2005). He nurtured our four children by his quest for intellectual growth, sense of family, and a commitment to a life focused on a moral code of conduct. As an educator, he searched for truth on behalf of his students.

Armed with an unconditional ethic of care, my husband's behavior cultivated a genuine optimistic view for a healthy and happy milieu in his professional and personal life (Heifetz & Linsky, 2002). I carried his model of care into my school life.

Collaboration with teachers to uncover talents and acknowledge their value as individuals was easy. The empowerment of difficult teachers was not (Whitaker, 2010).

Nevertheless, a culture of care brought participants into circles of knowledge to address authentic instructional issues. Symbols of a circle represent collaboration. At the center of the labyrinth is the strongest geometric figure. Hence, as a circle of learners, we grew in strength and unity along symbolic labyrinth paths.

Transformational Leadership Journey

I believe a focus on care wrapped around my efforts to help teachers meet with success in the pursuit of professional learning. Thus, with teachers' growing responsiveness to learning about differentiated instruction, coupled with an evolving passion for nurturing one another's learning capacity, fluid connections between the framework of servant leadership and the platform of feminist leadership (Gilligan, 1993;

Maxwell, 1999; Noddings, 2005) unraveled within my work domain. More specifically, servant leadership anchored a solid foundation for my leadership platform.

At the same time, however, facets of feminist leadership remained the venue's cement (Culver, 2009). Thus, as servant leader actions generated knowledge and feminist leadership behavior nurtured that growth irrespective of participants' professional status, I organically uncovered transformational aspects of my leadership platform (Culver, 2009; Hackman & Johnson, 2009). Surely the compulsion to change instructional practices awakened elements of transformative leadership practices within me.

Elements of Transformational and Transactional Leadership

The current research in leadership abounds with articles and books describing transformational and transactional leadership. Beginning the foundational work outside of education, MacGregor Burns (2003) identified transformational leadership in terms of a relationship of mutual stimulation and elevation that converted followers into leaders and leaders into moral agents. Moral issues happened when the leader raised the level of human conduct and ethical aspirations of both himself and his followers. Within this context, both leader and follower rise to a transformation of personal goals and values. A higher aspiration emerges from their collective interest and extends beyond the follower's needs to be aptly met through a transactional style of leadership.

MacGregor Burns (1978) influenced leadership in the workplace when he coined the term transactional leadership. In a transactional leadership style, the leader controls what the follower wants in exchange for his services or for extrinsic motivations and rewards. There is a clear dependence on the leader to direct behavior and to solve

problems. For example, a teacher received a salary in exchange for the service of teaching.

Transactional leadership, therefore, commands and controls while the transformational leader projects a visionary stance that appeals to followers' better nature and moves them toward higher needs and purposes (Bolman & Deal, 2003). Despite their differences, researchers consider the best leadership a combination of both transformational and transactional. They asserted that no formula determines why one style of leadership should be the most relevant. By the same token, Sergiovanni (1990) professes transactional leadership may not necessarily stimulate improvement, but that the day-to-day operation of an organization gets carried out.

Leadership Within Education

MacGregor Burns (1978) termed transformational leadership in business as motivating followers to action by appealing to shared values. By the same token, Leithwood (2006) spent more than a decade to research the nature and effects of transformational leadership in schools. They connected the benefits of three traits relative to transformational leadership within a school setting: forming directions for visions, goals, and high expectations; developing people through intellectual stimulation; and redesigning an organization to include collaboration and building community relations.

Other researchers uniformly support transformational leadership as an effective approach for school leadership (Thurston, Clift, & Schacht, 1993). Transformational leadership may move a school from first order changes on the surface to a second order changes that deeply penetrate the core functions of the school. As such, I formulated a vision with teachers to explore best practices, stretch our brains through exposure to

research, and in the process, built a professional learning community (Culver, 2009; Zoul, 2010). I pursued teachers' growth through workshops, a book study for differentiation, and an embedded professional development program. More specifically, through dialogue and sharing, we focused on understanding the philosophy and tenets of differentiated instruction (Tomlinson & Allan, 2000).

Further, with earnestness, I sought to save our school in an era of Catholic school closures. To save our school, changes needed to be rooted in three ways: first, by building a culture of learning for differentiation, second, by supporting teachers' cognitive growth, and third, by a path for shared leadership (Tomlinson & Allan, 2000; Saroki & Levenick, 2009). But, it took a change process to fulfill teachers' individual needs for self-actualization, self-worth, and efficacy.

Realistically, I could not be transformative by myself. With the best efforts and creative imagination of this action research study, participants could propel themselves toward nurturing each other's intellectual capital and shared values (Sagor, 2000; Wheatley, 2002). They did just that.

Dialogue during faculty meetings emerged as the most powerful tool toward accepting the transformation of pedagogy. It was like the Berlin wall tumbling down! Participants actually shared common misunderstandings about differentiating instruction (Gregory & Chapman, 2007; Smutny & VonFremd, 2004; Tomlinson, 1999, 2001, 2003). Veteran teacher, Miriam once shouted, "I had to re-teach!" In moments, startled looks turned to laughter as a sense of freedom and courage entered our shared space. Miriam was close to retirement, but she never considered that option in her weekly plans or determination to improve instructional strategies.

Transformational Leadership Qualities

Researchers who explore characteristics of transformational leaders recognize striking similarities. Kouzes and Posner (1995) surveyed more than 1,300 managers to ascertain practices common to successful transformational leaders. According to Hackman and Johnson (2009), extraordinary transformational leaders are: creative, interactive, visionary, empowering, and passionate. Fullan (2002) adds similar, yet distinct, qualities to include: a strong sense of moral purpose, developing and sharing new knowledge, understanding the dynamics of change, emotional intelligence in relationship building, and a capacity for order and creativity.

Reflections on these qualities helped align my vision of an action research project through the lens of strong ethical behavior and the philosophy of differentiated instruction. I believed, also, that the needs of learners could be met by shared visions, personal mastery, and team learning (Senge, 2006). As such, the learning culture moved in a new direction, not via great leaps, but through listening, reflection, and the habit of assessing prior knowledge and experience (Appendix C Participant Assessment).

Hence, as a school leader with a proclivity for change, I welcomed the challenge to survive and thrive as the emotional intelligence (Robinson, 2009) of participants built team concepts and freed everyone to be creative without restraints. My intent to balance participants' capacity to change the instructional culture, however, also transformed my view of our change imperative (Fullan, 2001; Marzano, Waters, & McNulty, 2005). To hone a capacity for order, I maintained a journal of my reactions to people, circumstances, and situations and encouraged participants to do the same. Within this paradigm, I also read, researched, and meditated on collaborative decision-making.

Transformative Behavior

Raising my expectations as a transformative leader and despite the financial burden for professional development experiences, I invited three project participants to attend a Carol Anne Tomlinson conference on differentiated instruction along with me. Tomlinson, one of the nation's leading experts on differentiated instruction, shared the cutting-edge philosophy and practical application of differentiated instruction for our 21st century with humor and practical knowledge. The action research study participants ignited their individual pathways toward understanding differentiation with enthusiasm.

Reminded that collaboration remained central as teachers explored differentiated instruction (Gregory & Chapman, 2007; Tomlinson & Allan, 2000), participants empowered one another in a pursuit of knowledge at the following faculty meeting. Each teacher shared her Tomlinson conference experience with colleagues who, in turn, gained a practical understanding for the philosophy and practice of differentiated instruction. Two listeners actually envied their colleagues' personal connection to Carol Ann Tomlinson and requested permission to attend a similar conference. Nevertheless, all participants brokered a new mindset for instruction at our school.

As noted, collaborative change was not imposed. A commitment to a changed learning culture emerged through a gentle and ongoing pull (Marzano, Waters, & McNulty, 2005; Noddings, 2005; Sernak, 1998). Instructional routines of another century served as the glue for pedagogy until participants faced their lesson preparation without fear-based motives. In calling forth such consciousness, I witnessed connections of equality grow between grade level and pre-kindergarten teachers. In many ways, the

Tomlinson conference moved the action research project to a tipping point as the three attendees gained empowerment through their presentations to other project participants.

It took months to gain knowledge and build an intellectual capacity, yet I worried about teachers' satisfaction in their search for personal mastery (Senge, 2006). In that sense, as the cycles of our action research study continued, I shared with them that a school in the Midwest offered teachers from \$50.00 to \$500.00 to learn, practice, implement, and model new teaching practices (Cook, 2007). As a poor, urban Catholic school, we accepted that the intellectual capital derived from our morning faculty meetings served as compensation for hard work along with morning bagels, juice, and coffee. In the end, we found a great leap of authenticity associated with dedication and the art of reflection (Appendix D Reflection Instrument Form).

Participants shed new light on the quality of their integrity for it all centered on giving and receiving knowledge. I would like to think the genius of my leadership led to new knowledge, but if participants exhibited strong strands of transformative behavior to translate differentiation into a workable model, it also grew out of their relationships with one another (Wheatley, 2002). Indeed, this action research project inspired participants to work passionately for a meaningful cause and to gain new insights into the value of collaboration.

I contend that being part of a learning community engaged in changing practices gave deep joy to everyone. In many ways, it even generated rich fellowship beyond the participants to community members. Researchers attest that action research is a way to make practical changes, but it is also a way to make changes that address equity through issues of social justice (Izzo, 2006; Robson, 2002; Stringer, 1999.)

Presently, after years as a school administrator, state executive board member, and president of the county principals' association, I believe the characteristics of transformational leadership through small, but meaningful changes mirrored my behavior. Through the consumer lens of transformational leadership research (Baker & O'Malley, 2008), I found a beacon and an oasis within its distinguishing characteristics. I focused on each teacher's personal and professional development through dialogue and more frequent classroom visits to share stories of progress or impediments to change.

Essentially, I moved from a blaming pattern for poor instructional practices through knowledge to reveal both the problem and the solution. As Rohr (2008) points out, "Education is not the same as transformation" (p. 142). We also needed a reflective or contemplative mind to unlock the dialogue about differentiated instruction (Deal & Peterson, 1999; Robinson, 2009).

Path to Differentiated Instruction

At a deep level, we become what we believe. I could not demand teachers to differentiate instruction, but like Tomlinson (1999, 2001), I possessed a dogged, unremitting insistence on and support for differentiation. I simply expected the best from participants as professionals. Sometimes teachers stretched to reach goals, but I never doubted their intellectual capacities. In other words, teachers needed help to transform their one-size-fits-all instruction into a culture of responsive teaching in order to operate at the height of their limits.

But, what would happen if teachers rejected learning because my passion to transform pedagogy overwhelmed them (Covey, 1990; Tomlinson & Allan, 2000)? To address this possibility, I explored relevant literature and research links between

professional development and differentiated instruction beyond what I could imagine (Heacox, 2009; Marzano et al., 2005; Tomlinson, 1999, 2001, 2003). I focused more than anyone on understanding differentiated instruction, its basis in theory and research, and how systemic change (Senge, 2006) serves the needs of all learners. Moreover, I maximized the possibilities to allow participants to become more responsive to learner differences by sharing again and again the stages for movement toward differentiated instruction. The stages proposed by Tomlinson and Allan (2000) include the following: establish a need, articulate a vision, share common definitions, link differentiation and best practices, focus initiatives, plan support, and allocate financial resources. School change is complex, but a mutual vision establishes conditions to initiate change.

To support our vision, I connected to teachers' innate talents and abilities. I believed in teachers' genius. Further, as we shared the muddy waters of research from Dewey's principles of pedagogy to the work of Heacox (2009), participants appreciated the manner in which I paved the way for them through my own research. They, in turn, shared with each other through dialogue and book exchanges. Slowly and cautiously, participants understood my burning desire as a transformational leader (MacGregor Burns, 2003; Marzano et al., 2005) to do what was right for their professional growth. Thus, transformational leadership solidly fit as the bookends of my leadership platform.

Transformational Leadership Counts

For nearly 20 years as a school leader, I exhibited characteristics of transformational leadership through small, but meaningful changes. Reflection upon my past behavior and research confirmed this belief. A transformational leader supports professionalism in all domains of instruction by the cultivation and implementation of

best practices (Marzano et al., 2005). Researchers posit that a transformational leader's increased capacities and commitments result in teachers' extra effort and greater productivity (MacGregor Burns, 2003). Research also describes the ability of a person to reach the souls of others in a fashion that raises human consciousness, builds meaning, and inspires human intent as the source of power (Bennis, 1994; Chopra, 2001; Culver, 2009; Deal & Peterson, 1999; Fullan, 2003). According to Sergiovanni (1992), it is essential to know the norms that guide our behavior and give meaning to community life.

Further, the purpose of dialogue is the identification of core values, a commitment to continuous personal improvement, and to care (Nottings, 2005; Palmer, 2007). As this action research project explored pedagogical practices, participants acted more holistically about their personal and professional lives in two ways. First, the coming together in a communal manner facilitated collaboration through open and honest dialogue. This proved to be a reality as weekly breakfast faculty meetings evolved from a review of tasks to a gathering of educators ready to share instructional successes or their attempts to translate new ideas into practice.

Second, teachers' empowerment grew on a foundation of trust (Baker & O'Malley, 2008; Stephenson, 2009) and mutual respect flourished. We illuminated our clarity of purpose through a review of teaching practices, core curriculum standards, standardized test data, report card grades, and we listened. But, it was not enough just to listen. Entering into fruitful and thoughtful discussions, participants grew to appreciate the values, sentiments, and creativity of one another.

Laughter also became a meaningful vehicle to awaken participants' seeing, hearing, and knowing. Researchers posits that people only start dialogue about never

discussed subjects when they develop the reflection and inquiry skills to talk openly about complex, conflictive issues without invoking defensiveness (Collins, 2001; Senge, 1999; Wheatley, 2002). In point of fact, participants often responded to the uniqueness of each other through laughter.

Nevertheless, one teacher, Michal (pseudonym), possessed strengths that resisted any transformative aspirations. Although highly intelligent and capable, she fit some of Whitaker's (2010) categories of a mediocre teacher. She appeared oppositional to building genuine relationships with most of her colleagues. Further, the fallout for her lack of instructional preparations compounded the burden placed on the academic life of students and the expectations of parents. Thus, as we moved toward a meaningful professional development regimen with vigor, focus, and a communal spirit, Michal decided in the middle of the academic school year to take one giant step away from her position as teacher to begin a career outside of education.

Whether an ideological assumption or not, I believed almost every teacher holds some representative way to register judgment on matters of educational importance and that those judgments affect a school. As a transformational leader, I accepted that Michal refused to find common ground to honor the diversity of learners. Moreover, as my transformative leadership actions portrayed a deep commitment to differentiated instruction, I appreciated how other participants embraced a spirit of collaboration with their hearts. MacGregor Burns (1987) called this the end values.

Lastly, as researcher, participant, collaborator, mentor, I administered with the ambition to transform an instructional milieu with a focus on participants as knowledgeable agents of change. Kotter (2008) posits that when one senses the urgency

of a critical issue, action must take place in the present time, not when it fits a convenient schedule. Through observation, I recognized the instructional needs of teachers as critically important to learners and for the survival of the school.

In good time, I witnessed participants develop the habit of differentiated instruction as I lived the complexity of leadership to complete this action research project. Far more than I realized, leadership for change is contextual, complex, conditional, and skill-based (Janesick, 2004; Hackman & Johnson, 2009; Zigarmi, Fowler, & Lyles, 2007). Therefore, to make sense of leadership, I engaged in self-education and reflection to gain a proper perspective of my behavior.

Trust Mattered

The heart of collaboration is trust (Baker & O'Malley, 2008; Kouzes & Posner, 2002; Stephenson, 2009). According to Kouzes and Posner (2005), one is a leader if one does what one says one will do. The building of trust means building relationships (Fullan, 2003; Houston, Blankstein, & Cole, 2007; Sernak, 1998).

My responsibility to lead a school toward opportunities of equality for all learners helped me internalize how much teachers needed a culture of trust. Yes, trust matters, "But like any trust fall, first we have to trust the one we are going to fall toward" (Rohr, 2007, p. 200). As such, mental models and behavioral changes of participants in this action research project needed affirmation.

Yes, the culture of a school captures the identity of the school and the development of trust is crucial in the school's culture (Harris, 2006). Therefore, could we trust one another if we possessed a mission toward something extraordinary, that is, to transform the pedagogical practices of our school? Deep in my heart, I knew optimal

levels of reciprocal trust might emerge through shared experiences and moral imperatives.

I anticipated trust would help participants accept the labyrinthine journeys through truthful conversations, stories of change, and a concerned interest to listen with focus to one another. Essentially, we had conversations that took us to a place deemed unsafe – the instructional domain of one-size-fits-all. Wheatley (2002) posits that if one knows another's story, one gains the courage to start conversations about what really matters. She writes, "All change, even very large and powerful change, begins when a few people start talking with one another about something they care about" (2002, p. 9).

As leader to a new school, I never consciously forced change, but worked to know the people and culture of the community by building levels of trust. I quickly learned the names of faculty and staff members and attempted to gain their trust through a respect for their personal and professional experiences. In the process, I shared my background and beliefs. Moreover, I honored the integrity and work of the previous principal because leadership must build on the bedrock of trust and respect for the dignity of every member of an organization.

Thus, after months of hard work directed toward improvement, we acknowledged our "skilled incompetence" (Argyris, 1990, p. 14) and moved to being savvy students of best practices. Indeed, reciprocal trust challenged us and offered a realistic mission. As researchers reason, trust can only arise where people have deep interest in one another (Baker & O'Malley, 2008; Senge, 2006; Senge et al., 1999, 2000; Stephenson, 2009).

Leadership Platform Reflection

This action research project emanated from the need to help students meet with academic success through an equality and equity of opportunities. Throughout the first year, my care as a feminist and servant leader advanced my openness toward transformative behavioral patterns (Culver, 2009; Hackman & Johnson, 2009; Kouzes & Posner, 2002; Noddings, 2005). But, could I inspire participants to build a capacity to change instruction into something more wholesome for all learners?

Research indicates that transformational leadership represents the transcendence of self-interest by both leader and led. How, then, to proceed? Even my fellow principals questioned why I chose to challenge the status quo. A principal's daily responsibilities already consumed much of one's time.

First, I believed the culture of our Catholic school remained open to the possibilities of change (Cook, 2007). I integrated a vision for the equality and equity of teaching and learning through dialogue and in the cultivation of good listening (Gregory & Chapman, 2007). Further, reflective practices helped me examine reform efforts as I supported a collegial environment and actively engaged participants in change decisions (Izzo, 2006; Osterman & Kottkamp, 2004).

Within this context, moreover, I shared my passion to change pedagogical practices by building relationships of the heart and by a constant drive to overcome the barriers to fulfilling the promise of differentiated instruction (Kotter & Rathgeber, 2005; Palmer, 2007; Tomlinson, 2003; Tomlinson & Allan, 2000). Further, my respect for teachers' talents, skills, and efforts to understand best practices set a tone in which my actions spoke to our school's mission and vision. As such, movement toward change,

coupled with participants' dedication, turned a moral aspiration into an organizational reality.

But, charges Kotter (1996, 2008), change might feel like pushing a boulder up a hill, unless one knows a sense of urgency. Wheatley (2002) also asserts that the future comes from where we are and it will not change until the present is examined. But, through reflection or meditation, great human capacities move into action.

Thus, consequential to my capacity as a leader, I looked at the human capacity in Dorothy Day, cofounder of the Catholic Worker Movement, for inspiration. I learned from Day's actions that leadership is not only something in one as a person or in one's personality, but that leadership depends on where one is as much as who one is, and the company one keeps. In many ways, the emerging picture of the action research project reflected how one's personal value systems and the school context influenced my practice as a principal. In retrospective reflection, I embraced the chance to live out my values with a compelling moral purpose in connection with participants in the action research project.

To this end, my leadership appeared fluid as my proclivity to care, serve, and transform behavior strengthened (Heifetz & Linsky, 2002). In the process, cycles of change merged from one into another just as elements of my leadership style formed a tapestry of labyrinths. Thus, changes at different points consolidated gains and in turn, produced more changes.

Likewise, in concert with Tomlinson's (1999, 2001, 2003) theory of differentiated instruction, teacher participants explored the principles of differentiation in light of students' readiness, interest, and learning profiles with enthusiasm, flexible groups, and

the consideration of students' specific academic and personal needs. Tomlinson's work defined our blueprint for the promise of differentiated classrooms. There are many paths to follow in a change paradigm, but the cornerstone of our professional development solidified primarily from participants' spontaneous shared experiences, reflective practices, and shared leadership.

Chapter 3

Change Theory Framework

Fundamentally, change requires an effective vision and purposeful plan that includes a clear set of core values, commitments, and a compass to navigate the way (Barth, 1990; Senge, 2006; Sergiovanni, 1992). A leader must have a sound blueprint or model to establish direction, align people, and inspire others to accept change (Appendix E Conceptual Framework). Leadership is the engine that drives the change (Kotter, 1996; Tichy & Cohen, 1997).

Many models serve as a scaffold frame to plan for change in an organization. Hargreaves and Fullan (2009) describe three stages of change in education and then propose a fourth way – a change-in-action that can move education toward inspiration and sustainability. In the Hargreaves' model, changes in education first moved through three stages: an era of optimism and innovation of the 1960s and 1970s, standardization of market competition in the 1990s, and the call for more innovations and creativity in the early years of the 21st century.

The fourth stage, a theory-in-action, consists of five pillars of purpose and partnership and three pillars of professionalism. Key to this theory of change rests in the development of sustainability (Hargreaves, 1997; Hargreaves & Fink, 2006). Researchers also suggest a compelling moral purpose as the most important pillar for change. Ultimately, the fourth way builds inspiration and an inclusive vision to draw others into the change process through the strength of sustainability and inspiration.

In terms of inspiration for change, I turned to Senge's (1996) core disciplines as a solid and suitable change theory for this action research study. I believe the disciplines

identified by Senge (2006) surpassed the Hargreaves and Fullan (2009) stages in practicality, including the need for inspiration and an inclusive moral purpose to steer the system. For my change purpose, the five disciplines connected my future to my past. It allowed me to see the tapestry of pedagogical practices within a vision of collective responsibility.

Specifically, the action research project fit Senge's (2006) paradigm in the following disciplines: systems thinking, personal mastery, mental models, building shared visions, and team learning. I found the disciplines a no-nonsense approach to shift our capacity to maintain the status quo towards a shared vision of equality of opportunity for all learners. As such, the five disciplines served as a whole system model in which separate entities fused into a coherent body of theory and practice. Moreover, as a template, perceptions about pedagogy developed with a collective capability to share aspirations, especially within the scope of mental models.

Disciplines of Learning Organization

Senge (1996) posits that we can only understand a system, such as a rainstorm, by reflecting on the whole, not the individual parts of its pattern. The multiple events of a rainstorm in time and in space all connect to form the pattern. It is a system just as a school is a system.

Further, adds Wheatley (2002), advocates for change must turn to one another in simple conversations to restore hope and to harmoniously grow together as professionals. Whatever life the participants experienced, would the disciplines help us recognize we could not move ahead without each other? Indeed, we needed everybody's open heart, caring spirit, and creativity to experience the wholeness of this action research project.

Systems thinking. Senge (1996) describes systems thinking as a conceptual framework. It is a body of knowledge and tools that makes full patterns clearer. Business and other human endeavors are systems bound by invisible fabrics of interrelated actions. The other four disciplines fuse into a coherent body of theory and practice through systems thinking. The discipline of systems thinking, therefore, needs the disciplines of building shared visions, mental models, team learning, and personal mastery as described below to realize its own potential.

Shared vision. The building of shared visions, the second discipline, unearths a vision of the future that nurtures genuine commitment rather than compliance. In this new millennium, our site school faced judgments by outsiders on more than report cards or standardized test results. The image of our small, urban Catholic school rested on a caring environment, up-to-date teaching strategies, and the capacity to keep pace with tangible shifts in learning theories and practices that would take us into the future. But, we cannot catch up. Rather, we must be in the lead by capitalizing on mission, vision, action, and achievement (Cook, 2007; Zhao, 2009).

Presently, the once instantly recognizable system of Catholic schools fights the competition for the enrollment of students in this century. There is no question that the majority of Catholic schools struggle to provide a quality education, but they also cope daily with demographic changes and budget constraints. Currently, with public schools' mandate for school uniforms, a weak economy, and the growth of Charter schools, a declining enrollment in a Catholic school threatens closure.

At the close of this decade, will most Catholic schools be put out of business if we do not build shared visions and then continually surpass them (Cook, 2007)? If there are

unlimited successes, I contend we embrace a shared vision to maintain the vitality of Catholic schools for another one hundred years. But, a beacon of hope could fade fast. For example, seven teachers joined the faculty of the action research site school in the past five years when their respective Catholic schools closed. All dreaded a repeat of that catastrophic experience.

The message remained clear. Our urban school must be an exemplary school for the diocese to keep it open and for parents to make sacrifices to pay tuition. Researchers contend that the quality of teachers' instructional paradigms affects the success of students (Bolman & Deal, 2003; Deal & Peterson, 1999; Harris, 2006; Reeves, 2004).

Darling-Hammond (2000) attests the degree of pedagogical skills interacts with a teacher's subject matter knowledge to bolster or reduce his or her instructional performance. Other researchers in the field of education support similar sentiments (Fullan, 2001; Lambert, 2003; Sergiovanni, 1992; Tomlinson & Eidson, 2003). Tomlinson (2000) firmly agrees that no instructional strategy can compensate for teachers' lack of proficiency in the content areas.

Similarly, as I discovered how the instruction within our school reflected a broken system by clinging to the status quo, I understood participants needed to build on the strength of one another (Deal & Peterson, 1999; Wheatley, 2002). Hence, through this action research project, participants moved toward wholeness as they garnered strength through an interconnectedness of labyrinthine journeys of professional development. Culture, religion, and the environment of our Catholic school converged in a powerful way.

Further, the isolated and traditional one-size-fits-all instructional paradigm no longer meets the needs for many urban schools (Tomlinson & Allan, 2000). Based on the research, I believe meaningful, ongoing professional development could enhance participants' capacity to improve instruction, build efficacy with new knowledge, and gain empowerment through shared visions (Senge, 2006). In other words, our school needed a powerful framework of knowledge, instructional practices, and community building to move forward.

Team learning. Wheatley (1999, 2002) echoes a similar point in her view that the quantum world teaches that there are no pre-fixed describable destinations. There are potentials that will form into real ideas depending on who the discoverer is and how persistent one is to ask questions. Wheatley (1999) shared how a spider builds on the strength of its own web when damaged. The broken web is not destroyed, but built up again from within.

Team learning starts with communication through shared dialogue (Harris, 2006; Houston et al., 2007; Senge, 1996; Wheatley, 2002). The exercise is to suspend assumptions and enter into a forum to think together. But, the discipline of dialogue also involves learned patterns. If the patterns of interactions in teams impair the ability to learn or hold a capacity for defensiveness, they need to surface for learning to take place. As such, I found shared dialogue within the context of this action research project unraveled the defensive routines (Collins, 2001) as participants transitioned into team members.

Further, as a work ethic, collaboration helped govern teachers' behavior in the workplace. By the recognition of reality, including its power and force, participants

gained pedagogical development primarily through an acceptance of one another as learners. Shared dialogue first set the tone toward the creation of a collaborative workplace through a shift in participants' thinking. Participants needed team learning to support systems thinking, as much as honest dialogue needed good listening. By trying to understand what was being said, not what they wanted to hear, participants opened pathways to connect with one another.

Thus, months of dialogue and listening about instructional practices took root formally and informally between and among participants. Senge (2006) spoke of dialogue sessions as practice. We attempted to see all the parts of our mission, vision, and goals as a system, but this occurred only after teachers ceased to excuse their lack of knowledge and experience of best practices. Shared learning, listening, and values eventually transformed the way we worked.

Mental models. In the late 1970s, scholars viewed organizational change as a change of interpretive schemes, that is, the mental frameworks that individuals use to understand events (Bolman & Deal, 2003; Demers, 2007; Senge, 2006). The interplay of the systems thinking discipline and mental models did not shade reality, but represented a frame on an organization as well as tools for navigation. Nevertheless, Wheatley (2002, 2010) asserts that reality does not change itself because it needs us to act. For participants to acquire usable knowledge, they needed experience, practice, and a concept to give the action research project expectations. Thus, the development of their capabilities emerged as a common thread to improve practice in workshops, faculty meetings, and professional development sessions. The discipline of mental models, in turn, served as the underpinning for participants' personal self-development.

There exists, moreover, a direct correlation between participation and improved results (Wheatley, 1999). Further, there was no point in identifying expectations for participants without setting expectations for myself. Hence, the core ideas of Senge's (2006) mental model discipline integrated into my leadership practices as I expanded my research and reflective practice to better understand the principles and practices of differentiated instruction. This discipline guided my clarity of purpose in establishing priorities. Further, I examined my leadership actions through the prism of my espoused theories (Argyris, 1990) as I captured the complexity of voices within and outside our learning organization.

Moreover, as researcher participant, I searched for impressions of mental models to enrich an understanding of systems thinking (Senge, 2006). I found the business model of BMW offered much to ponder for educators. *Never stand still* promoted the all-new BMW 7 series. The company claimed to manage time-honored design values with forward-looking ideas. In other words, BMW wanted their car to be instantly recognizable with its continuous flow of maximum comfort, enhanced margins of safety, and driving pleasure. It reminded me of the Blue Ribbon School Banner to recognize a school's excellence. Surely, to achieve such status, the mental models of a school's community possessed disciplined actions.

Hence, to better understand our mental models, participants studied test data for the previous two years. They also viewed demonstration films of schools committed to equity and equality of instruction and shared research literature on differentiated instruction put forth by researchers (Heacox, 2002; Smutny & Von Fremd, 2004; Tomlinson, 1995, 1999, 2001). Engaged in dialogue about the literature, participants

acknowledged stories about the levels of student achievement, social and emotional performance, and the affective learning climate in schools of differentiation. However, only after months of reading and shared experiences did participants acknowledge the discrepancy between their one-size-fits-all instructional frame, their instructional mental models (Senge, 2006), and the need to explore the philosophy and tenets of differentiated instruction.

But, cautions Senge (2006), mental models may exist below the level of our awareness. Gaps may form between our mental models and reality. Should this happen, defensive routes may insulate an individual's mental models from realistic examinations.

Aware of this phenomenon, I listened as participants spoke of feeling unappreciated and vulnerable as educators. Without question, they blamed instructional problems on the previous administration, not themselves. I listened, yet felt profoundly struck by the interplay of teachers' mental models (Senge, 2006). How could I accept the practice of students lost in a classroom milieu in which teachers treated all students the same (Gregory & Chapman, 2007; Tomlinson, 1999, 2001; Tomlinson & Allan, 2002)? I could no longer bury the instructional issues of equity and equality of opportunity.

With reflection, I believed teachers' instructional domain could rise above the radar within the paradigm of this action research project. As such, my mental models transitioned along a continuum of change as I devoted time to think about the status quo and how learning together created new values, practices, beliefs, and attitudes (Senge, 2006; Wheatley, 2002, 2005). Further, as the action research project gave birth to the pedagogy of best practices, we confronted the brutal facts of our instructional practices (Argyris, 1990; Collins, 2001) and faced ingrained defensive pathways. We took critical

steps to examine the subtle patterns of our reasoning and with dialogue, recognized reality.

Personal mastery. Personal mastery is the discipline of clarifying and deepening one's personal vision (Senge, 2006). It is the learning organization's spiritual domain. In the world of education, it reflects teachers' commitment to the lifelong study of learning their craft.

With this understanding, I investigated the professional development workshops individual teachers or the entire faculty attended during the five years that preceded our action research project. Individually or in a group setting, we dialogued about their exposure to the themes of multiple intelligences, cooperative groups, learning styles, technological strategies, and in particular, elements of differentiated instruction. Yet, during classroom visits, I failed to observe a correlation between the participants' accumulated professional development experiences and their daily lesson implementation.

This phenomenon exemplifies why researchers argue that organizations must not just invest in tools, such as workshops, to be more efficient. Teachers need a voice to create learning opportunities for themselves as well as for students (Argyris, 1990; Baker & O'Malley, 2008; Fullan, 2001; Lambert, 2003; Noddings, 2005; Osterman & Kottkamp, 2004; Sernak, 1998). As such, an awareness of personal mastery through dialogue helped participants focus their energies objectively on the reality of their professional behavior. Moreover, as change took root, a flow of understanding and knowledge nurtured a sustainable and systematic manner through interconnections

(Csikszentmihalyi, 1990, 1993; Deal & Peterson, 1999; Wheatley, 1999, 2005; Wong & Wong, 2009).

Thus, within the frame of Senge's (2006) systemic lens, I observed how participants' expanded pedagogical knowledge and practice relied upon collegiality as professional interactions flourished. In the end, the journey of our organizational change helped participants discover their true selves as learners empowered to be creative and knowledgeable professionals. As an additional consequence, I shifted my habitual focus from students' learning and test data to that of teachers' intellectual growth and exposure to the best practices of differentiated instruction.

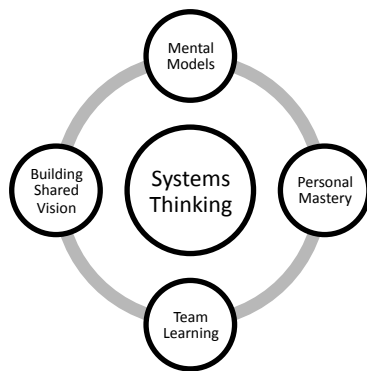


Figure 4: Senge's Disciplines.

Leadership and Change

When the Catholic school involved in this study opened in 1890, the teaching religious nuns turned innovative ideas into a systematic framework for the education of young women. It is evident how school leaders since that time kept an awareness of

innovation and continuous improvement as a focal point because the school flourished for over one hundred and eighteen years according to a review of documents. However, in the first decade of this 21st century, I felt a moral obligation (Baker & O'Malley, 2008; Fullan, 2003; Palmer, 2007) to help participants transform their instructional practices in order to meet the present students' diverse needs (Gregory & Chapman, 2007; Tomlinson, 1999, 2001; Tomlinson & Allan, 2000).

Accordingly, a change in educational practice included the examination of my leadership through the prism of beliefs, values, and attitudes (Culver, 2009; Deal & Peterson, 1999; Osterman & Kottkamp, 2004). In this process, I looked to Wheatley (1999, 2005) who defined a powerful biological strategy as essential for a living network change – the connecting of something to more of itself. This phenomenon is delicately illuminated in Wheatley's tactile observation of a spider web. Not only did this organizational consultant and researcher's sense the resiliency of the web, but she also observed how slight pressure in one area impacted the entire web. Wheatley recognized the profound truth that a spider does not tear her web to pieces to reorganize it, but rather, by the utilization of silken relationships, reweaves it. By this behavior, a spider creates a stronger interconnectedness in all directions.

In a like manner, I explored the manner in which our urban Catholic school demonstrated a state of interconnectedness. But, participants succumbed to group pressures for conformity to past practices. Changes in pedagogy threatened teachers along with the knowledge of Catholic schools being shuttered. Further, despite teachers' attendance at professional development sessions, their transition into a new century rarely brought new knowledge with practice or performance into their classrooms. We not only

needed the conceptual cornerstone of systemic thinking (Senge, 2006), but also the practice of reflection and the strength of each other to showcase the vitality of a shared vision (Cook, 2007; Osterman & Kottkamp, 2004; Wheatley, 1999, 2002, 2005).

For years, Argyris (1990) helped individuals examine reasons for their actions. He argued that workers insulate their mental models from examination because of their defensive routines. The practice of reflection in action, however, promoted an understanding of one's mental models and how they operated. With this awareness, I examined my own way of thinking about teachers' behavior and my actions toward their work ethic. With reflection, I examined my difficult change issues as well as factors encountered and shared by the action research participants. Change challenged us, but provided guidelines toward future actions.

Theories of Design

In terms of types of change, theorists have identified two levels: first order and second order change (Argyris, 1990; Marzano et al., 2005). First order change in an organization involves incremental, convergent change with a refinement of the existing structure that comes with experience. Second order change is transformational because it changes the core of an organization.

In his research on organizational behavior, Argyris (1990) uses the term Model I or Model II as a theory of design or theories of action. As participants, our espoused theory-in-action, Model I, consisted of beliefs, values, and attitudes designed to produce defensive consequences and reasoning. On the other hand, Model II as a theory in-use, revealed the actual theory we used when we took action.

In accord with the Model I theory-in-use (Argyris, 1990), I unraveled teachers' failure to accept their personal responsibility for pedagogical practices of equity and equality. For months, practitioners defended the status quo of one-size-fits-all instruction. As such, although unintended, counterproductive consequences supported their defensive routines.

To alter behavior or values, participants needed to experience the new theory-in-use called Model II or double-loop learning (Argyris, 1990). Movement toward Model II emerged through professional development opportunities for collaboration and collegial discussions about instruction and practice. Knowledge of differentiation in a learning enriched environment took root as trust imbued the system. Participants turned to one another to improve practice (Darling-Hammond & Bransford, 2005; Fullan, 2001; Fullan & Hargraves, 1992; Kouzes & Posner, 2002; Tomlinson & Allan, 2000; Wheatley, 2002, 2005).

At first, a change from our school's first order status to a second order change (Argyris, 1990), appeared less than desirable for me because I had just begun my affiliation with the learning community. Yet, participants' ability to bury their typical defensive reactions about pedagogical practices or blame others for maintenance of the status quo amazed me (Kotter, 2005, 2008; Tomlinson, 2003). As such, movement began from concept to action.

Change in perpetual motion. The essence of a professional learning community stems from a commitment for every student to learn and educators' openness to both continuous learning and related actions brought about by change (DuFour et al., 2006; Lindstrom & Speck, 2004; Marzano, 2003). An authentic professional learning

community consists of educators committed to working collaboratively in ongoing processes of collective inquiry and action research to achieve better results for the students they serve (DuFour et al., 2006). It operates under the assumption that continuous job-embedded learning for educators is the assumed key to improved learning.

Through this action research project, a journey of collaboration toward learning for all began with one teacher at a time until a team of participants formed (Hord & Sommers, 2008). However, it was no small task for participants to become agents or leaders for change (Zoul, 2010). Key to our change meant involvement (Wheatley, 2002, 2005).

At first, teachers reluctantly shifted their attention from non-instructional issues at faculty meetings to a committed interest in professional development sessions (Hewitt & Weckstein, 2011; Reeves, 2010; Zepeda, 2008). Further, as a deeper awareness to change pedagogical practices surfaced, participants' expanded their own knowledge and began to see opportunities to open doors to new visions of practice. Nevertheless, to change instruction could not be just an individual phenomenon for our school. Change is a social phenomenon.

Teachers, as members of a social system, reflected a living system (Fullan, 2001; Wheatley, 2002, 2005). Based on observations and investigations, Fullan (2001) asserts change, sought after or not, represents genuine personal and collective experiences characterized by anxieties of failure or success. Regardless of the situation, ambivalence surfaces in the transition because change gives birth to uncertainty and in some instances, chaos (Wheatley, 2002, 2005). Indeed, change may come about in several ways: imposed

on us, we volunteer to participate, or we initiate the change ourselves. Nevertheless, a situation may be intolerable or unsatisfactory (Collins, 2001; Fullan, 2001; Gardner, 2006), however, change in education, regardless of its simplicity, remains multidimensional

Assumptions of change. An assumption is that change must happen in practice along the path of at least one of three dimensions: new material, teaching approaches, or alteration of beliefs (Fullan, 2001). If the change does not involve one of the above, no innovation will occur. In the second year of our study, we benefited from all three elements due to a Federal grant of one hundred thousand dollars for professional development and instructional materials.

In essence, however, a key factor to improve instruction through change rested heavily on building relationships (Fullan, 2001; Whitaker, 2010). Indeed, face to face interactions, not bureaucratic controls, move people to change and expand their horizons for new solutions (Fullan, 2001, 2003). Real change in the action research project was reflected in the acceptance of new beliefs derived from professional development, but I contend, that occurred primarily through the context of collaboration and group support (Elmore & Burney, 1997; McLaughlin & Talbert, 1993).

Indeed, as I observed classroom instruction, I recognized participants' commitment to change pedagogy develop with fluidity. Participants took very small steps, but their capacity to share aspirations flourished in a climate of care, the habit of reflection, an appreciation of new knowledge, and professional efficacy (Deal & Peterson, 1999; Hord & Sommers, 2008; Tomlinson & Allan, 2000). However, I

questioned how or if in my tenure as a leader, I purposely affirmed teachers' instructional practices beyond the required observation and evaluation requirements.

In this new 21st century world, I felt compelled to nurture and affirm participants' personal and collective transformations (Baker & O'Malley, 2008; Bolman & Deal, 2002; Noddings, 2005; Palmer, 2007; Sernak, 1998; Stephenson, 2009) as we explored and shared elements of differentiation at profound levels. It mattered that participants sensed sacredness in their experiences. Wheatley (2002, 2005) describes sacred as a feeling that one belongs.

Although the experience took place many years ago, I reflected often on a professional development day designed to observe teachers' instructional lessons at a Japanese school located near New York City. Throughout the day, Japanese teachers observed their colleagues' instructional lessons to offer comments for the improvement of pedagogical practices. Daily observations of colleagues' lessons are part of the schedule and fabric of the school's culture and it made no difference when outsiders stood in the background to also observe a lesson.

Throughout that day, I learned the difference between professional development activities for Japanese teachers as compared to American teachers. They practiced with respect to become better professionals every day. In a society where education is highly valued, it was the natural habit for the Japanese teachers to invest energy in the actual experience of their peers and learn from each other's practice (Stigler & Hiebert, 1999).

The Japanese teachers also had the advantage of a culture in which virtues, modesty, and humility thrived. The Japanese students are expected to be obedient, respectful, and well-behaved (Cheng, 1987). In contrast, change to improve practice

appeared anathema to most teachers in my school prior to this action research process. But, we unearthed the moral imperative of our pedagogical practices and took a breath of fresh air toward creating a school culture that supported learning for all.

Practice of change theory. To lead our school in new directions through organizational change, I envisioned a viable community of learners eager to access a route to differentiated instruction within a professional development framework. But, could I as the school leader inspire others to embrace the challenges of an organizational change? A leader is someone with followers (Drucker, 1996, 2002).

Would there be followers for change equipped with knowledge, confidence, and a moral conviction for issues of equality and equity of opportunity under my leadership? Does a leader need followers or is it a question of an emotional catharsis that will move individuals to change a course of action? As an ordinary leader, I announced myself as an agent for change, confident that the old ways would not do because we faced a moral obligation to all learners.

Would there be followers for change equipped with knowledge, confidence, and a moral conviction for issues of equality and equity of opportunity under my leadership? Does a leader need followers or is it a question of an emotional catharsis that will move individuals to change a course of action? As an ordinary leader, I announced myself as an agent for change, confident that the old ways would not do because we faced a moral obligation to all learners.

In the final push, I recognized my leadership platform would be revealed within the scope of changes in participants' philosophy of learning and in their way of thinking about participative, self-organizing processes (Tomlinson & McTighe, 2006; Wheatley,

2005). Therefore, as the new principal of an urban Catholic school, I indulged daily in the operation of the school through the sights and sounds that framed the learning environment. I worked to absorb the wholeness of the culture through the complexity of relationships and I enjoyed the team work.

But, as an organizational change manifested itself through the core of professional development, I also recognized my role as a moral catalyst. Was moral leadership an imperative (Baker & O'Malley, 2008; Fullan, 2003; Palmer, 2007)? It takes courage to act, so I determined to thread my plan of action with a sense of urgency. Further, in our changing school environment, I knew if given the opportunity to explore teaching and learning literature, participants would accept the challenge.

Reflection

Not long ago, I received a grocery store receipt that read: *We give you our best every day*. It is my bookmark reminder of how teachers desire to give their best to students every day. As a school leader, I intuitively knew participants needed skills, knowledge, and support to be effective teachers and this involved elements of change.

Thus, as teachers acknowledged a discrepancy between one-size-fits-all instruction and the model of differentiated instruction, I also learned an approach in which teachers' accomplishments could not be forced. It may even damage credibility (Kouzes & Posner, 1987, 1995, 2002). What personalized recognition denoted is thoughtfulness (Palmer, 2007). To be sure, the connection of colleagues with recognition and a purpose helped participants build a disposition for change within a structure of frequent gatherings.

Within this paradigm, safe and non-threatening professional development sessions provided continuity and sustained authentic learning (Reeves, 2010; Zepeda, 2008). It provided a place for honest recognition. As such, attitudes changed and new professional practices emerged through the creation of a positive, trusting atmosphere and the cultivation of respect (Wheatley, 2002, 2005; Zoul, 2010). Never shade reality (Senge, 2006). I emphasized the structure of community building as a framework for our common future. We knew isolation presented a precarious situation, but with new knowledge and a growing sense of belonging, participants prevented a retreat into themselves as they committed to renewed pedagogical practices for all learners.

Chapter 4

Review of the Literature

The purpose of this action research project was to explore a sample of urban teachers' perceptions of how an investigation of the principles and practices of differentiated instruction changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the academic needs of their increasingly diverse students. Specifically, I endeavored to understand how or if participants' experience of professional development supported a propensity to change pedagogy through an exploration of differentiated instruction and their growth toward a culture of change. To conduct this action research study, I reviewed literature relative to professional development, differentiated instruction, change theories, and leadership throughout the data collection, data analysis, and synthesis chapters of this action research study. I used multiple information sources, primarily books, but also dissertations, Internet resources, professional journals, and periodicals. A time frame remained open-ended.

As such, a review of the philosophy and practice of differentiated instruction provided context for participants to gain knowledge, skills, and attitudes to change pedagogical practices. Literature on change theories and professional development structured knowledge and theoretical understandings about teaching and learning. Leadership capitalized on the unique situation of the site school to instill values that supported the successful implementation of new knowledge and the generation of positive energy for change initiatives. The reflective summary illustrates connections

between the impact of professional development and differentiated instruction, research implications, teacher empowerment and professional efficacy.

Topics reviewed to inform this action research study include the following:

Legacy for professional development, Perspectives on professional development, Legislation for teacher empowerment, Integration of professional development, Links to teacher quality, Imperatives for professional development, Investment in practice, Probing professional development for differentiation, Concepts of differentiated instruction, Participants' challenge, and Reflective summary.

As the new principal of an urban Catholic school proposing an action research project, I observed classroom instructional practices through a prism of best practices. Within three months, I shared my observation findings and a plethora of related material with the faculty along with an invitation to share in an action research project. Although reluctant at first, teachers volunteered as project participants to explore the interconnectedness of professional development, change theories, and the philosophy of differentiated instruction. Both before and following my petition for volunteers, I searched the internet for relevant information about best practices or differentiated instruction to limit my study. However, empirical literature on teachers' professional development specifically for differentiated instruction proved inadequate. To find scholarship on differentiated instruction within the paradigm of professional development for change, I concentrated my efforts on primary sources, including relevant classic works and landmark studies related to the topic of my action research study.

Professional Development Legacy

A decade of literature on professional development revealed a relatively under-explored phenomenon of teachers' proclivity or capacity to change instructional patterns (Glickman, 2002; Hord & Sommers, 2008; Marzano et al., 2005; Tomlinson, 1999, 2001, 2003; Zepeda, 2008). Disturbed by the observation of teaching tasks reflective of late 19th century classrooms, researchers in the 21st century address criteria deemed essential for effective professional practices. Physical factors as essential to change and the improvement of learning included schedules, structures that reduced isolation, effective communication skills, and collaboration (Tomlinson & Allan, 2000). School autonomy and people empowerment add to the improvement of professional practice (Maxwell, 1993, 1999, 2007; Osterman & Kottkamp, 2004; Pinchot & Pinchot, 1996).

Nevertheless, even in this new century, school schedules work to keep teachers apart. For numerous reasons, teachers face obstacles to plan multidisciplinary units or address issues of school climate. Schedules, in particular, appear in opposition to researchers' stance that professional learning for adults should be collaborative, job-embedded, focused on increased knowledge for all learners, and designed to promote collegiality among teachers (Elmore & Burney, 1997; Roberts & Pruitt, 2009; Stigler & Hiebert, 1999; Zepeda, 2008).

In this century, educators must arrive at new understandings just as other professionals did for centuries. In medicine, for example, doctors achieved wisdom when they discovered germs, not evil spirits, caused health problems (Hunter, 2004). To be sure, in professions such as medicine as well as law, the membership worked for years within a system of evaluation and accountability (Hord & Sommers, 2008; Hunter, 2004).

Expectations for medical personnel and members of the legal community included a review of research in their field, attendance at conferences, and the exploration of new methods and approaches related to their expertise. They also observed one another at their work and offered feedback to increase professional effectiveness. Who would go to a doctor who practiced medicine the same way for 30 years (Zemelman, Daniels & Hyde, 2005)?

In many school settings, however, an essential stimulus for learning appears rooted in the learners' own sense of purpose and efficacy. By the same token, educators understand the cause and effect relationships in teaching and learning. Teaching is not simply to offer knowledge. Pedagogy involves what learners' know and think as a starting point for new knowledge, social interactions with knowledgeable others at the learning level of readiness, and opportunities for reception to new challenges (Csikszentmihalyi, 1990, 1993; Sprenger, 2003; Vygotsky, 1978, 1991).

Such ideas appeared consistent with Wheatley's (1999) assertion that as a system inquires into the three domains of identity, information, and relationships, it becomes more connected to itself, the environment, and to other people in the system. These connections increase an individual's learning as well as organizational effectiveness. Hence, in a systems thinking approach to learning, as in the school site of this action research project, genuine vision prevails when people excel and learn because they want to rather than because they are told (Senge, 2006).

Further, not every educator is prepared by a professional education or one's experience to measure successful instruction by the metric of students' academic performance (Darling-Hammond, 1996, 2001). Nonetheless, the expectation for

educators to engage in sustained improvement of instructional practices fails to be the norm in many schools. In the past as well as the present, few educators broadly expand their knowledge base or gain a familiarity with educational research.

Perspectives on professional development. Prior to the 1970s, the history of in-service education for teachers focused on two forms of professional development delivery: consultants for the day or college courses. Further, in the traditional form of in-service for educators, the administration selected consultants and only rarely addressed specific problems that teachers encountered in their daily professional lives. As such, professional development failed to promote innovative practices in the classroom in a sustained manner.

The lack of robust professional development during the 1970s and 1980s remained at odds with the energy and quality of investment needed in school personnel. Indeed, the pattern to acknowledge responsibility for the academic and social growth of a school's personnel appeared in few school districts (Hord & Sommers, 2008; Reeves, 2010). Teachers referred to professional development activities as "Hit-And-Run" workshops because they lacked the element of sustainability. It followed that issues in real classrooms did not exist nor did teachers share pedagogical practices with colleagues.

But, with the demands on schools in the 21st century, students held to higher academic standards and teachers accountable for students' ability to meet those standards, professional development needed to connect to the life of practicing teachers. Nevertheless, collaborative learning remained a new phenomenon for educators in many schools despite research to the contrary (DuFour et al., 2006; Hord & Summers, 2008;

Osterman & Kottkamp, 2004; Palmer, 2007; Zemelman et al., 2005). Researchers contend teachers need updated subject matter knowledge, a repertoire of new teaching methods, and a connection to their students to improve the quality of instruction. But, professional development must be addressed with teachers through the practice of reflection, research, and professional networks, not to teachers.

Eventually, the focus on reflective practices and collaboration helped teachers accept the premise that new knowledge enhanced their professionalism and efficacy (Hord & Sommers, 2008; Zemelman et al., 2005). However, is it possible for professional development to inspire best practices, to uncover the latest educational findings, and to encourage teachers to incorporate new ideas into their instructional lessons? Teachers found positive experiences when they chose the topics, experienced hands-on activities, and received remuneration for their time.

Nevertheless, although seldom consulted regarding topics to enhance their professionalism, teachers must be inspired by the content. As such, attempts at professional development often frustrate teachers who seek practical solutions for their classroom problems. For this reason, Tomlinson (2003) asserts teachers' view of professional development appears as isolated fads that eventually go away if they wait long enough.

Today's research advocates a daily job-embedded, learner-centered approach to change the learning culture of a school (Lindstrom & Speck, 2004; Zoul, 2010). For the purpose of this action research project, I investigated professional development opportunities with participants to discover what we needed to change the instructional culture of our school. Without question, we needed professional development to be a life-

long, collaborative learning process to nourish our growth as individuals and as a learning community.

But, in the paradigm of this action research project, participants needed confidence in each other's capability for learning and trust to assume responsibility for their own learning. As leader, I nurtured reflective practice for serious trust to grow. Thus, to support our goal to explore the philosophy and practices of differentiated instruction, our energies focused on elements of systems thinking, engagement in an interactive, safe community, and a resolve to do what must be done (Collins, 2001; Senge, 2006; Wheatley, 1999, 2002).

To ensure successful pedagogy, researchers advocate a move from the pervasive one-size-fits-all instructional framework to a differentiated classroom designed to invigorate academically diverse learners (Gregory & Chapman, 2007; Sprenger, 2003; Tomlinson & Eidson, 2003). A differentiated or responsive classroom is an environment that offers learners multiple ways of taking in and expressing information. Ultimately, in the context of education, differentiation responds actively and positively to a student's needs in an effort to maximize learning.

Consequently, differentiated instruction rests upon an active, student-centered, meaning-making approach to teaching and learning (Gregory & Chapman, 2007; Smutny & Von Fremd, 2004; Tomlinson, 1999; Tomlinson & Allan, 2000; Tomlinson & Eidson, 2003). In a differentiated classroom, challenges and skills are in balance and well matched. As such, I believe educators meet current accountability standards as well as enhance professional efficacy.

Legislation for teacher empowerment. Although research on professional growth for teachers put down roots in the late 1970s and early 1980s, education was seldom in the public eye with the exception of the federally sponsored Teacher Center Program. President Gerald Ford signed into law legislation for the Teacher Center Program in October of 1976. With proposals submitted in the spring of 1978, the funded first projects focused on workshops, seminars, and symposia to train teachers at various locations. As an elementary school principal, I participated in Teacher Center workshops for two years and benefitted from the resources offered.

On an average, the funding for Teacher Centers amounted from \$100,000 to \$200,000 each year. This initiative lasted for approximately 1,000 days. Nevertheless, retrospective analysis revealed the Teacher Centers as the precursor to teacher empowerment. Individuals experienced a safe environment to express their own professional development needs and a coordinated human resource system built to ensure teachers' continuous professional growth.

Eventually, teacher professionalism moved to the forefront of national interest in 1983 with the release of Ronald Reagan's Commission of Educational Excellence entitled *A Nation at Risk: The Imperative for Educational Reform*. A number of conclusions flowed from this report, including the premise that America was at risk from a rising tide of mediocrity in our schools. Not long after this publication, the National Board for Professional Teaching Standards (NBPTS) was established (Danielson, 1996).

Researcher Hunter (1990) asserts that the field of education reached the status of a real profession beginning in the 1990s. During her career of 30 years devoted to the translation of the content of research into effective clinical professional practices and the

professional growth of teachers, Hunter maintained the same principles that increase student learning connect to the ongoing professional development of teachers. The final criterion of a profession, Hunter argued, is that its practitioners never stop learning better ways to meet their goals. Danielson (1996), challenged by the growing awareness for professional development, designed a framework or roadmap to enhance professional practice. The framework encouraged novices and experienced teachers to use assessments in the service of learning and teaching.

Thus, a relationship threaded around accountability, improved instruction, and a support framework by administrators who evaluate pedagogical practices. Given this point, in the period since 1995, the National Staff Development Council (NSDC) developed 12 standards for professional development to bridge context, process, and context standards (Zepeda, 2008). Could repeated cycles of inquiry and evaluation of standards expand teachers' capacity to improve instructional practices?

A further leverage for professional development made its debut in 2001 when the federal policy, *No Child Left Behind Act* (NCLB), became law. The policy addressed highly qualified teaching and provided power for research-based professional development (Leos, 2004; Zepeda, 2008). Accordingly, the United States spends between \$5 billion to \$12 billion each year on educators' professional development. Of note, participants at the school site for this action research project benefitted from federal allocations. Funds supported conferences, workshops, and educational resources to enhance pedagogical practices.

Regardless of the expenditures under the new law, however, researchers recognized that an evaluation of the impact of professional development remained a

critical factor. Provisions related to NCLB and the urgency for researched-based accountability was deemed expedient. It became widely understood that teachers needed content knowledge as well as pedagogical knowledge in order to be held accountable in their field (Darling-Hammond, 1996, 2001; Elmore, 2000).

Professional development integration. Researchers posit the cadre of standards increased teachers' capacity to teach and learn and, ultimately improve student achievement (Darling-Hammond & Bransford, 2005; Dufour et al., 2006; Fullan, 2008; Marzano et al., 2005). As such, contemporary understandings of professional development supported improved pedagogical practices, but when bureaucratic systems resisted treating teachers as highly skilled professionals, they failed to provide systematic supports, collaboration, or job-embedded learning experiences (Darling-Hammond, 1996, 2000, 2001). Indeed, education reforms based on standards and accountability need strategies to ensure teachers possess the essential knowledge and skills to help students succeed. Promoting real and ongoing learning for teachers held the perspective that teachers learned just as their students through study, action, and reflection.

Further, it is understood that new knowledge is affected by previous experiences, prior knowledge, and current beliefs (Csikszentmihalyi, 1990; Vygotsky, 1978, 1991). Therefore, examination and modification of practice remains an imperative for professional growth and to make challenges meaningful (Hunter, 2004; Kouzes & Posner, 2002; Lindstrom & Speck, 2004; Tomlinson & Allan, 2000; Zepeda, 2008). Researchers contend efficacy, methods of instructional practice, and professional development models reach beyond the one-day exposure to understand when and why

teaching methods should be used. Otherwise, teachers revert quickly to previous practices.

Elmore (2000) asserts, “heavy investment in highly targeted professional development activities for teachers and principals is a fundamental quality of strong classroom instruction” (p. 28). As the 1990s evolved, research on staff development illuminated the complexity of the change process and the structural elements of change models. Thus, the question: “Is on-going high-quality professional development the key to high standards of teaching and learning?” To become effective, a school needs a principal who fosters a strong learning community to integrate development and accountability seamlessly into a culture of school improvement (Fullan, 2001).

Given the consistencies in research, school improvement demonstrates a commitment to professional development as the primary vehicle to support school improvement efforts (Darling-Hammond, 1996; Joyce & Showers, 2002; Sergiovanni, 2001; Stronge, 2002). Elmore (2000) proposes the real issue for school improvement is not the governance, but in the quality and type of instructional practice. Elmore’s study of 1,000 teachers found three strong relationship features to change teachers’ behavior: focus on content, application of learned pedagogical knowledge, and activities designed to build upon each other.

Organizations need a commitment and capacity to sustain support for professional development to evolve and possibly thrive (Darling-Hammond, 2001; Eaker et al., 2002; Elmore, 2000; Glickman, 2002; Lambert, 2003). But, capacity refers to the knowledge, skill, and instructional resources that affect the interaction among students, teachers, and

the content. Hence, the essential elements for effectiveness must flow seamlessly through this triangulation.

Furthermore, as promulgated by the American Federation of Teachers (AFT), professional development is a continuous process of individual and collective examination of practice (Lindstrom & Speck, 2004; Osterman & Kottkamp, 2004). As such, exploration of new knowledge empowered teachers to make complex decisions, solve problems, and make interconnections across research theories, practice, and student outcomes. In sum, professional development helped structure element of comprehensive or “systemic” reform to improve pedagogical practices (Fullan, 2001; Hord & Sommers, 2008; Roberts & Pruitt, 2009; Senge, 1990; Stronge, 2002).

Link to teacher quality. Research affirms teachers improve the quality of their professional craft through the continuous improvement of best practices (Darling-Hammond, 2000; Guskey, 2009; Tomlinson, 2003; Tomlinson & Allan, 2000). In particular, job-embedded learning creates an overall benefit for professional development as teachers grow, evolve, and emerge in the reality of their classrooms’ continuous day-to-day labor. Researchers assert that approximately 20 percent of participants’ learning occurs at a professional development exercise while 80 percent of learning happens outside of the workshop setting.

It is the professional learning, however, not the process of professional development that effects growth (Fullan, 2008). A culture of deep learning is the heart of what is worth fighting for in a school. Research contends, however, that teachers’ face constraints in their attempts to learn within or outside their organization because few opportunities exist to engage in sustained learning, reflection, observation of colleagues,

or to envision more promising ways to practice their profession (Tomlinson & Allan, 2000; Zoul, 2010).

This conception suggests the practice of new skills as well as the creation of deep cultures that work daily on purposeful, continuous learning. Nonetheless, a focused collaborative culture for learning is one of the most difficult challenges schools face due to long standing elements of the organization. Tomlinson (2003) notes a school system of pyramidal governance created by bureaucratic approaches may force us to overlook special local conditions, particularly school-by-school differences.

Pedagogical transformations take incredible persistence, stamina, and optimum face-to-face interactions to accommodate a common vision (Kotter, 1996, 2008; Marzano, 2003; Wood, 1992). Teachers need time and specific opportunities to learn and practice new skills. As a multilevel and cognitive process, organizational learning allows participants to overcome barriers to reform or modify practices through collective professional development activities. Yet, research asserts that a superior formula for teaching concepts in the classroom setting does not exist nor is there a predesigned comprehensive school reform program in which the unique characteristics of every school is aptly addressed (Marzano et al., 2005).

Yet by implication, professional development remains the essential resource for the effective functioning of a school (Hunter, 2004; Marzano et al., 2005; Senge, 2006). In an ideal organization, these principles of professional development flourish: the promotion of on-site initiatives, exploration of new pedagogical practices, models of constructivist teaching, and a respect for teachers as professionals. Moreover, goals are within the context of a specific organization because a one-size-fits-all approach to

professional development leaves learning to chance (Guskey, 1994, 2009; Hargreaves & Fullan, 2009; Marzano, 2003; Tomlinson, 1999, 2003). Taking research at face value, I conclude the multilevel and cognitive process of learning within the action research project supported efforts to overcome barriers to reform through collective professional development activities.

Imperative for professional development. Presently, the licensure structure advocates a greater regulation of teachers to ensure their competence. That is, through the expectation for rigorous professional development, competent, well-trained teachers meet the needs of students. For instance, a study of policies for teacher education, licensing, hiring, and professional development in 50 states indicated a correlation between teacher quality and student achievement using data from the 1993-1994 Schools and Staffing Surveys (SASS), the National Assessment of Educational Progress (NAEP), and case studies (Darling-Hammond & Bransford, 2005). To link teacher learning to student learning, teachers use profession-wide knowledge to meet learners' needs. Research results confirm teachers certified or degreed in their field correlated with higher achievement results in reading and mathematics. Class size did not have an effect on higher achievement, but teacher's verbal ability, content knowledge, and professional development positively affected student achievement. The theory behind this equation targeted embedded professional skill development of teachers as avenues to improve the quality of instruction.

Accordingly, in a research study for The Pew Charitable Trusts by SRI International, seven urban school districts implemented standards-based systematic reform to communicate ambitious expectations for instruction. The study employed a

strong professional development system to effect changes in classroom practices (David & Shields, 2001). Results indicated an alignment of high-quality professional development improvement plans with a cohesive focus to increase student achievement. Likewise, in a study of 900 Texas districts, investments in the quality of teachers prompted greater student achievements than any other educational funding. Teachers' influence was substantial based on the combined measures of expertise, including education levels and scores on a licensing examination.

Investment in practice. An investment in teachers is a lesson appreciated by societies at the top of the international ranking scale in education. The countries of Finland, Sweden, Ireland, the Netherlands, Hong Kong, Singapore, South Korea, Japan, Australia, and New Zealand invest heavily in teacher preparation, support, and time for professional learning (Darling-Hammond, 2001). In Finland, for example, all teachers receive two to three years of graduate-level preparation for teaching paid for by the government. They also receive a living stipend.

Researchers identify Finland as the poster child for school improvement. For more than a decade, Finland prepared teachers to differentiate instruction and focus on higher order thinking skills. The Finns maintain proper training helps teachers be effective in teaching all students, including students who struggle (Buchberger & Buchberger, 2004).

Singapore, by the same token, is an excellent example of best practices. Teachers receive 100 hours per year of professional development and an option of three career paths – master teacher, content specialist, or principal (Asia Society, 2008). Further,

retention of students is not an option. Teachers are encouraged to address and solve challenges rather than give students away to other educators.

Probing for Differentiated Instruction

Research attests a correlation between change for a differentiated school and professional development (Heacox, 2002, 2009; Tomlinson, 1999, 2003; Tomlinson & McTighe, 2006). But, to create responsive, differentiated classrooms, professional development must first address teachers' own interests, needs, and potential within the framework of respect, empowerment, and trust (Stephenson, 2009; Tomlinson, 1999; Tomlinson & Edison, 2003). Further, researchers hold the assumption that without professional development to nurture a learning community toward change, improved achievement will not happen (Darling-Hammond, 2001; Deal & Peterson, 1999; Elmore, 2000; Lindstrom & Speck, 2004; Sergiovanni, 1992; Tomlinson & Allan, 2000).

Nor will achievement happen if teachers lack proficiency in content areas, remain unclear of learning goals, or require the management skills to orchestrate the functioning of an effective classroom (Appendix C). Because of the need to transform the instructional domain of the action research school site, the link between professional development and differentiation emerged organically as the central focus to change pedagogical practices. In addition, to effectively create differentiated classrooms, the culture of the school needed a way to think about whom, where, and how one teaches. As such, the attempt to explore differentiated instruction began with a reflection on the differences between students and ended with adjusting the goals and lesson objectives accordingly.

Concept of Differentiated Instruction

In the early 1990s, Dr. Carol Ann Tomlinson, researcher from the University of Virginia, first coined the term differentiated instruction to encompass a versatile collection of principles developed over a period of time, including flexible grouping and tiered activities (Tomlinson, 1999, 2003, 2006). By 2006, differentiation was predominantly, though not exclusively, a student-centered model of instruction (Tomlinson & McTighe, 2006). Referred to as a constructivist's paradigm, differentiation supports a powerful relationship between a teacher and student as they both become learners (Smutny & VonFremd, 2004; Tomlinson, 2003; Woods, 1992).

Students learn at different rates, possess different degrees of difficulty, different interests, and need different support systems (DuFour et al., 2006; Frey, Fisher, & Everlove, 2009; Heacox, 2002, 2009; Marzano, 2003; Sprenger, 2003; Tomlinson, 1999, 2001, 2003). For more than two decades, research focused on how learners differ from one another in need, readiness, interests, size, shape, and social development and the vital role of differentiated instruction in the learning process (Tomlinson, 1999, 2003; Tomlinson & Allan, 2000; Tomlinson & McTighe, 2006). As such, teachers study students to address learning needs and potential.

Research on differentiated instruction asserts an appropriately differentiated instructional framework as associated with improved learner achievement (Tomlinson, 1999, 2003). But, how do researchers or practitioners define an appropriately differentiated classroom? In the context of research, it is a teacher's attentive response to learners' needs through respectful tasks, flexible grouping, ongoing assessment, and adjustment (Tomlinson & Allan, 2000; Tomlinson & McTighe, 2006).

Within this pedagogical model, a teacher differentiates the content, process, or product of instruction according to students' readiness, interests, and learning profiles (Heacox, 2002, 2009; Smutny & Von Fremd, 2004; Tomlinson, 1999, 2003; Tomlinson & Allan, 2000). As such, differentiation involves responsive teaching and scaffolding of material to ensure effective learning for varied individuals (Gregory & Chapman, 2007; Marzano, 2009; Tomlinson, 1999, 2003; Tomlinson & McTighe, 2006). In short, differentiated instruction is a philosophy as much as an amalgamation of principles and practices (Gregory & Chapman, 2007; Hewitt & Weckstein, 2011; Tomlinson & Allan, 2000). But, with a class of 20 to 30 students, how is a teacher able to understand and accommodate students' learning profiles and plan accordingly?

This is the exact concern raised by educational consultant James DeLisle (*Edweekly*, 1/7/15) who claimed that, "Although fine in theory, differentiation in practice is harder to implement in a heterogeneous classroom than it is to juggle with one arm tied behind your back." The basis of his argument is that heterogeneous classrooms present an environment inherently antithetical to the learning process. He advocates tracked classes in which teachers can simply sidestep the complications of differentiated instruction much to the dismay of practitioners. Tomlinson responded with scientific, social, and research-backed evidence that to scaffold instruction can be the norm rather than an anomaly. She presented a thorough case for the existence of successfully differentiated classrooms across the country. Furthermore, Tomlinson (2001) reminds us that tracking students by ability usually results in students being relegated to racial and socio-economic pathways that perpetuate their inequality while celebrating the privileged and advanced students. She ends with a call for a "growth mindset" when it comes to

developing the capacity of teachers as well as students as learners, acknowledging that though differentiation is not easy, she's "never felt that teaching should be easy," either.

To add to this instructional paradigm, Gardner (1991, 1993, 2006), in his theory of multiple intelligences, posits learners differ in at least eight or nine intelligence areas. That is, they possess a number of relatively autonomous cognitive capabilities and each is designated as a separate intelligence. This is an evocative image, yet Gardner encourages teachers to be aware that students may learn better when they use their strongest intelligences. Again, how do teachers think and plan lessons in terms of multiple avenues to teaching and learning for students' varied intellectual needs?

From this perspective, participants in the action research project subscribed to the fundamental ideas of pedagogy in terms of their own capacity to understand and practice the principles and practices of differentiated instruction. For almost three years, participants attempted to weave new knowledge with a rigorous change attitude to acquire and apply differentiated instruction (Heacox, 2002, 2009; Smuty & VonFremd, 2004; Tomlinson, 1999; 2001, 2003; Tomlinson & Allan, 2000). As a consequence, the fluidity of efforts resulted in participants' installation of professional efficacy with reflection on instructional practices and empowerment through higher standards for professional performance. Further, just as students learn at different speeds, I recognized the need to accommodate participants' varying interests, skills, and readiness levels.

Participants' Challenge

Educators from preschool to the graduate level may find themselves challenged by too much content to teach as well as constraints of time. Not only content overload challenges teachers, but also content standards to specify what students should know. In

one study, an analysis of 160 national standards and state-level content standards yielded a synthesis of 255 standards and 3,968 benchmarks students are expected to master (Marzano & Kendall, 1998). If allocated 30 minutes of instruction to each benchmark, approximately nine more years of school would be required.

At its most basic level, NCLB impacts classrooms across the country. In the challenges set forth by this law, educators acknowledge an urgency to meet learners' needs regardless of background knowledge, readiness, language, interests, and academic diversity. From my perspective, I recognized the opportunity to give all students powerful curriculum, effective teaching, and the support through funding to accomplish deep learning. However, as a school leader for change, I learned my efforts to transform organizational behaviors needed the voices of teachers. Classroom teachers make all the difference to the climate and destination of students.

While not arguing the pros or cons of NCLB in this study, the profound reality of the demand for proficiency for all students enables educators to see the plight of those students falling under the umbrella of *partially proficient* or *below standards*. With a specific time frame to meet the prescribed goals of NCLB, schools struggle to help all students meet proficiency levels. But, to improve the performance of American public schools, NCLB insists that all students from around the country conform to the same standards and find the same right answers (Robinson, 2009). Hawkins (2004), in turn, questioned whether the achievement gaps on standard tests as well as higher dropout rates could actually be turned around with appropriate professional development.

Further, the National Association of State Boards of Education (NASBE) addressed the issue of instruction for all students. Their report encouraged school leaders

to develop statewide literacy plans. Once teachers receive support and skill development geared to individual student needs, they reported, teachers could achieve the goal to reduce student failure. Nevertheless, it came as no surprise to researchers studying school improvement for the last decade that, despite higher academic standards, more test-based accountability, and expanded school choice, almost one-fourth of schools in the United States received a failure status by the standards of NCLB (Meier, Kohn, Darling-Hammond, Sizer, & Wood, 2004).

In this review of literature for professional development and differentiated instruction, I found researchers agreed that the quality of student learning depended on the quality of teacher learning. Indeed, the attributes of high-quality professional development focused on teaching and learning to improve the equity and equality of opportunities for all students. In a perfect world, contend researchers, the most important investment a school makes is to ensure teachers continue to learn (Heacox, 2002, 2009; Hord & Sommers, 2008; Marzano, 2009; Reeves, 2010; Smuty & VonFremd, 2004; Strong, 2002; Tomlinson, 1999; 2001, 2003; Tomlinson & Allan, 2000).

The implications of learning suggest that well-prepared, capable teachers have the largest impact on student learning (Darling-Hammond, 2000). Nonetheless, research shows teachers' growth and development need more than the occasional day of in-service (Reeves, 2010; Smuty & VonFremd, 2004; Stronge, 2002; Tomlinson, 1999; 2001, 2003; Tomlinson & Allan, 2000). It is the habit of learning day by day that influences quality practices (Fullan, 2001).

Reflection

This action research study sought to explore a sample of urban Catholic school teachers' perceptions of how an investigation of the principles and tenets of differentiated instruction through embedded professional development changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the diverse academic needs of their students. The phenomenon of pedagogical practices within the school site illuminated three reflection questions which evolved into this action research project. First, prompted by an observed static instructional framework, did I possess the leadership capacity to create a professional development paradigm to support an understanding of differentiated instruction? Second, under my leadership, would teachers accept professional development as a gateway to change their pedagogical milieu? Third, how would participants perceive an exploration of the principles and practices of differentiated instruction changed their pedagogical practices?

From the start, research suggested effective professional development be job-embedded to understand the impact of student learning in a realistic setting (Brandt, 1989; Elmore, 2000; Fullan, 2001; Zepeda, 2008). In addition, research highlighted the importance of collegiality, content knowledge, and active learning, but also the capacity to learn from one's own professional work (DuFour et al., 2006; Hord & Sommers, 2008; Marzano, 2003; Osterman & Kottkamp, 2004). I could not refute the research findings within the context of this action research paradigm. As a community of learners manifested itself within this action research project, participants shared ideas and supported feedback as pedagogical practices, empowerment, and professional efficacy developed. As such, both positive and negative experiences revealed the accuracy of the

contention that participants needed an interconnection of place, vision, and each other for our organization to change.

For example, during a professional development conference on differentiated instruction hosted at the school, participants facilitated small group sessions for about 60 visitors from five neighboring Catholic schools. To my surprise, participants in the action research study embraced the opportunity to explain the purpose and sequence of activities for a framework of differentiated instruction. In turn, participants' presentations impressed and energized visitors with effective venues for transmitting an equality of opportunity for all learners.

The success of the conference seemed far-reaching as facilitators' sense of confidence soared and best practices took a forward leap. Nonetheless, over coffee the next day with the five principals from the conference, I learned the visiting teachers respected the concept of differentiated instruction, but an enculturation of different pedagogies appeared too comprehensive an endeavor for them. Whether a moral imperative or not, to change the status quo of their pedagogical practices would face them with challenges and they declined.

On the other hand, the conference helped the school site participants face the reality of how hard they worked to understand differentiated instruction. Change did not identify the perfect structure to teach and learn, but differentiated instruction transformed participants' mind sets as professionals. In turn, teachers continued to adopt the five disciplines (Senge, 2006) of shared visions, mental models, team learning, and personal mastery to increase their effectiveness. In the end, participants reflected upon two places in particular to go: first, to personal mastery or the inner ground from which good

teaching comes and, second, to the community of fellow teachers from whom they could learn more about themselves and their craft (Appendix D).

Palmer (2007) echoes Senge's *The Fifth Discipline* (1996), when he advocates for the learning organization where "people continually expand their capacity to create results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together" (p. 3). Researchers add that teacher knowledge and its correlation to continued professional growth remain significant factors relating to the success of teaching and learning (Tomlinson, 1999; Darling-Hammond, 1996). Hence, as human lives are organic and cyclical (Robinson, 2009), educators get multiple opportunities for new growth and development. Moreover, neither life nor this action research project remained linear.

To blossom as professionals, sense empowerment, and feel efficacy, learners need to turn to one another (Wheatley, 2002, 2005). With interconnectedness, we zigzagged through labyrinth journeys to listen well, explore ranges of our abilities, and never underestimated our human capacity. In doing so, the stratified, one-size-fits-all approach to pedagogy gradually ceased to marginalize the learning of teachers and students. Instead, teaching and learning changed from a liability to an asset.

Chapter 5

Methodology

This action research project maintained a two-fold purpose: first, to explore a sample of Catholic school teachers' perceptions of how investigating the philosophy of differentiated instruction through professional development initiatives changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the academic needs of their increasingly diverse students. The second, equally important purpose was to examine my espoused leadership platform through the filter of my leadership journey for differentiated instruction. This chapter describes the study's research methodology and discussions on the following:

(a) Rationale to conduct study, (b) Rationale for Action Research, (c) Rationale for Qualitative Design, (d) Rationale for Case Study Methodology, (e) Site/Location/Background Context, (f) Literature Review, (g) Participant Selection, (h) Overview of Cycles, (i) Data-Collection Methods, (j) Methods for Data Analysis and Synthesis, (k) Ethical Considerations, (l) Issues of Trustworthiness, and (m) Limitations of Study. The chapter concludes with a reflective summary.

Rationale to Conduct Study

I made my entry as the new principal of a Catholic school with a sensitive stance toward the apprehension of teachers and staff. I was not new to a leadership position, yet understood the dismay of the faculty upon my appointment. I was principal in a public school system, not in the domain of Catholic schools as my predecessor's legacy revealed. Intuitively, I dedicated time to listen, observe, and openly acknowledge teachers' commitment and hard work.

Nevertheless, in the beginning, every move I made appeared to be analyzed with skepticism even though I waited to discuss the school's agenda of mission, vision, values, and goals. According to Stephenson (2009), an early presentation of such an agenda would turn teachers away from me before I connected with them. Therefore, I worked to understand the school's learning culture and the manner in which teachers valued themselves as professionals.

Of course, I asked a lot of questions. But, it took months of faculty meetings and one-on-one encounters before anyone shared their stories or history as teachers in our urban Catholic school. Eventually, teachers unraveled their heart-felt work hypothesis. They believed teachers in a Catholic school worked harder and cared more about students than educators in the public schools. The inequality of salaries and benefits compared to public school teachers strengthened their assumptions.

Furthermore, for the past two years, budget constraints caused principals of many urban Catholic schools, not the affluent Catholic schools, to freeze teachers' salaries. Fear of the school being shuttered added yet another dimension to their boast of dedication. As their leader, I understood teachers' frustration, but continued simple conversations to discover their extraordinary potential for growth and development.

I augmented my exploration of the culture through informal dialogues to ascertain teachers' professional visions, instructional beliefs, and theoretical perspectives of learning. Teachers shared how they attended a variety of diocesan sponsored professional development workshops with teachers from other Catholic schools. The foci included cooperative learning, classroom management, differentiated instruction, and Gardner's (1993) theory of multiple intelligences. Despite teachers' good intentions, however, their

capacity to put theory into practice seldom, if ever, materialized. Teachers' cultural one-size-fits-all instructional paradigm exceeded its usefulness, yet it prevailed.

As leader, I recognized the need for a transformation of beliefs, postures, and mental models about teaching and learning. I believed an action research project through a systematic commitment to learn the principles and practices of differentiated instruction could address that need. From experience, I trusted differentiated instruction to be a driving force that allowed different pathways of learning for both diverse teachers and students. In addition, I believed an action research study in an embedded professional development framework could teachers' one-size-fits-all instructional paradigm, build reflective practitioners, and put down roots for a professional learning community.

Rationale for Action Research Design

As a category of research, action research is a disciplined process of inquiry conducted by and for those taking the action to improve or refine their lives or practice (Glanz, 1998; Koshy, 2005; Robson, 2002; Sagor, 2000; Stringer, 1999). It is aimed at social change, such as a specific problem within a setting that involves participants (Creswell, 2007; Koshy, 2005; Merriam, 1998, 2009; Patton, 2001). As such, action research methodology is absolutely appropriate to effect planned changes in an organization (Sekaran, 2003). Further, educators in a school may very well attempt to solve a problem in their school by studying themselves.

Lewin, (1948), a Gestalt psychologist, conceptualized and practiced action research as early as the 1940s (Izzo, 2006; Koshy, 2005). Driven by issues of equity or practical concerns within the field of education, Lewin's (1948) idea of action research has gained momentum since the 1970s. Work by Stenhouse (1975), a proponent of action

research in the United Kingdom, added to its appeal through the study of theories and practices of teaching. Argyris (1982, 1990) put forth action science as a theory and method to examine the reasons beneath our actions.

Consequently, action research remains distinguishable in terms of its application to influence or change some aspect of a practice by participants or the improvement of existing social systems (Koshy, 2005; Marshall & Rossman, 1995, Merriam, 2009; Robson, 2002; Sagor, 1992). The purpose is participatory in nature as actions lead to personal or professional growth. The basic tenet, therefore, is to contain an action agenda for reform in which the lives of participants, the researcher participant, or an institution may be changed (Creswell, 2007).

Others add that action research is action carried out with participants through a cyclical and participatory process to address practical problems, generate knowledge, and enact change (Glanz, 1998; Koshy, 2005). The action research of this study fits such a structure. Almost ideological, our project entailed an immersion in the everyday instructional domain of participants and through exposure to new knowledge, sought to discover and implement pedagogical changes. Above all, our journey into a systematic inquiry relied on participants' mind set, words, and observable behavior (Marshall & Rossman, 1995).

Regardless of definition, however, there exists a distinction between action research and traditional research (Stringer, 1999). Action researchers are not mere observers or reporters of a situation as a traditional researcher. In action research, there is an intimate connection between the way an action researcher looks at something and what is actually discovered (Sagor, 2000). Likewise, an action research agenda holds the

potential to help educators regulate their own performance and improve professional skills (Merriam, 2009; Sagor, 2000; Stringer, 1999).

The purpose, then, of this action research project is to explore a sample of urban Catholic school teachers' perceptions of how an investigation of the principles and tenets of differentiated instruction changed pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the academic needs of their increasingly diverse students. Through an understanding of differentiated instruction, participants moved to change pedagogical practices within an action research process specific to our setting and necessity. As an action researcher, I framed a paradigm for pedagogical transformations through professional development and empowerment of participants (Hackman & Johnson, 2009; Hord & Sommers, 2008; Tomlinson & Allan, 2000) and within the paradigm of a Conceptual Framework (Appendix E).

Further, an action research project became the most viable means to construct an ongoing learning process for the rebirth of pedagogical practices (Merriam, 2009; Sagor, 2000; Stringer, 1999). As participant researcher throughout the process, I collected data from journals, field notes, observations, interviews, and a focus group. Along with participants, I also analyzed concerns and planned professional development as the gateway to explore, comprehend, and implement differentiated instruction.

Rationale for Qualitative Design

There are multiple definitions for the concept of research. Merriam (2009) asserts that a common thread is “the notion of inquiring into, or investigating something in a systematic manner” (p. 3). Qualitative research is a study of things in their natural setting

with an attempt to make sense of a phenomenon in terms of the manner in which people make sense of it (Creswell, 2007; Marshall & Rossman, 1995; Merriam, 2009).

Key characteristics of qualitative research include a focus on process, understanding, and meaning; the researcher as primary instrument of data collection and analysis; inductive processes, and rich descriptions that portray the end product (Bloomberg & Volpe, 2008; Merriam, 2009; Rossman & Rallis, 1989). In addition, a qualitative research methodology allows one to enter the world of others and attempt to achieve a holistic rather than a reductionist understanding of an organization (Bogdan & Biklen, 1998; Merriam, 1998, 2009; Patton, 1990; Robson, 2002). Grounded in social constructivism, the research endeavors to understand the meaning people construct of their social interactions, cultural world, and their experiences (Bloomberg & Volpe, 2008).

Hence, a qualitative methodology approach (Marshall & Rossman, 1995; Merriam, 2009; Sagor, 2000; Stringer, 1999) lent itself to this action research project to discover, describe, and ultimately bring meaningful insights into the pedagogical practices of participants in our school. Indeed, the elements noted above flowed from a flexible design framework and participants' interactivity. Moreover, to reconcile the framework of pedagogy with responsive practices, a qualitative paradigm balanced the dynamic between the two entities.

Further, a qualitative design created pathways for me to listen to the stories of participants, learn about their lives in school, beyond the classroom, and expand the sense of community. Indeed, educators who listen well may illuminate human feelings and provide rich insights into one's actions (Koshy, 2005). Researchers, in turn, believe we

can change the world if we start to listen to one another (Baker & O'Malley, 2008; Kouzes & Posner, 2002; Loehr & Schwartz, 2003; Wheatley, 2003). To listen well became my participant researcher mantra.

Not surprisingly, my work as leader and researcher captured all my attention, yet I created time to systematically build my capacity to listen (Baker & O'Malley, 2008; Stephenson, 2009; Wheatley, 2002). I discovered the richness and excitement of participants' point of view and how they perceived themselves as learners and me as their leader. I possessed no inclination to judge pedagogical practices; I lost that. Rather, I worked to discover, mentor, and nurture those I served.

Indeed, I could not wait to interview participants or visit classrooms with a totally different stance. A qualitative research paradigm allowed discoveries that acknowledged connections between the observer and the observed (Marshall & Rossman, 1995; Merriam, 2009; Sagor, 2000; Stringer, 1999). I purchased beautifully bound journals for all participants, although only a few maintained journals as a source of reflection (Izzo, 2006; Osterman & Kottkamp, 2004). Nevertheless, through my practice of journal writing, I felt centered as a leader with a clear vision for a professional learning community (Hord & Sommers, 2008).

As noted, a qualitative research methodology (Marshall & Rossman, 1995; Merriam, 2009; Sagor, 2000; Stringer, 1999) framed the exploration of participants' pedagogical practices. The process challenged us to read and research best practices. Yet, despite the demands of the undertaking, I found myself more joyful. Did participants also experience a sense of exuberance?

Rationale for Case Study Methodology

Within the framework of a qualitative research approach, this action research study appeared suited for a case study design. Case study research is a type of methodology in qualitative research that explores an issue within a bounded system through detailed, in-depth descriptions and analysis over time (Bloomberg & Volpe, 2008; Creswell, 2007; Merriam, 2009). As with other forms of qualitative research, it is a search for meaning and the researcher is the primary instrument of data collection and analysis.

In a school setting bounded by time and place, the case study design is detailed in descriptions as it interprets an educational phenomenon. According to Koshy (2005), it is an ideal way of disseminating a meaningful story for those interested in the application of an action research project. As researcher, I used a case study methodology for this action research project because the identified problem was framed through my experience as a school leader, on-going observations, and a review of related literature. This methodology promoted change rather than the traditional research objective of description, understanding, and explanation (Robson, 2002).

Further, living my theory-in-use as a servant, feminist, and transformational leader (Hackman & Johnson, 2009; Kouzes & Posner, 1995), I gained a deep understanding of the research material from working collaboratively with participants through professional development activities (Creswell, 2003; Glanz, 1998; Kouritzin, Piquemal & Norman, 2009; Robson, 2002). For practical reasons, a case study methodology is an ideal way to disseminate a better understanding for readers interested in the application of the action research project (Creswell, 2007; Glanz, 1998; Koshy,

2005). The case study methodology in this action research project also set the framework to examine participants' perceptions and depth to understand the principles and tenets of differentiated instruction.

Information to Conduct Study

Site location/Context of study. The setting took place in an urban Catholic school located in the Northeast. The school, Cardinal Newman Academy, is one of 600 Catholic schools under the auspices of a large diocesan school system operated by the bishop and his appointed school superintendents. For confidentiality, the school and the participants in this research study are assigned pseudonyms.

At the turn of the century, the school community was made up of Irish and Italian immigrants. It was popularly called *Irish Hill* before it transitioned into a strong Italian neighborhood in the 1960s. Due to its proximity to international airports, the community again changed in the 1980s with the arrival of families from South and Central America as well as from Puerto Rico, the Philippines, Vietnam, Haiti, and along the Ivory Coast.

Within the public school system in the township are seven elementary schools (K-6), one middle school, and one high school. Although founded and fully staffed since 1879 by the Sisters of Charity as a private school for the children of Irish and Italian immigrants, the religious faculty in Cardinal Newman Academy ended their commitment in 2006 due to the ages of the remaining three religious women. Not only did the school operation change to a lay faculty, but the demographics of the area changed.

The last census of the school's location determined 8.2% of the population below the poverty level. The racial and ethnic composition of the 35,926 population determined by the 2010 census revealed 60.5% White, 9.0% Black or African American, 0.4%

Native American, 12.0% Asian, 0.1% Pacific Islanders, 14.0% other races, and 4.0% reporting two or more races. Although the average income per a household is \$48,576, many students' families in the site school lived outside the township in pockets of poverty stricken areas of the nearby largest city in the state.

Local demographics. For the past decade, the demographics of the school site slowly mirrored the large urban neighborhood to the east. The project school site boarded this city with its abandoned buildings, empty lots, drugs, and proclivity for arson. Many of our students resided in those blighted neighborhoods. Indeed, families witnessed the transformation of neighborhoods from single family wood houses into apartments to accommodate five or more families.

Therefore, in addition to being a faith-based school, the prevalence of drug sales, murders, and gang activities that penetrated the school's boundaries caused parents to seek refuge in our private school facility. Juan, for example, a fourth grade student, could not do his homework at night. He always heard gun shots. His father affirmed Juan's story. Hence, despite hardships, many parents chose to work more than one job to keep their children enrolled in our tuition required school.

School population. Our Catholic school served a population of approximately 300 prekindergarten through grade eight students. Specific demographics in the site school revealed 65% of the students identified for the free or reduced breakfast and lunch program. Many of the students resided in a single-parent household. Eighty-five percent of families spoke a language other than English at home. Data revealed the ethnicity of students in the site school as approximately 75% Latino, 15% African-American, 6% Filipino, 3% other, and 1% Caucasian.

An enrollment decline and the threat to shutter the school loomed on the horizon throughout the process of this action research project. A tuition fee of \$3,600.00 per student, a challenged national economy, and the unemployment of many students' parents placed a hardship on the operation of the school. Numerous scholarships supported tuition, but the primary factor to save the school depended upon parents' willingness to sacrifice for the sake of their child's education. As principal, I suspected every visible nuance of pedagogy as the pathway to sustainability.

As such, I also faced budget constraints that left us without a business administrator, vice-principal, guidance counselor, media specialists, full time custodian and nurse, but we prevailed. We continued to follow the guidelines of the school superintendent's office, federal and state mandates, the core content curriculum standards, and the protocol for teacher licensures. Further, compliance with federal and state requirements meant allocations for professional development.

As principal, the administration and the leadership of the site school rested with me. Leadership, however, is a life long journey. I learned from experience, but learned more from my mistakes. With the opportunity to work on an action research project, I faced new challenges, but embraced the courageous thinking of Churchill's opening speech to the House of Commons on his first day as prime minister, "I have nothing to offer but blood, toil, tears, and sweat" (Humes, 1991, p. 41). I could offer no more than Churchill!

Consequently, as the school tittered between an exploration of differentiated instruction and fear of being a shuttered school, the majority of teachers appeared eager to advance instructional skills through professional development. The imperative to act

grew out of the dire need for teachers to explore instructional paradigms, transition from their traditional stance of isolation, and recognize how to create equity and equality of opportunity for all learners. As such, a participant action research project within the framework of a qualitative methodology case study unfolded.

Furthermore, the call for change not only involved pedagogical practices, but also awakened an awareness of the rich cultures within our learning environment. For instance, a review of data showed that more than 50 percent of our students' parents immigrated from Central and South America and English was not the first language spoken at home. Before my leadership, this phenomenon appeared unrecognized in instructional practices, social events, or material contexts within our organization.

School site faculty/staff. During the process of this action research project, the school site employed 13 full time classroom teachers and five part-time special subject teachers. In the total of teachers, eight held state certification in their respective subject areas. One teacher held a Master of Science degree in education. In addition to the principal, three teacher assistants, two secretaries, a part-time nurse, two cafeteria cooks, and a part-time custodian completed the faculty/staff of the school.

Based on a brief questionnaire distributed at a faculty meeting, the racial and ethnic composition of the 28 employees was approximately 90% Caucasian, 5% Filipino, and 5% Latino (Appendix F Demographic Data Form) and (Appendix G Participants' Demographic Matrix). Either an Irish or Italian heritage was the most common ancestries of the faculty/staff. Of the 28 employees, seven resided in the township and worshipped in the parish church affiliated with the school site. Other faculty/staff members who lived at various distances drove cars or took public transportation to the school site each day.

The median age of the faculty/staff was 54 years old. The average faculty salary was \$42,000.00. With the exception of the fifth and sixth grade teachers and the principal, the work experiences of teachers and paraprofessionals took place solely within the setting of a Catholic school.

Of note, 11 female teachers and one male teacher served as participants in this action research project. During Cycle 2, Daniel, the only male teacher, replaced the sixth grade male teacher from Cycle 1 who accepted a teaching fellowship in another state. Daniel taught for two years in a public school before he joined our faculty. His enthusiasm added to the exploration of differentiated instruction through humor while his sincerity lent building blocks toward a learning community. In many ways, Daniel understood how the critical factor of adaptive instruction dignified his own instructional management system.

The Qualitative Researcher

During this action research study, I remained the principal of the research site school. Although newly appointed to this pre-kindergarten through grade eight urban Catholic School, I served for more than two decades as teacher or principal in other school settings, but never in the role of researcher. In qualitative studies, the researcher is considered the instrument for the research (Marshall & Rossman, 1995).

My presence as principal sustained a personal and professional relationship with participants on a daily basis throughout the duration of the action research study. As a full research participant in the study, I entered into the lives of the teacher participants, engaged in social interactions, and brought practical experiences to this inquiry through empirical knowledge and a familiarity with the environmental context. As such, the

strength of my past professional experiences helped me gain insights into the design and interpretation of the action plan findings.

However, my work experiences in administration also brought bias or assumptions to the research. Hence, I engaged in critical self-awareness through a meditative focus of journal writing and with a dedication to dialogue with professional colleagues. Of note, the everyday practice of reflection supported my resolve to be a better leader, researcher, and listener as I connected to participants' exploration of differentiated instruction and their increased professional efficacy.

Overview of Cycles

Change at the study's site focused on the prevailing history of instructional practices, academic competency, and the diverse culture of learners. The salient feature for me, however, was the project's cyclical structure. Involvement in an action research project is based on systematically collected data as cycles converge toward better situational understandings and improved action implementation (Koshy, 2005; Sagor, 1992; Stringer, 1999).

In tandem with participants, I continuously recycled activities through a prism of observation, reflection, and dialogue. Eager to cooperate, participants moved in new directions, even before a skill was mastered. All learned through reflection, shared experiences, and practice. As a researcher, I also moved in cycles to share newly acquired professional books and material on change and encouraged participants to do the same.

Participants for Cycle 1. My role as principal became the essential reason the action research project took place at the Cardinal Newman Academy. I used the school for the sake of convenience, yet it also embodied a place for purposeful and meaningful

research. Moreover, due to expectations for professional development, the availability of both site and participants conveyed a convenient sample for Cycle 1. A convenience sample is just what it implies – a sample based on location, availability of respondents, and time (Merriam, 2009).

The teachers and paraprofessionals who attended weekly and monthly faculty meetings willingly participated in the first cycle as a convenience sampling (Merriam, 2009) out of curiosity as well as politeness. Of the full time teachers attending the Cycle 1 faculty meetings, only eight qualified and received teacher certification by the state. The other four classroom teachers and three paraprofessionals worked toward meeting certification requirements, but lost a sense of urgency.

The paraprofessionals did not attend college, but with 10 years of experience as teacher assistants, each person cherished the intellectual and social challenges offered through professional development opportunities and asked to be in attendance. Although not participants, their role supported everyone's journey toward new knowledge and the building of a learning community. Of note, two paraprofessionals spoke Spanish as a first language, but also possessed the ability to speak and write English. The third paraprofessional spoke only English.

Not all teachers on staff attended faculty meetings because of their part-time status or after-school commitments. The participants in Cycle 1, classroom teachers from pre-kindergarten to grade eight, asked questions about best practices, but with reserve. With respect to participants' professional experiences and to ensure confidentiality, I selected Old Testament pseudonym names to identify participants in Cycle 1 as follows:

Abigail, Ruth, Rachel, Rebekah, Miriam, Esther, Sarah, Deborah, Naomi, Noah, Michal, and Eunice. Biblical names are used throughout this action research study.

In the beginning, expectations for professional development through dialogue and document review intimidated participants. Moreover, when they moved through activities in Cycle 1, Michal, the eighth grade teacher, met the potential for change with daunting distain. Michal separated from the school during Cycle 2, but is included in the data results to a limited degree. Anna left the school in January for a personal reason and is not included in the data collection. Anna's students merged with Ruth's students to form one large grade. Daniel replaced Noah who accepted a fellowship for an advanced degree in another state.

Participants for Cycle 2. When Cycle 1 flowed into Cycle 2, participants explored differentiated instruction in greater detail. From the start of this cycle, the majority of the teachers expressed a full commitment as participants in the action research project. As a subsequence, 11 female teachers and one male teacher formed a group of nominated teachers to participate in Cycles 2 and 3 as discussed below. With respect to participants' professional experience and to ensure confidentiality, I maintained Old Testament pseudonym names to identify the 12 participants, but changed Noah's name to Daniel. Anna contributed to the dialogue of Cycle 1, but she is not included as a participant. Participants in Cycle 2 are identified as follows: Abigail, Ruth, Rachel, Rebekah, Miriam, Sarah, Esther, Deborah, Naomi, Daniel, Eunice, and Michal.

The selection of participants for Cycle 2, teachers from an urban Catholic school who served a predominantly Latino community located in the northeast, included the most common form of purposeful sampling, snowball or network sampling (Bloomberg

& Volpe, 2008; Creswell, 2007; Merriam, 2009; Robson, 2002). This strategy involved identifying one or two participants who easily met the criteria established for the study: teach at the school site, agree to read best practices books and articles, view related videos, and attend professional development sessions. As the new principal, I selected a second grade and an eighth grade teacher as the first participants because of their enthusiastic discussions during faculty meetings.

After I completed informal interviews, both teachers assisted in the selection of colleagues who exemplified characteristics of interest for this action research project. That is, after the key participants' interviews, other individuals recommended participants from among the faculty for the study (Merriam, 2009). The process of selection continued based on the recommendations of selected participants.

The snowball became bigger as 12 teachers from pre-kindergarten to grade eight volunteered as participants for this action research project. A choice for participation was not offered to the special subject teachers, such as art, physical education, Spanish, music, and technology. All participants agreed to attend ongoing professional development opportunities, dialogues, conferences, and a focus study group. Thus, without coercion, each participant expressed an interest to understand differentiated instruction through a myriad of professional development opportunities.

Participants for Cycles 3 and 4. In this social network, the final research sample for Cycle 3 consists of 11 female participants and one male participant from Cycle 2. Each participant held an interest and excitement for Cycle 3. Participants involved in Cycle 3 also functioned as participants for the focus group in Cycle 4. To ensure

confidentiality, I again maintained the same Old Testament pseudonym names to identify the 12 participants as noted above.

Prior to observations, interviews, and the focus group, participants read and signed consent forms. As required, I submitted the approved application to the superintendent of schools of the diocese and obtained permission to conduct research at the site school without borders of time. Commitment to a time frame remained open-ended because an appropriate differentiated classroom remained a work in progress, not a quick fix for a short duration.

With participation in professional development activities, teachers shared their expanded knowledge of differentiated instruction with courage as well as acceptance of discernable changes in their attitudes about personal mastery, mental models, values, and team learning (Senge, 2006; Zepeda, 2008). Far from a linear experience, I witnessed participants' leadership skills develop as they advanced down a plethora of learning paths toward understanding differentiated instruction. Reflective practices also helped thread shared dialogues among participants as I visited classrooms to support change efforts.

Data Collection Methods

According to researchers, action research is viewed as a spiral or cyclical process (Glanz, 1998; Koshy, 2005; Robson, 2002; Sagor, 2000). The process involves a change plan, action, observation of what transpires following the change, reflection on consequences, and a plan to repeat the cycle. Stringer (1999) identifies a simple routine – look, think, and act.

The model of action research takes shape as knowledge emerges. Due to its fluidity, the spiral model exists within multiple methods of data collection and

triangulation to explore a particular phenomenon. Further, strategic actions add depth to a study and corroborate evidence of the data obtained (Creswell, 2003; Koshy, 2005; Merriam, 2009; Sagor, 2000). Despite similarities in the cyclical models, I preferred O’Leary’s (Koshy, 2005) cycles of research as my model for the data collection methods of observation/mini-question strategies, document searches, interviews, and a focus group. The simplicity appealed to my sense of balance.

Cycle 1 questions/observations. Cycle 1 involved 12 classroom teachers. Three paraprofessionals as well as the teacher, Anna, also attended faculty meetings and professional development activities, but are not included in the data findings or analysis. The study sought to explore a sample of teachers’ perceptions of how an investigation of the principles and tenets of differentiated instruction through embedded professional development changed pedagogical practices from a traditional one-size-fits-all instructional framework to the model that addressed the academic needs of their increasingly diverse students. The target explored why, how, or even if the elementary school teachers in a prekindergarten through grade eight Catholic School believed they transformed their traditional pedagogical practices.

Teachers informed me that prior to the action research project, they attended workshops on differentiated instruction, cooperative learning, multiple intelligence theories, and learning styles, but their experience of professional development was episodic, superficial, and disconnected from the problems of practice within their classrooms. On the predication that curriculum, teacher training, and social, cultural, and linguistic variables influence instruction, I asked teachers to respond in writing to one, two, or three questions during faculty meetings or extended professional development

sessions. Simple factual or open-ended questions elicited teachers' recollection of professional experiences or the depth of their content knowledge. Questions also served as a useful complement to other data-collection methods as well as to shape the form of questions used during interviews.

More importantly, the process engaged teachers in the practice of reflection about pedagogy. For example, when asked about *wait time*, the term was unfamiliar to every teacher and so also the practice of giving students time to think about a question. In addition, varied responses to questions allowed an opportunity to learn something new through shared experiences, but also to be cognizant of an instructional strategy.

I researched questions from various sources, but primarily from the work of Beers (2007). In pursuit of collaboration, I collected the question/answer papers from teachers, collated answers, and shared the information at the end of our faculty meeting or at the beginning of the following meeting. The mini-question series in Cycle 1 extended from October 2007 to May 2008.

Eventually, question/answer sessions evolved into shared experiences as teachers asked their own questions about teaching and learning. I remember well the professional development session when Rachel asked: "Would you teach us about cooperative learning?" A turning point emerged from that one sentence.

In conjunction with the paradigm of questions, observations played an important part as a data-gathering instrument beginning in Cycle 1. Observation is a natural process because we observe people and situations all of the time (Koshy, 2005). Moreover, as participant researcher, I lived in the context of the study and became integral to the process. From the start, I recognized my proclivity to be subjective in the gathering of

data as well as bringing a bias to my interpretations. To write in a journal every day added to my objective stance toward the collection of data.

Classroom observations are usually the responsibility of the principals. As principal, I used two forms of observation, nonsystematic and systematic. As research participant, I followed a nonsystematic protocol by entering a classroom unannounced to observe instructional practices and the learning environment. In a systematic forum, I scheduled classroom observations with teachers if they wished to demonstrate a particular skill or theme.

I completed at least two formal observations for each teacher during this action research study. The 45-minute classroom observations included a prekindergarten class and classes of teachers in grades one through eight. As a reading specialist, I gravitated toward literature as the core subject to observe. At the school site, teacher observations took place between January 2008 and December 2009.

For data collection and for consistency, I used observation forms recommended by the superintendent of schools in conjunction with the Danielson's (1996) templates. To establish an understanding of what I observed at the onset of the study, participants received copies of the observation and the walk-through template (Koshy, 2005). In most instances, I used the three-phase observation cycle recommended by Hopkins (2002): a planning meeting, classroom observation, and a feedback discussion. This process fit well into the action research project because it encouraged teachers to construct a launching pad for their own best style of teaching to take flight.

My practice of the three-minute classroom walk-through offered supportive data to formal teacher observations. Moreover, as teachers relaxed more with the three-minute

walk-through, the practice worked to move the isolation of teachers toward a spirit of open-mindedness. Such a situation describes the condition necessary for reflection (Osterman & Kottkamp, 2004). The willingness to reflect on practice was new for teachers, but they learned to share the knowledge and practice of differentiated instruction. Even more, reflective practice enhanced teachers' ways of thinking about personal learning, changes in behavior, and improved performance (Osterman & Kottkamp, 2004; Zoul, 2010).

In regard to the exploration of teachers' capabilities, I created situations fit for their unique talents. For instance, for one school year, I took a symbolic labyrinth journey with Ruth, a first grade teacher of 20 years. She appeared to be a teacher who hid her joy. After many discussions about her abilities, past successes, and the feasibility of changing her grade level, Ruth agreed to be the middle school mathematics teacher for the following school year. Ultimately, the teacher's openness to change advanced the instructional performances for at least 70 students, but the discovery of her specialized talents enhanced the collaborative efforts of every team member. As I reflected on Ruth's renewed energy, enthusiasm and exuberant joy, I felt the power of servant leadership in our workplace culture.

Cycle 2 document reviews. The first cycle of discovery flowed seamlessly into Cycle 2 through the continuation of classroom three-minute walk-through and observations. I used the same template for walk-through visits, and continued to ask teachers to respond in writing to one or more questions at faculty meetings or during extended professional development sessions. Again and again, discussions ensued in

relation to responses provided by teachers. Participants did not want their questions to remain anonymous.

Further, as I learned the school's culture, I reviewed the most recent documents in the office files about teachers' instructional practices. Documents threaded data into a tapestry about classroom environments, management, pedagogical practices, teacher preparation, and respectful tasks to engage learners in an instructional framework. My anecdotal and subjective field notes also included data from responses to questions posed at professional development sessions, observations of hallway and classroom bulletin board displays, artifacts throughout the building, and photograph albums of school activities.

In addition, I reviewed lesson plan books, teachers' grade books, student progress reports, report cards, and results of standardized test scores across grade levels. During one professional development workshop in Cycle 2, I distributed the standardized test results of two years for participants to review and discuss. For the first time, teachers examined their students' test results to gain insights into skill areas of strength or skill development in need of attention.

I wanted participants to study assessment data for a practical purpose, but also to read and interpret the data with confidence. This professional development activity turned the faculty room into a buzz with questions and comments as data revealed theory and practical application of skill development. Moreover, teachers trusted my motive for the distribution of data because I intended teachers to gain wisdom, not to ascertain deficiencies in instruction.

Document review also included: Middle States Evaluation Reports, budget documents, curriculum binders, students' official file folders, and personnel records of faculty. I also studied documents for insights into the culture of the school in terms of teacher qualifications, the school's mission and vision statement, and evidence of new skill development outlined in each teacher's professional development plan. In sum, elements of documents pointed to a tumultuous reorganization of instructional practices.

To bring closure to the document review, data were organized by themes or patterns and put into graphic organizers. I shared elements of data with participants to move the action research project forward during observation conferences or for the purpose of professional development. I also compared findings to the literature.

Cycle 3 interviews. The interview served as a primary method for data collection in this action research project (Creswell, 2007; Glanz, 1998; Janesick, 2004; Merriam, 1998; Stringer, 1999). It also served as a fundamental tool of qualitative research if one is to understand the experience of others. As such, the interview described participants' view or perspective of a situation. In the qualitative tradition, the interview method evoked rich, substantive data because questions elicited various responses. Using pseudonyms, teachers from the site school participated in a cycle of interviews during the month of March, 2009.

In preparation, I developed five questions for the participant interviews, but encouraged natural conversations as well (Creswell, 2007). As such, transcripts from participant interviews sometimes appeared unstructured and open-ended. I wanted an easy flow of ideas within a relaxed atmosphere. Moreover, as school principal, researcher, and participant, I sought an environment of trust for participants to give

honest responses, not answers they expected I wanted to hear. Glanz (1998) asserts that a major benefit of an in-depth interview is to capture the complexities of the participants' experiences.

To my delight, I found the interview experiences as fluid conversations for both myself and each participant. There are moments of anxiety as ultimate moments of truth unravel, but many more bursts of laughter through person-to-person engagements. Merriam (2009) described this format as one person's elicitation of information from another.

Indeed, some words and stories amused me as I conducted interviews with the participants in my office during the second and third week of March, 2009. A pot of hot tea always stood ready to be shared because the interview time fell during the teachers' lunch, preparation period, or after the school dismissal. Although a demanding process, I transcribed all audio-taped interviews and for issues of confidentiality, secured them in my office safe.

The duration for each interview ranged from approximately 45 to 55 minutes. Additionally, to bring unity to the process, within three days I transcribed verbatim each interview and met again with the interviewee to review or member check the agreed upon findings (Bloomberg & Volpe, 2008; Merriam, 2009). Following the analysis of interview data for themes and patterns, I placed material into graphic organizers.

Before the transition into Cycle 3, I reshaped the study's research questions four times by the framework of observations, interview questions, and conceptual framework. As researcher, I attempted to open the mind of each participant and listen intently to the dialogues that took shape. Indeed, participants revealed their perceptions of change

initiatives, attitudes toward transformations, and their passion to grow as professional educators.

DePree (1992) suggests that leaders act as servants to their followers. I subjugated my ego to provide resources, encouragement, and empowerment to participants through shared responsibility, open communication, and my passion to serve. Harvey S. Firestone (Hackman & Johnson, 2009) writes: “The growth and development of people is the highest calling of leadership.”

Cycle 4 focus group. A case study, as a method of qualitative research data collection (Bloomberg & Volpe, 2008; Creswell, 2007; Merriam, 2009) emerged when a group of participants formed to discuss their perceptions of learning the practices of differentiated instruction within the framework of professional development. Teachers volunteered as participants for a focus group lasting about two hours. Participants included the teachers introduced in Cycle 2, excluding Michal.

Patton (2001) asserts the objective of a focus group is to get high-quality data in a social context. Our purpose was to augment the information obtained regarding professional development for differentiated instruction by means of interviews, document reviews, observations, and classroom walk-through. The focus group discussions centered on open-ended questions. To identify the descriptors for discussion under the categories defined in the conceptual framework, I taped large sketchbook pages on the walls of the faculty room as repositories for participants’ comments or different segments of data (Bloomberg & Volpe, 2008). Subsequently, I asked teachers to help identify harmonious balances as themes or patterns emerged (Bloomberg & Volpe, 2008; Creswell, 2007; Merriam, 2009). In addition, I prepared written narrative structures from

participants' interview transcripts through the lens of a value coded format (Saldana, 2009). Triangulation confirmed emerging findings (Creswell, 2007).

The format of the focus group elicited opinions, ideas, and perceptions about changing pedagogical practices. Although not audio-taped, participants color-coded summaries of data and displayed them on flip chart paper. According to Robson (2002), the advantage of a focus group is in its efficiency to generate a substantial amount of data. As the facilitator, I organized the two-hour discussion session in an open forum to illuminate participants' perceptions of changes in knowledge, attitude, beliefs, and values. Following a pot luck luncheon, participants appeared energized and eager to share ideas generated from months of research and the depth of their empowerment as learners.

After 25 minutes of an open forum dialogue, four small groups formed and again, animated dialogues ensued. Color-coded flip chart papers taped around the faculty room walls visualized units of information created by each subgroup of participants. After another 45 minutes, a spokesperson for each group summarized the groups' findings regarding their perception of pedagogical change initiatives through professional development. Rachel took notes during the group presentations and submitted a written report at the end of the day. Ruth and Miriam compared Rachel's report to the flip chart summaries posted on the faculty room walls.

Data Analysis and Synthesis

Data analysis, according to Merriam (2009) is a process to find answers to the research questions. I used a strategy of alphanumeric codes to assign categories and descriptions in the conceptual framework to substantiate findings. I then sorted responses

into categories, themes, or patterns. At this point, findings could be substantiated, revised, and reconfigured based on my coding system (Saldana, 2009).

Synthesis involved pulling the systematic coding together to reconstruct a holistic and integrated explanation (Bloomberg & Volpe, 2008; Saldana, 2009). In this process I compared patterns across categories. I formulated conclusions based on the synthesizing process. To reduce any potential bias during the data analysis, I removed participants' names from the transcripts. Additionally, there was a conscious effort to create an environment that situated participants in open and honest dialogues (Tomlinson, 2003; Wheatley, 2002).

Cycles of Action

All cycles of actions emerged from the same imperative - to provide instruction to meet diverse needs of learners. I wanted teachers to possess the drive and passion to be the best. To be passionate as a professional means to never cease to perfect the art of teaching.

To encourage teachers to read about their craft, I purchased and distributed Tomlinson's (2003) book entitled: *Fulfilling the Promise of the Differentiated Classroom* and gave a copy to every faculty member with the suggestion to mark up the pages with comments or questions. Thus, a series of cycles emerged in participants' efforts to explore differentiated instruction as one cycle flowed into another. Within the exploration cycles, dialogue about Tomlinson's theory of differentiated instruction permeated every professional development meeting, formally and informally.

But, although agreed upon, teachers failed to read chapters in the Tomlinson (2003) text assigned for discussion. I questioned whether they lacked motivation to grow

as professionals or grew in fear for the future of the school. Thus, we divided the chapters and sub-topics of the text according to individuals' interest. Participants then presented a key issue of their choice at upcoming professional development sessions. Empirical data and strategies gleaned from video tapes on differentiated instruction or the effective teacher supported the literature found.

Cycle 1. The initial focus of Cycle 1 was vocabulary development because of the many English language learners in the school. Teachers made word walls in the classrooms and hallways based on material from basal readers. Decorative walls reflected the creativity of teachers. But, though dialogue about pedagogical practices at faculty meetings never ceased, teachers did not attempt to group students for literacy development by interest and proficiency levels. They did not group at all, except for one teacher.

Abigail's prekindergarten class formed flexible groups. The teacher assistant monitored the writing center, peer partnerships worked at computers, and small-groups moved every 20 minutes for direct instructional time with Abigail. Management was based on a color-coded system.

Gradually, however, participants' dialogue turned to instructional practices, professional development initiatives, and the meaning of an effective teacher. As a reading specialist, I turned the spotlight on our literacy program within the context of an action research project. For months we discussed and tried various instructional strategies, but primarily the formation of reading groups. Not groups that tracked students forever, but flexible groups based on skill development and student interests.

As we entered the 21st century, learning tools included a wide range of technological innovations, theories, and professional development activities to support teachers' on-the-job experience. According to Tomlinson and Allan (2000), differentiated instruction specifically attends to the learning needs of a particular student or small group of students rather than to the more typical teaching pattern in which all students receive the same instruction. Working in concert with factors that affect learning, the ultimate goal of a differentiated classroom, then, is to maximize student achievement and individual success.

The analogy of one-size-fits-all instruction used for many years in education continues as the reality in many classrooms today. Even in this 21st century, teachers in the site school often expected students to adjust to a lesson rather than design a lesson adjusted to the learner. I continually observed teachers plan a lesson and teach it to all students knowing that some are bored because the material is too familiar while instruction for others is beyond their learning capacity.

Cycle 2. Cycle 2 fully emerged when our school hosted a professional development conference on differentiated instruction for five schools in the diocese. Following the morning conference, volunteers from other schools joined our teachers for mini-workshops located in classrooms throughout our building. Our teachers selected individual classroom themes for the year and showcased with pride their creative endeavors to visitors.

Teachers worked hard to host the conference. Throughout the day, a sense of efficacy emerged as participants shared stories about meeting the varied instructional needs of students through differentiated instruction. Teachers, project participants noted,

showed amazement at the practice of differentiating instruction in our school. But, visitors said they could not change their well rooted pedagogy. Such feedback only added to participants' motivation to excel as professionals.

Further, to my delight, literacy circles emerged as an important example of this phenomenon. After months of study, trial, and error, Rebekah moved in a new direction. Her grade five students read different chapter books in literary circles and met in teams to discuss interpretations of the readings. Rebekah often guided others into the future. As relatively inexperienced participant, Rebekah learned on her own about literacy circles. With coaxing and encouragement, she agreed to demonstrate literacy circle strategies for her colleagues. Rebekah received both praise and admiration from everyone for her model lessons and follow-up mentoring as requested. As a novice teacher, unsure of her capacity to be an effective teacher, Rebekah intended to leave the teaching arena at the end of the school year. Rebekah not only changed her decision about leaving the teaching profession, but she also became a model teacher as knowledge, collaboration, and relationships replaced isolation with trust and care.

Cycle 3. Cycle 3 focused on interviews, the main source of data collection to understand the phenomenon of pedagogical change. Many themes and patterns emerged from the interviews along with a plethora of change stories. As the researcher, I placed my criteria of change in teachers' attitude toward instruction. Changes in attitude occurred in me as well as participants. For example, within this cycle, a major influence to support the practice of differentiated instruction derived from my experience and the connectedness of three participants' in attendance at a conference on differentiated instruction. Not only was Carol Ann Tomlinson the keynote speaker, but she also spent

time speaking to participants during the break. Tomlinson touched the hearts and minds of all of us with her kindness, wisdom, and a reminder to be patient.

Cycle 4. The iteration of Cycle 4 flowed from teachers' dialogue about meeting Tomlinson and her practical presentation of the philosophy of differentiated instruction. With humor and a wish from other teachers to attend such a conference, the focus group formed. Possessing a deep conviction to plough on, participants in the focus group brought past practical experiences, knowledge, and discussions together with a sense of belonging.

The primary inquiry of this action research project was the perception of gaining knowledge and understanding to change pedagogical practices. Toward this end, I listened carefully to the focus group dialogue to determine answers to the following research questions:

1. To what extent did participants perceive an exploration of the principles and practices of differentiated instruction through embedded professional development prepared them to change their traditional instructional practices?
2. How did participants develop the knowledge, skills, attitudes, and values they perceived essential to change pedagogical practices?
3. To what extent did participants perceive certain factors in their systematic inquiry into the principles and practices of differentiated instruction resulted in enhanced feelings of empowerment and professional efficacy?
4. To what extent did participants perceive certain factors impeded their pursuit of knowledge, consistency, and pedagogical innovations grounded in the principles and practices of differentiated instruction?

5. How did this action research study help me examine my espoused leadership platform through the filter of Senge's (2006) five learning disciplines and my leadership for differentiation?

I determined the information required to answer these questions be framed within the conceptual framework that fell into four categories: (a) exploration of differentiated instruction to change pedagogy, (b) perception of pathways to contextual learning to enhance differentiated instruction, (c) impediments to understanding and implementing differentiated instruction, and (d) perceptions of my leadership platform through the prism of Senge's (2006) five disciplines and differentiation.

Ethical Considerations

In any research study, ethical issues relating to protection of the participants is a major concern (Creswell, 2003; Koshy, 2005; Merriam, 1998; Sagor, 2000). Prior to soliciting participants' cooperation, I explained the purpose of the study, how the data were used, and the dissemination of the final research report. The Institutional Review Board of Rowan University reviewed my action research project to protect against human rights violations (Creswell, 2009).

Care was taken for the collection of data and the dissemination of the findings to respect participants' confidentially as well as their involvement in activities within the local situation. I assured respondents that in questions, observations, interviews, and the focus group, their identities remained anonymous. The study poses no serious ethical problems. Permission was requested and granted from the diocesan superintendent of schools to carry out the action research project within the Catholic school used as the study's site

Issues of Trustworthiness

According to Robson (2002), many proponents of flexible, qualitative design deem the terms *reliability* and *validity* as unacceptable. Moreover, Lincoln and Guba (1985) maintain that the trustworthiness of qualitative research must be assessed differently than a quantitative study. Accordingly, researchers of a qualitative paradigm use canons or criteria to assess the trustworthiness of their study (Bloomberg & Volpe, 2008; Marshall & Rossman, 1995).

The canons provide evidence that the procedures and processes of inquiry minimize the potential for superficial, biased, or insubstantial investigations (Bloomberg & Volpe, 2008; Marshall & Rossman, 1995; Merriam, 2009; Stringer, 1999). Thus, regardless of categories, the qualitative researcher guards against the potential emergence of biases in the design, implementation, and analysis of the study (Bloomberg & Volpe, 2008). Further, to evaluate the rigor of a naturalistic inquiry, researchers may determine the trustworthiness of their study through the four constructs proposed by Lincoln and Guba (1985): credibility, dependability, confirmability, and transferability.

Credibility. Credibility means the inquiry ensured the study subject was accurately identified and described (Lincoln & Guba, 1985). In this study, I established credibility by extended engagement with participants with whom I worked every day; embraced member checks to solicit participants' views, verifications, and the accuracy of information presented; and used triangulation of information from multiple data sources and data collection methods. In most instances, the process of triangulation involved corroborative evidence from the different sources to illuminate themes or perspectives (Creswell, 2007; Merriam, 2009; Patton, 1990, 2001). Further, to enhance the interpretive

validity of this action research project, I discussed my participatory modes of research (Bloomberg & Volpe, 2008) and emergent findings with colleagues or informed associates. My colleagues, principals from two other Catholic schools, asked enigmatic questions about the transformation of pedagogical practices and the participants' interpretation of the change process. Both principals and their faculty attended the conference on differentiated instruction hosted at the school site.

Dependability. According to Lincoln and Guba (1985), the finding must be consistent and dependable with the data collected. It became incumbent upon me to document my procedures and demonstrate the consistency of the codes and categories used. To this end, I asked a graduate student teacher from another city to code two interviews. I also chronicled the evolution of my thinking and actions by keeping a journal in which I detailed data analysis and interpretation. With respect for the work of Bloomberg and Volpe (2008), I relied on their research for trustworthiness to guide, model, and be a template throughout this action research project, framed within a qualitative case study paradigm.

Confirmability. The construct to confirm embraces the traditional concept of objectivity (Bloomberg & Volpe, 2008; Marshall & Rossman, 1995). According to Stringer (1999), to confirm evokes an audit trail in which the processes of data collection and analysis reveal the means for readers to reference the raw data. As such, the fluidity of an audit trail emerged to offer readers the findings of this action research study through ongoing reflections found in journal writings, field notes, memos, and interview transcriptions.

Transferability. To ensure that the findings are transferable between researcher and participants, Lincoln and Guba (1985) assert the need for thick descriptions. As such, the application of the findings across settings is made possible through detailed descriptions for readers to see themselves and/or their context in the researcher's accounts. Nonetheless, a qualitative study's transferability to other school settings, such as this action research project, may be problematic because other schools lack identical conditions (Bloomberg & Volpe 2008; Marshall & Rossman, 1995).

Limitations of the Study

When I considered the purpose of my action research project was to improve teachers' pedagogy, it was difficult to find disadvantages. However, the research project contained several limiting conditions relating to the parameters of the study and to qualitative research methodology in general. As such, I gave careful consideration to minimize the impact of the limitations. My subjectivity as the researcher, for instance, could be biased because as a former teacher, I implemented the principles of differentiated instruction with both advanced and struggling students as a teacher of reading. Further, the participants knew me as their principal as well as the supervisor of instruction.

Although teachers volunteered to be participants, they could be guarded in their responses. Limitations also arose from the restricted sample size of 12 teacher participants and the location of the study within the structure of a small Catholic school. The study was bound by time and limited by one school.

Recognizing these limitations, I took the following measures in my role as the researcher: shared the agenda with participants at the beginning of the study, removed all

participants' names from coded documents and transcripts, and made a conscious effort to create a learning environment conducive to trustworthy and open dialogues (Bloomberg & Volpe, 2008; Creswell, 2007; Koshy, 2005; Merriam, 2009). In addition, I assessed the rich descriptions and explicit details within the context of this study's school site for possible connectivity to other circumstances.

Reflection

The purpose of this action research project was to examine participants' perception of embedded professional development on their capacity to change pedagogical practices through an understanding of the principles and practices of differentiated instruction. The participant sample for Cycle 1 used a sample of convenience. Selection for the rest of the study used a snowball procedure for teachers at the site school.

Data-collection methods included mini-question sessions, interviews, observations, a focus group, and document review. Data were reviewed against literature, patterns, and key themes. Further, within the framework of this chapter, I provided a detailed description of this action research project's methodology, a qualitative case study methodology.

Moreover, through intensive study, I discovered a plan for the whole process. In this qualitative action research project, I directed distinct stages toward the improvement of participants' pedagogical practices in the following manner: first, I identified a topic for investigation grounded within my school setting, conducted and continued a literature review of professional development, differentiated instruction, and leadership for change to enrich my capacity to understand different issues of pedagogy and developed questions

to be explored. Second, I interviewed and selected research participants and planned professional development activities. Third, I refined and focused my research questions. Fourth, I determined data-collection methods and gathered data through interviews, mini-question strategies, field journals, observations, a focus group, and documentary evidence to gain multiple perspectives of my study. Fifth, I determined analysis and synthesis procedures through a qualitative case study methodology that captured real data based on the behavior and actions of participants as well as myself as research participant and leader. Sixth, I researched and reflected on my role as a leader and on the outcomes of the action research project for validity and reliability. Lastly, I reported my findings.

Schon (1987, 1991) makes the point that the education of reflective practitioners occupies a critical element in bounded work. As research/practitioner, I recognized how the exercises of intelligence or the kind of knowing that emerge from trust may only marginally influence others, yet the impact on human enterprises in this action research project eventually lead to flow experiences for participants (Csikszentmihalyi, 1993). In flow, an individual feels totally involved and so committed to a task that one experiences an activity as something that allows the full expression of what is best in us (Gardner, Csikszentmihalyi, & Damon, 2001).

Chapter 6

Findings and Discussions

This action research project maintained a two-fold purpose. First, the study sought to explore a sample of urban Catholic school teachers' perceptions of how an investigation of the principles and practices of differentiated instruction through embedded professional development changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the diverse academic needs of their students. Specifically, I believed our understanding of differentiated instruction would encourage other principals and teachers to address varied learning needs of academically diverse classrooms.

Just as students choose a variety of clothing to fit their differing tastes and affordability, could focused professional development through deep knowledge building and systemic support help teachers adapt instruction to fit learners' unique academic needs? From this perspective, I anticipated teachers' fixed classrooms to move into fluid spaces of flexible, thoughtful, and responsible pathways through the study of best practices. A second purpose of this action research study was to reveal my espoused leadership platform through the prism of differentiated instruction and the disciplines defined by Senge (2006).

As a final step, this chapter presents the key findings obtained from interviews, classroom's three-minute walk-through, observations, document reviews, a participant focus group, and a leadership journey. An explanation of the teacher participants' experiences follows the findings. I acknowledged that participants' perceptions stemmed primarily from interview transcripts, the primary source of data collection.

Research Finding 1

Research question number one asked: To what extent did participants perceive an exploration of the principles and practices of differentiated instruction through embedded professional development prepared them to change their traditional instructional practices? The finding for question number one is that all 12 (100%) participants interviewed perceived that the exploration of the principles and practices of differentiated instruction through embedded professional development helped change their one-size-fits-all pedagogy to some degree. This finding is meaningful in terms of participants' change initiatives. From participants' descriptions, there appeared to be changes in pedagogy by all participants, but changes limited in scope, difficult to implement, and slow to take root (Appendix H Data Summary – Finding 1).

As learners, participants started at the beginning stage of understanding the principles and practices of differentiated instruction. Participants knew the terminology, but not the practice. At first, participants grappled with the idea of differentiated instruction, but they soon learned that it would not be a passing fad in our school. They witnessed my passion for the practice of differentiated instruction during months of discussions at faculty meetings and during one-on-one conversations.

At the school site, one-size-fits-all instruction dominated teachers' instructional landscape. Teachers used a single textbook, single lecture or activity, and a single homework assignment. Changes in pedagogy meant abandoning many of their comfortable, often ineffective ways of teaching and learning.

To change pedagogy meant to sustain a momentum to learn and practice new ideas. The whole concept meant breaking their cycles of instruction and accustomed

routines. Abigail captured the vision for transformation in my eyes with the words, “We knew you were up to something when you kept walking the halls and visiting our classrooms. You didn’t say anything, but we knew.”

As an observer of instructional lessons, I witnessed small changes in lesson plan books and in initiatives to group learners in reading and mathematics and to a lesser degree in science and social studies. On the other hand, teachers talked about teaching and learning as never before. Sometimes unknown to me, a teacher mentored a colleague to learn a strategy or just to put words on moments of frustration.

Teachers heard the term *literature circle*, but it took the research of Rebekah to bring the practice into our school. When this action research study began, Rebekah’s experience as a new teacher in our school was a heavy weight on her shoulders. Despite great efforts on her part, the tasks of management, discipline, and pedagogy never seemed surmountable. When we agreed to change from grade eight to grade five, Rebekah was reborn.

With encouragement, Rebekah agreed to stay another year and she spent the entire summer doing research on best practices. Not only did Rebekah exceed her own expectations, but many of the participants turned to her for guidance. I witnessed teachers from grades three, four, and five huddled in the hallway to share teaching and learning strategies.

The philosophy of differentiation is a matter of thinking about teaching and learning. To some degree, participants held on to instructional frameworks that robbed them of their creativity as well as new ways to think. Now an action research project offered a huge invitation to open their minds and hearts to the joy of teaching and

learning. Hence, with the onset of reflective practices and openness to shared experiences, teachers cautiously moved into uncharted areas of pedagogical practices and collegiality as expressed in the following:

Well, I am going to say that differentiation has, uh, really changed me. When we first started learning about it, I didn't like it. I thought it was crazy. It is going to be loud and noisy and children are going to be doing what they want and no one is going to learn. But, the more that I read and the more that I learned in all our meetings, I liked it. I didn't know how much I liked it until, I think, Thanksgiving when my sister-in-law says she must do differentiation. She said she hated differentiation. She was putting it down and I am angry about that. It is good; it is good. It is not only our school that is changing – it is obviously the way of teaching. We need to be part of it. (Rachel)

Before the talk of differentiated instruction, I never thought about splitting up my class. It is scary and I still need to do a lot of research. Professional development helped a lot. It changed me. I'd still be in the dark. When you are teaching this long, it is hard to break from the old habits. I told myself that I can do this. I can learn more. I could actually move forward. This is the 21st century and we have to move. (Deborah)

I try to differentiate beyond – not the process, but the content. I will give the same amount of work, but different concepts. I know that the two students I have are doing an entirely different kind of lesson altogether. What do I do? I do demonstrations and then I have students working on easier things. And my most advanced students, I give word problems. I think I learned so much from professional development. Two teachers have given me so much since the beginning of the year. [Ruth] helped me with a power point in math to prepare for the standardized test and [Rebekah] gave me so much for my reading groups. I go to her all the time. (Sarah)

I used differentiated instruction before. I understood the concept, but was not getting the whole picture, Ah, so by reading I was able to get a better understanding. You know, in the back of the book you gave me are examples of what to do. I used them all the time. It was modeling and I am a visual learner. (Rebekah)

All volunteer participants responded to the opportunity to research, collaborate, and dialogue about their instructional practices. Some teachers looked at professional development opportunities with a mixture of interest and fear. However, participants wanted new knowledge to live through classroom practice.

There had been a stream of professional development workshops each year prior to my appointment as principal, but teachers voiced that every initiative appeared short-lived despite engaging content and attentiveness. Thus, many questioned the value of participating in an action research project for differentiated instruction and its sustainability for practice within their classrooms. Further, the common sense of changing instructional practices could not be grounded solely on learning new knowledge. It required a commitment of time, dedication, and possibly the transformation of the school's culture through shared visions, mental models, team learning, personal mastery, and systems thinking. Nevertheless, teachers accepted the challenge.

Rachel voiced many comments about change initiatives, such as, "I needed to understand what differentiation was. I needed to see it in print and I am glad I found it in the back of my teaching manual. And so, we just have to do it and not be afraid." Rebekah added, "Concentrated professional development helped me change what I do. I never would have thought of it before – peer teaching. I have flexible groups based on interests." A different thought comes from Sarah: "I think it is easier for the three youngest teachers to take on differentiated instruction than the more experienced teachers. They have been teaching for so long and it is harder for them to change."

Most participants spoke favorably about exploring various dimensions of differentiated instruction within the domain of our professional development. However, in my review of documents, two years of mandated professional improvement plans submitted by teachers included objectives to implement differentiated instruction. However, I found no evidence of differentiation upon my arrival.

Additionally, recent Middle States Evaluation Reports detailed teachers' efforts to differentiate instruction and recommended the continuation of its practice. An obvious split in the data existed. Again, I failed to observe teachers' awareness of students' varied academic needs before initiating the action research study. Indeed, I could not spin out a narrative about differentiated instruction because after months of observations and classroom walk-through, no evidence of the principles of differentiation existed beyond the office documents.

Embedded professional development, however, served as an agent for systemic changes in teachers' beliefs, values, practices, and attitudes as evidenced in these words of participants:

I've learned more than I expected. It helped me to be more introspective about planning lessons. There is a planning stage of differentiated instruction grounded in rules, but the ground work is laid. I am aligning my instruction with students' needs and interests. I think the action research project was the missing element for us. I get kids more deeply involved-it was not there before. And I saw in the cluster workshop that our teachers are getting much more involved. I shared with teachers from five other schools. I was so surprised how much I could talk about differentiation. They said it was too much work. They just go to their classrooms and close the door. We build our professional efficacy. We network with each other. (Rebekah, Abigail, Miriam)

During a professional development session designed to discuss the benefits of differentiated instruction, Miriam placed her hands on her head and shouted, "No more talk about differentiation, please, please, please. Can it go away?" She let us know the depth of her feelings about change as participants listened with unremitting attentiveness, in awe of the outburst. Miriam then laughed aloud and, with a sigh of relief, others joined her with laughter and giggles. Correctly acknowledged and properly applied, Miriam's accountability to colleagues empowered her with a new sense of her own control to teach.

Miriam, a second grade teacher for 20 years, initially requested storage for her new electronic board until she gained confidence to use it. Although not ready for a smart board, this veteran teacher courageously shared her advanced knowledge and attempts to differentiate instruction, including episodes of failure. I believe Miriam grew in wisdom as she reflected upon and shared her struggles to change old habits. Despite the fear of change, however, a metamorphosis took place in the second grade classroom and in Miriam's growth as a leader as illustrated in the following story.

Miriam continued to share how differentiated instruction amazed her and allowed her to become a more effective teacher. At first, change meant the traditional rows of desks turned into group clusters for shared learning. But with new knowledge, activity centers emerged, lessons tiered, and above all, flexible reading groups supported skill development.

By use of actual examples, Miriam shared with colleagues the manner in which she planned lessons, involved parents, and ceased being defensive about her rigid conservatism. Indeed, through the revitalization of her own teaching methodologies, Miriam brought excitement to herself, to students, and in particular to the parents who delighted in their child's performance of a classroom play. Invitations to school activities, unheard of before, evolved from this action research project. Likewise, at any time, one could find Miriam's students actually seated on the floor for lessons, at the computer center, or working with a peer to complete a task.

To ignite participants' transformational behavior took time, but classroom environments gradually showcased innovative themes from skateboards hanging from the ceiling in grade five to jungle centers with fake trees, colorful parrots, and a plethora of

monkeys in nooks and crannies in the fourth grade. Miriam took an under the sea theme from a chapter in her basal reader and with the help of parents, turned her classroom into a sea world of color, water, and light. Transformations continued as knowledge supported actions. With trust, teachers courageously shared their best kept secrets about pedagogy, management, and research.

Miriam commented:

I developed new skills in the workshops, in the professional development. My interest in learning motivates me. It is my motivation to learn differentiated instruction and I love what I do and I see the changed results in the class when I teach. I see that I am successful and my children are happy and I know when they go home, they tell these things to their parents like, oh, we tried something new today. My instruction is not the same. I learned a lot, uh, I just did!

Research Finding 2

Research question number two asked: How did participants develop the knowledge, skills, attitudes, and values they perceived essential to change pedagogical practices? The finding for question number two is that all 12 (100%) participants from Cycles 2, 3, and 4 perceived professional development helped develop the knowledge, skills, and personal mastery to change their instructional practices (Appendix I Data Summary - Finding 2). Professional development included participants in faculty meetings, workshops, interactive activities, conferences sponsored by the Diocese, and a focus group. Rachel, Abigail, and Esther kept journals to enhance reflective practices. In addition, participants expressed that factors such as shared experiences, trust, and stable, predictable growth in their own capacity to learn also influenced their beliefs, attitudes, and values as professionals.

Along with me as the research practitioner, the teachers of grades four, five, and eight facilitated efforts to change pedagogical practices by attending a county conference

in which Carol Ann Tomlinson, as keynote speaker, presented a summation of her writings and experiences as advocate for the principles and practices of differentiated instruction. The conference, entitled: *Differentiating Instruction in Mixed Ability Classrooms*, a tipping point of the action research project, taught teachers how to think about differentiation more than what to do with implementation strategies.

Rebekah reports:

When we went to see Tomlinson, it was my clicking moment. It was like “wow” and I think the conference was more beneficial because of all the readings and discussions behind me. I think I would have lost something if it were my first introduction to, uh, differentiated instruction. So the handouts were really helpful. Also, I enjoy hearing what other people are doing in their classrooms. Everyone seems to realize that we can learn from each other’s mistakes. Sarah always tells me she is overwhelmed with groups. Her students are always having side conversations. I suggested to stop the groups and share with students what you have planned and why. “That was the best idea ever,” she shouted the next day. Sarah and Esther share what they are doing in their classrooms. We share a lot almost every day.

Essentially, participants possessed a need to learn in similar ways. Again, Rebekah voiced, “I felt that all the books you gave me and the sharing during professional development helped me. But, the Tomlinson conference on differentiation was the “wow” moment.” Rachel adds: “The professional development activities that we did here have been very helpful as far as what we see on paper.” Miriam reports: “I learn from my mistakes. When I realize that I do something that is not working, I try to improve. My planning changed. The idea you get from reading, from sharing, and then when you go to your classroom, you want to try it.” Rebekah concludes, “I have reading groups, not a lot of control, but it allows for me to spend more time with struggling students. I group by ability and interest.”

In one form or another, participants described their perception of learning new skills. Rachel said, “To just try it and I have to keep a little journal and we have to write and to be honest,” and Miriam commented, “In other words, you are putting theory into practice. Yes, and we have a lot of stuff– oh, the tools. It really helped. I have a smart board. It is in the box (laughs).” Deborah summed up her view with the words: “I believe using new practices is a continuous strategy. A teacher will continue to learn more as she goes along. I am willing to continue learning and developing more strategies. I want to learn more.”

The philosophy of differentiated instruction proposes that what we bring to school matters in how we learn (Tomlinson & Allan, 2000). To be effective, teachers must take into account who they are teaching as well as what they are teaching. For example, the action research project school site enrolled many English language learners, yet a mismatch existed between students and the lessons presented. However, as teachers’ awareness developed through an exploration and implementation of differentiated instruction, they recognized how their one-size-fits-all instructional paradigm was rarely a good *size* for most learners. Participants described developing knowledge, skills, and attitude in this manner:

By getting ideas from other people, listening, and by watching. I guess basically by watching the video tapes. Oh! Of course, by reading helped a lot. By the different books you’ve given to us and when you explained the more benefits. Although my aide and I did a little, this happens to be a better way. I’m really happy and the day goes quicker and there is less stress. It was whole groups and everyone did the same thing. Now, it is different. I needed to learn about it. How important it is to differentiate. Now I have color groups. I assess them. I learned a lot. (Abigail)

This reflection speaks to the truth of the instructional milieu of our school prior to the introduction of the action research project. Hence, to initiate the action research study

was the single galvanizing moment to change our learning organization. From my perspective as the observer of pedagogy, I deemed it a moral obligation to improve instructional practices.

With a sense of urgency, I believe participants made meaningful strides to become effective instructional leaders within the domains of their classrooms as well as for the system as a whole. Through the learning experiences of an action research project, teachers moved from accepting single lesson pedagogical practices to power point presentations and electronic lessons using a smart board. Teachers assessed the needs and interests of their students, slowly at first, but with a purpose. In the transition, they also built their own skills as professionals.

Research Finding 3

Research question number three asked: To what extent did participants perceive certain factors in their systematic inquiry into the principles and practices of differentiated instruction resulted in enhanced feelings of empowerment and professional efficacy? The finding for question number three is that all participants invested time and effort to change pedagogical practices with a sharp focus on understanding the principles and practices of differentiated instruction. Along with a stronger and more cohesive instructional culture, the action research study spoke to the core values of participants. Rooted in a transformed culture of social and intellectual capital, participants' sense of empowerment and professional efficacy soared (Appendix J Data Summary – Finding 3).

Nevertheless, change was hard. It took much effort and a very long time, but participants accepted the journey. The following story reflects a journey of change, empowerment, and professional efficacy:

Rebekah arrived at our school during the first year of this action research project. She left another school after only a few months, but was glad for a new start to her teaching career. Rebekah taught English to students in grades six, seven, and eight. Her parents and sister helped decorate her classroom for several weeks before school began. In my review of documents, I found a classroom observation of Rebekah that addressed issues of planning, the need for structure and discipline, and a recommendation to display students' work. I did not recall the actual classroom visit, but I never forgot Rebekah's decision to give up teaching when the school year ended. Through the prism of my leadership platform and with the help of her colleagues, we convinced Rebekah to try teaching for one more year. I saw her as a plant to water, not as someone who needed to be fixed (Palmer, 2007).

Without intention, this young teacher was an instrument of change for the teaching and learning environment our school. Rebekah read about differentiation, initiated literacy circles, and shared her knowledge. Moreover, when the assistant superintendent of schools visited her classroom, he practically ran back to my office.

The superintendent observed Rebekah teach a lesson with a power point, electronic white board, and audio sounds interwoven into objectives from the subjects of religion, mathematics, and literacy. He was totally amazed with her ability to structure three subject areas with such fluidity. Rebekah did not know that someone would visit her classroom that day, but her extraordinary dedication to preparation and instructional decisions triumphed. I respected Rebekah's ability to embrace challenges and rejoiced in the growth of her professional efficacy.

Esther commented, “I want to learn new learning theories by going to more workshops and I want to implement on a regular basis.” Deborah concluded, “Our environment has changed. We go to each other. As a staff, we need to pull together because we can’t do it ourselves. I go to my colleagues all the time.”

As this action research project stretched from one year into the next, participants slowly demonstrated the strength of their own voices through a sense of empowerment. New knowledge opened their eyes to their own worth and to their own capacity to change. At the same time, I worked to maintain a construction of meaning with the realization that participants’ arrived at a threshold in their professional lives. That is, regardless of the complicated nonlinear system to effect change, participants learned to express the plentitude of possibilities within themselves.

Shared views fostered this strength and unity as participants started to recognize one another’s hidden talents. For instance, when the reserved participant, Eunice, presented her literature review on differentiated instruction to colleagues with deep knowledge and exuberance, the faculty burst into applause. Teachers felt inspired, but it was an epiphany moment for Eunice as a sense of efficacy enveloped the faculty room.

On a farm, reminds Irish poet O’Donohue (2004), work has a visible effect. When you dig potatoes, you see the results of the harvest. Teaching is hard work too, yet it seldom offers the visibility of the harvest. Eunice’s presentation captured the countless impressions and ideas in our hearts and minds. Her 10-minute presentation awakened in us a path toward team building and the tightening of the circle that bound us within our organization.

Findings further illuminated the efforts of participants to journey toward the change of pedagogical practices. Specifically, excerpts from the transcribed interviews and data sources provide a window into how participants responded to the challenges, sharing, and practicing of differentiated instruction. Throughout the clarification of themes within the findings, I unraveled an emphasis on participants speaking for themselves (Bloomberg & Volpe, 2008). In professional development sessions, participants found a safe place to develop knowledge and skills without being assaulted with expectations for immediate changes. Trust and respect took hold in our risk free learning environment as participants' voices energized actions.

Research Finding 4

Research question number four asked: To what extent did participants perceive certain factors impeded their pursuit of knowledge, consistency, and pedagogical innovations grounded in the principles and practices of differentiated instruction? The finding for question number four is that all participants charged that several factors impeded their efforts to create classrooms and pedagogical experiences to match learners' needs (Appendix K Data Summary – Finding 4). Nevertheless, barriers formed building blocks toward empowerment and professional efficacy.

Professional development experiences made sense for teachers to fashion the learning environment to match learner needs, but reminds Senge et al. (1999), “Sustaining any profound change process requires a fundamental shift in thinking” (p. 10). Participants learned step-by-step, sometimes with excitement, but often with trial and

error. Sharing experiences, however, unfolded into new understandings and gradually shifted mental models.

We spent months together in the observation of videos and discussions about strategies and theories of learning. In the process, we lived with our mistakes, but kept focused to overcome barriers. As the researcher, I stood in awe of participants' actions expressed through unrealized knowledge and the step-by-step rearrangement of their instructional landscape. As such, I valued each participant's efforts, small or large, to learn and use new knowledge.

Nevertheless, participants charged that several impediments existed in their efforts to create classrooms and pedagogical experiences to match learner needs. The goal of professional development was to provide maximum growth in knowledge, understanding, and skills. Although participants engaged in embedded learning opportunities for differentiation, several described the difficulty experienced in understanding and putting into practice the various facets of differentiated instruction. They could not determine flexible pathways for all learners despite the extent of research, reading, and discussions experienced for more than two years. To put new learning into actual practice presented challenges as described:

You were patient and gave us time to go with it because you knew that it was new and that we didn't get it. And it took a long time and we still didn't get it. We are still working on it. And it took a long time for everybody to stop and say, well, this is what we have to do. (Abigail)

Professional development that we have done have been very helpful, but I think what is missing is to see it in action. Not on a video tape, but really in a classroom that is run completely differentiated. But I know at the conference they said not every lesson every day. But, I think we put too much on ourselves. We want to be at the top, not to be climbing a ladder. And so it was very difficult. Doesn't it look just great on paper! This group will do this and that group something else. It is

overwhelming at times. I know you kept saying baby steps, but we kept feeling we were not producing. We were not doing enough. (Rachel)

During this action research project I posed the following question at a faculty meeting: “What is your vision of our mission?” Responses included: to provide students with a strong education that reaches the diversified learners, help each child learn through differentiation, push knowledge abilities, to learn how to make a better program, provide students with an American culture, to meet the individual needs of each child and, lastly, to have an acute understanding as to what learners’ particular needs are. With these comments in mind, I share the words of a dedicated first grade teacher participant:

I have been a teacher for eight years. Well. Here’s how I feel. I like differentiation. Do I honestly wish that I could just stand up and lecture? Yes, I do. I want to teach college. But no, I cannot teach that way and it frustrates me. To get it to a personal note, my daughter who is in third grade had a fabulous teacher. I used to think she was great, but all day long, my daughter tells me, she sits at her desk. For the science lesson, the teacher reads from the book and then students do a ditto. That’s what we did here. My daughter has difficulty reading. Last night doing homework, she could not understand how the earth turns. I thought my daughter is all about differentiation. She actually needs to see a tennis ball spinning. I need to be a better teacher because that is what I do. I am not raising the level of students’ learning. I should be with the differentiation. It is difficult. It is so hard and I don’t know how to be good at it. I’ve tried and I feel I have let a lot of children down because there are students in my class who could soar. I have lots of ideas, but it is difficult. (Rachel)

Miriam adds her perspective with the following words:

I think the faculty has grown a lot with us since you started introducing differentiation in the classroom. And, um, as far as I am concerned, I really see the result of my hard work, too, because it is not easy. You have to really plan because you have to differentiate groups. But, I am always complaining because the many workshops that I have attended since I came to this country, not one workshop did an actual demonstration on the things that they teach. Because it is easy to say – you do this. I get so frustrated because what I want is an actual demo in an actual classroom and then we take it from there. Change is hard!

Research Finding 5

Research question number five asked: How did this action research study help me examine my espoused leadership platform through the filter of Senge's (2006) five learning disciplines and my leadership for differentiation? The finding for question number five is that, as participant researcher, I set out to document rich descriptions (Marshall & Rossman, 1995; Merriam, 2009) of participants' attempts to understand the depth and wisdom of the philosophy of differentiated instruction and the changes that shaped their pedagogical practices. In most instances participants needed multiple approaches to learn the philosophy of differentiated instruction, particularly the management of content, process, and product. They attempted again and again to refine their understanding of pedagogical innovations. In essence, the journey to invigorate and renew pedagogy meant a long-term commitment, a dedication to hard work, and shared responsibility through systemic leadership.

In my determination to lead a school toward differentiated instruction through the prism of my espoused leadership platform, I looked for guidance to the disciplines of personal master, mental models, shared vision, team learning, and systems thinking identified by Senge (2006). These disciplines are considered vital dimensions in building an organization. Further, the five disciplines are personal, although also the familiar disciplines of the business management model. As such, I respected systems thinking within the framework of working with and for teachers and the emphasis on how to think, interact, and learn with one another.

I first embraced the systemic view of our learning paradigm by giving voice to teachers. Through reflective practices I recognized our potential to define a vision for

learning within an action research project. As identified, teachers shared their personal vision of our instructional milieu in the question sessions. My task, however, was to translate individual visions into a shared vision of the future we aspired to create.

The discipline of personal mastery is the discipline that clarifies our vision. It commits to learning and acts as a spiritual foundation (Senge, 2006). As the new principal, my vision appeared idealist, but essential if the diverse academic needs of students could be addressed. Nevertheless, no guarantees existed that the knowledge and implementation of differentiated instruction would turn our school around nor could we be certain the school would not be shuttered. Nevertheless, I depended on classroom walk through observations to support a culture of change (Appendix L Images).

But, I believed it a matter of social justice to try. As educators who espoused care for students, we faced the harsh reality to serve them well. As the leader, however, I did not want the school to exist in a survival mode. Personal mastery called all stakeholders to realize our vision of investment in the principles and tenets of differentiated instruction where every child advances in understanding and skill development.

The discipline of team building was the web to pull us tightly together. Senge (2006) asserts that teams develop extraordinary capacities for coordinated action. This action plan was all about the coordinated actions of participants and me as the participant researcher, to invest time and energy into the exploration of differentiated instruction.

According to Senge (2006), team building begins with dialogue. The structure of our faculty meetings invited all to speak without risk. It took months to get to the point of shared dialogue, but with thinking aloud and building trust together came laughter and

community. I could feel the elements of being a servant leader and a transformational leader wrap around me like an invisible cloak.

A discipline (from the Latin *disciplina*, to learn), reminds researchers, is a developmental path to acquire skills or competences (DePree, 1989; Flynn, 1993; Senge, 2006). Within the discipline of mental models, I attempted to unearth the internal picture of our school. Ongoing focused questions surfaced teachers' beliefs, value, and attitudes. I shared my personal and professional story with teachers to let them understand my thinking as a leader. In doing so, teachers could begin to understand my world and my way of thinking about actions. Question and answer sessions also helped me understand the mental models of teachers and the effect of mental models on teachers' behavior. In turn, teachers shared their thoughts about my leadership in the following words:

We could have learned from each other, but we did not. We started to learn when you brought your books to us and then when you bought each of us the Tomlinson book about differentiation. There would be no change without your leadership. We could no longer hide behind our plan books. We could write about differentiation in our plan book, but we didn't understand. You kept our feet to the fire. We have to believe about differentiation. We have to believe it is the way children learn. You made us understand. (Rachel)

You put me on the right track. I did it because, from – you explaining the more benefits and the good for the school itself. I guess it is the children and the culture. There was a need to be differentiated. We needed the push. We needed someone to say this is what I really want you to do (big laugh). We talked about it every time. We knew you were looking for the change and I guess you realized how really important it was. It worked out really well. I think the children will be better off. We talked about it every time. And you were the servant leader. You are patient, but I know you blow when you are ready to blow, but you are patient. You are not critical and it made things a lot more – I think everyone is cooperating more and feeling more comfortable and a lot more like a community. It is a lot nicer now. (Abigail)

You put me on the right track. Well, we are tired of listening to you. Every time we have a meeting it is differentiation and differentiation. Your leadership from my perspective, I am telling you, uh, you are, oh my God, I have been teaching for so many years that I have been with so many principals, but you are different.

When you want something, you want it done and you bug us. You don't stop. So there is a quality there that makes people want to work together. When we do our homework, it helps me a lot especially because I am a seasoned teacher. I like new ideas because it is a changing world. (Miriam)

In reflection, I gave lasting support to participants as a leader eager to serve the equity of opportunity for all learners. I identified care within a feminine leadership, but was it to overcome adversity toward building a culture of differentiation? Fortunately, as I traveled my action research study journeys within the symbolic Chartres labyrinth, cycles of reflection, service to others' growth, and a transformational stance toward collaboration sustained me. I believe participants also gave birth to their own sense of empowerment and efficacy through this action research project. Participants understood that to support their capacity for differentiated monopolized my consciousness. To share its value could not be diminished.

Further, in the findings, I recognized a facility with the language of pedagogy in the separate and distinct voices of participants. Moreover, illustrative quotations from participants' interviews portrayed their perspectives while an interspersed discussion of documents and observations captured the complexity of changes attempted, the building of professional efficacy, and the wonder of being pushed to one's own limits. The last finding captured the participants' focus group data.

Focus Group

The focus group consists of the following eleven faculty participants from Cycle 1: Abigail, Ruth, Rachel, Rebekah, Miriam, Esther, Sarah, Deborah, Naomi, Eunice and Daniel, who joined our Catholic school faculty in year two of the action research project. As noted, pseudonym names are used throughout this action research study to respect

confidentiality of participants. In addition, information elicited would not be recorded. Ruth would maintain a written record of discussions.

As the facilitator, I monitored the process of the group discussions, but the dialogue remained in the hands of the participants. Thus, following a pot luck luncheon, participants gathered to discuss their perceptions of learning differentiated instruction and its impact on their pedagogy and attitudes toward teaching and learning. The faculty room buzzed with talk of actions taken and how students responded to innovative instructional strategies incorporated into routine lessons.

I randomly distributed large red, blue, and green index cards for participants to form color-coded groups. After 15 minutes, participants formed three separate discussion groups of mixed grade levels for a concentrated focus on their experiences. For nearly two hours, participants engaged in a discussion and analysis of their perceptions of the following question: What concrete steps have you taken to achieve the important goal of changing pedagogical practices?

Responses written on chart papers included the following:

Red Group: Graphic organizers/Projects/Readiness, interest, learning styles/
Varied rubrics/Supplemental materials/Multilevel activity tasks

Blue Group: Flexible groups/Reading groups/Math groups/Tiered activities.

Green Group: See children as individuals rather than a group/Know students/
Learn from the child/Beginning overwhelmed but now small
groups at same level/Flexible groups/Varied assignments/Learned
to change literature groups/Key to all things is assessment.

Participants expressed pleasure in the shared experience as a leader of each group held high the color-coded chart papers to summarize the groups' findings. With a special kind of curiosity and elegance, participants' ability to connect with each other was obvious in the laughter of friendship and in the pride of accomplishment. As the researcher and participant, I witnessed participants' emerging sense of personal and professional efficacy as two threads wrapping the groups together. Before the session closed, participants shared data from the whole group and the three subgroup discussions. In closing, Ruth presented an oral synthesis of the focus group findings. At that point, Naomi stepped forward to add that to form groups for her kindergarten students would deprive them of their childhood. Some group work was done, but to a limited degree.

Nevertheless, Naomi expressed a desire to continue to learn about the management of multiple activities. Naomi's comment surprised her colleagues, but they respected her candid attitude even if they did not understand her perspective.

In sum, teachers shared their early frustrations in attempting to change old habits and their support of each other in building intellectual capital. But, no matter where they would teach in the future, they agreed the exploration of the principles and practices of differentiated instruction experienced in our school's action research project would continue to awaken in them new values, beliefs, and attitudes about teaching and learning. I still treasure the chart paper presented to me with the words printed in blue: *Madame Principal, thank you from the red group.*

Leadership Reflection

As a practitioner of differentiated instruction in the past, I valued initiating a systemic growth toward differentiated instructional practices. Moreover, as leader in my

new school, I also envisioned teachers' willingness to explore the philosophy of differentiated instruction because of the site-based opportunity. Further, gaining the knowledge, skills, and attitudes to change patterns of instruction remained promising for participants' teaching and learning, but the process also supported professional and personal efficacy (Heacox, 2009; Smutny & Von Fremd, 2004; Tomlinson, 2003; Tomlinson & Allan, 2000). Further, I questioned if this action research project could also enable readers to delve into the real world experiences of the study's participants who struggled to crystallize themselves as practitioners of differentiated instruction?

Teachers at the project site became catalysts for reshaping their one-size-fits-all instructional framework, but only after the genesis of this action research project. In the beginning, they lacked the confidence and skill to take more than incremental steps to change practice. For years, despite a succession of professional development initiatives with the potential to help them change pedagogy, each initiative, separate and distinct, barely affected their instructional practices. Even high-quality topics, including cooperative learning, differentiated instruction, multiple intelligences, learning styles, and classroom management did little to change the use of single-paced lessons delivered through a one-size-fits-all instructional paradigm.

But, change is our great and constant muse! Prior to the action research study, change was not in teachers' pedagogy, but rather in the burgeoned diversity of students of all abilities entering every grade level. Researchers assert that most students behind the classroom door will be ill served if teachers are not skilled in recognizing the varying background knowledge, language, readiness, or interests of their learners (Tomlinson &

Allan, 2000). For this reason, I felt compelled to explore every reason for optimism about the philosophy and practice of differentiated instruction.

However, as the participant researcher in this action research project, I experienced an unprecedented bond with participants through the philosophy of differentiated instruction as I developed an ability to step back and facilitate learning. Further, I determined to achieve or produce anything from a small piece of knowledge and a deep belief in the potential of colleagues for the sake of teachers' professional development. Consequently, as my affinity for differentiated instruction spread through my actions, I encouraged and witnessed teachers' efforts to provide a quality of instruction for all learners despite academic diversity, cultural differences, or demographic realities.

I honored participants' teaching commitment as Catholic school educators and they recognized that I felt it a privilege to serve them. I believe, moreover, that a higher trust culture grew (Stephenson, 2009) through shared conversations, stories, and my capacity to nurture participants through certificates, press releases, food, or flowers. Although giving favors or awards is transactional, trust linked with appreciation served my transformational aspirations and cemented an orientation toward the art of teaching in a milieu of change. Participants trusted that I would help them understand the principles and applicability of differentiated instruction and, in the process, not judge them on their capacity to learn (Tomlinson, 2001, 2003).

Chapter 7

Interpreting Findings and Reflecting Leadership

This action research project maintained a two-fold purpose. First, the study sought to explore a sample of urban Catholic school teachers' perceptions of how investigating the principles and tenets of differentiated instruction through embedded professional development changed their pedagogical practices from a traditional one-size-fits-all instructional framework to a model that addressed the academic needs of their increasingly diverse students. Specifically, I believed expectations for differentiated instruction would support a trajectory of fixed classrooms throughout our school into flexible, thoughtful, responsible, state-of-the-art instructional pathways to learning. A second equally important purpose of this action research study examined my espoused leadership platform through the filter of the five disciplines defined by Senge (2006) and my leadership for differentiated instruction.

In response, this action research project became the entrée to reflective practice for participants to improve pedagogy through philosophical and behavioral changes. Accordingly, through exploration, articulation, and sharing of ideas by participants (Izzo, 2006; Osterman & Kottkamp, 2004), changes made during and as a result of this action research process addressed issues of equity and equality of learning for all students. Further, the triangulation for the collection of data included participant interviews studied through multiple listening opportunities, review of documents with a link to observations of classroom environments and instructional lessons, and a focus group. Participants throughout the research study included teachers from the site school.

The data were coded and organized by the conceptual framework rooted in the following five research questions:

1. To what extent did participants perceive an exploration of the principles and practices of differentiated instruction through embedded professional development prepared them to change their traditional instructional practices?
2. How did participants develop the knowledge, skills, attitudes, and values they perceived essential to change pedagogical practices?
3. To what extent did participants perceive certain factors in their systematic inquiry into the principles and practices of differentiated instruction resulted in enhanced feelings of empowerment and professional efficacy?
4. To what extent did participants perceive certain factors impeded their pursuit of knowledge, consistency, and pedagogical innovations grounded in the principles and practices of differentiated instruction?
5. How did this action research study help me examine my espoused leadership platform through the filter of Senge's (2006) five learning disciplines and my leadership for differentiation?

This chapter portends to analyze, interpret, and synthesize the findings following the model for an analysis chapter used by Bloomberg and Volpe (2008). The chapter is organized by the following themes:

1. The relationship of professional development and changed pedagogical practices perceived by participants' exploration of differentiated instruction.

2. Perceptions of learning the principles and practices of differentiated instruction, the acquisition of the essential knowledge and skills, and barriers to learning and implementation.
3. Differentiated-minded participants enhanced feelings of empowerment and professional efficacy.
4. Perceptions of barriers to continued development of knowledge and pedagogical innovations.
5. Senge's (2006) five disciplines and leadership for differentiated instruction.

In this chapter, I searched primarily for pattern connections within the analytic categories or themes that emerged from the data. Thus, I attempted to reconstruct a more holistic understanding of the research study. I also compared themes to the literature.

Analytic Category 1: Pedagogical Changes

The first research question sought to determine if the study of the principles and practices of differentiated instruction within a frame of professional development changed participants' pedagogical paradigms. As evidenced by their statements and behavioral changes, participants agreed a connection existed between professional development designed to explore differentiated instruction and their transformed instructional practices. Not only did some aspects of instruction change, but participants' attitudes toward teaching, learning, and toward one another moved in new directions.

Further, although participants worked in the same school, attended the same professional development sessions, and studied research by Tomlinson on differentiated instruction, teachers could not experience the same mental model transformation of pedagogy or personal mastery. Herein rests the beauty of our world of teaching and

learning. Just as no two children are the same, involvement in this action research project uncovered how each participant brought a unique wealth of experience and culture to the learning endeavors. Participants also illuminated their individual passion to be effective teachers.

Miriam, Esther, and Rachel articulated their need to take little steps to learn and practice new skills through readings, research, and workshops. Although grounded in a one-size-fits-all instructional paradigm for more than 20 years, both Miriam and Esther took more risks than Rachel, a teacher of less than a decade. Esther and Miriam, teachers from schools already shuttered by the diocese, brought memories of an earlier experience to our new challenge to improve instruction.

Nevertheless, although Esther received the teacher of the year award in another school, her creative spirit remained on hold at the start of this action research project. She often taught seated at her desk and seldom walked around the classroom. After several lively faculty meetings focused on the philosophy of differentiated instruction, however, Esther slowly moved from the silence of her isolated stance into happy dialogues with colleagues. More than that, she networked with teachers during her lunch period to share or discuss teaching methods or projects. Released from self-imposed isolation, Esther soared with an eagerness to share theme based and problem based learning techniques within the framework of differentiated instruction.

Miriam, also from a shuttered school, felt the burden of challenge, yet immediately embraced every opportunity to learn new teaching skills. Her energy and contagious sense of humor added spirit to our learning environment. Nevertheless, to

change practice or routines showed a love-hate relationship, yet Miriam emerged as a champion for pedagogical changes and the building of a learning community.

By the same token, Abigail, a teacher of young children for 18 years, moved with tenacity to differentiate instruction. She set up centers for computers, science, reading, and writing. Flexible groups worked with Abigail to develop literacy and mathematical skills as the paraprofessional transformed into the role of writing coach. Abigail commented:

Parents love the idea of differentiation. When I have my conferences, I tell them we are working on DI and if their child had the need to be advanced, we push, especially if they are gifted and talented. They do not think we have that and parents liked it. And if they are struggling, we have the help.

As noted, Ruth and Rebekah assumed the role of mentors for Sarah and Esther. This behavior represented a unified spirit sustained from meetings and discussions about instruction. Intellectual capital about best practices, once destitute of any real criterion, formed building blocks within teachers' landscapes of instruction.

In terms of her own research, Tomlinson (1999, 2001, 2003) acknowledged how the elements of learning and environment are the catalysts for effective differentiation. They shape and value everything else a teacher does in a classroom. I contended that foremost in the minds of Ruth and Deborah lived the equity and equality of opportunity for all learners as demonstrated through smart board activities, power point presentations, classroom management designs, and the sophistication of experiments in the science lab. By the development of strong mental models, they enabled themselves to serve students' needs using their knowledge of differentiated instruction.

Wheatley (2005) also underscored the importance of learning and environment and suggested "it is crucial to remember that, in organizations, we are working with webs

of relationships” (p. 106). In point of fact, our action research project helped participants weave one another into a web of shared interests and meaningful changes through patience, generosity, and acceptance to create a different learning milieu. To further support the paradigm to change practice in the learning milieu, I purchased Tomlinson’s (2003) book entitled: *Fulfilling the Promise of the Differentiated Classroom* for every teacher and expected the book to be read in a timely manner. I encouraged teachers to mark up their copies, focus on areas of interest and read the book over and over again. After months, however, teachers’ books appeared untouched.

Thus, began the essential homework assignments and teacher presentations to make participants better connected to action. Abigail said, “You encouraged us. You didn’t make us feel dumb, which is nice. You didn’t force us to do something.” But, I did assign participants to select chapters of their choice and prepare oral presentations. It worked! Teachers prepared with a thoroughness that amazed one another. Participants learned to talk the talk. The three teachers who attended the Tomlinson conference also reaped the benefits of the homework assignments. A foundation of the principles of differentiation through our professional development activities brought clarity to Tomlinson’s presentation.

As such, teachers become more effective instructors by learning the practices of differentiated instruction (Tomlinson, 1999, 2001, 2003), but growth required change in classroom practice. To differentiate instruction meant to honor the uniqueness of each learner, whether in groups or on an individual basis. Tomlinson and Eidson (2004) capture the essence of interpretation for this research by stating that every teacher is a learner.

As participants, we viewed tapes on differentiated instruction or lessons on how to become an effective teacher, but most of all, we talked. We dialogued during our seven o'clock Wednesday morning bagel breakfast meetings, at pot luck or pizza lunch professional development sessions, and every chance possible in our busy schedules. For the first time in my long career as a principal, I invited the faculty to my home for lunch. It was a memorable experience!

Like a slow wind moving through the leaves of a tree, we got caught up in learning together. Not as separate classroom teachers, but as companions on a journey. We supported one another with the energies needed to meet the diverse needs of students.

Participants, one after another, spoke of coming together as a community. Abigail phrased it this way, "It did help. It made things a lot more – I think everybody is cooperating more. Now it is more comfortable and when they are out of their classrooms, it is nicer. Deborah added: "The environment changed. We go to each other now." Looking directly into my blue eyes she added: "Don't be offended when I say your stubbornness, your drive, pushed me. I see myself more of a professional."

Nevertheless, to provide instruction to small groups of students is not a new concept, but rather an ancient practice. For instance, on a recent visit to England, I found an example of shared learning. In London's Victoria and Albert Museum is a 15th century seven foot wooden carved statue of St. Ursula. She is reading a book and small groups of children sit at her feet doing their lessons together. My eyes danced for a long time between St. Ursula's book and the children engaged in learning. Through the lens of centuries, I seemed to gaze at a teacher using differentiation. Tomlinson (2003) put it this way, "Those of us who persist in the profession of teaching want students in our

classrooms to experience affirmation, contributions, power, purpose, and challenge” (p. 19).

In essence, I think it is a battle to keep alive the tradition of teaching to students’ unique needs. Yes, participants strategically changed practices and I was proud of them. But, after almost three years into the study of differentiated instruction, I still sensed the need for much more to be accomplished.

Without a doubt, I established the initiative for all participants to think about appropriate instructional practices. However, instructional changes occurred faster in individual classrooms in which teachers recognized individual student needs and decided to blaze a trail. Abigail and Rebekah stood apart in their efforts to explore and implement the philosophy and tenets of differentiated instruction. Ruth’s mathematics classes also proved to be outstanding as students worked with peers, the electronic white board, or on projects.

As researcher and participants on this journey of change, I believed teachers arrived at different frontiers because of their distinct natures. For this reason, I realized a new pedagogy emerged from deep inside each individual. Further, they never owned the pedagogy of my expectations, but of their own.

Additionally, as teachers built intellectual capital, the school received a grant for over one hundred thousand dollars for professional development and supplies in the second year of the action research project. At that tipping point, participants wrapped themselves around a change process as a school community with a vision toward change. It was not easy to accept change, but participants emerged from months of interactions with a solid cornerstone for a learning community. I arrived at this conclusion by the

stories revealed behind participants' interview responses. I also sought to understand the wisdom experienced by each individual and to confirm participants' perceptions of change through opportunities for professional growth, empowerment, and efficacy.

Analytic Category 2: Learning to Differentiate

Participants perceived they gained knowledge and understanding from professional development, especially the social interactions with colleagues. Further, selected participants attending the conference by the guru of differentiation, Carol Ann Tomlinson, confirmed their knowledge and understanding of best practices. In the initial phases of this action research project, all aspects of differentiated instruction appeared mixed together. The conference illuminated teachers' understanding and the attendees, in turn, shared their new found wisdom for all to reflect upon.

In time, participants perceived the greatest sources to gain knowledge emerged from teachers' oral presentations and shared personal learning experiences. Further, as host school for a conference sponsored by the superintendent of schools' office, participants delved into self-directed activities and preparations for round-table discussions. Classrooms turned into showcases as teachers worked to prepare mini-lessons for the visiting teachers from five neighboring Catholic schools.

As such, the Cardinal Newman Academy participants effectively illuminated differentiated instruction as the core of learning in the conference discussions. To the teachers and principals from other schools, the skills associated with differentiated instruction encompassed a culture of togetherness within our site school as participants connected as colleagues. If we discovered shared interests, even small ones, reminds Wheatley (2002, 2005), magical things happen to our relationships.

Hence, although commitment to differentiation existed throughout the action research study, two participants expressed a clear need to learn from real world experiences at an off campus site. To affirm Miriam and Rachel's expectation to witness actual demonstrations of differentiated instruction, I asked them to locate a site and arrange a visit. They never found a school to visit.

At the same time, Rachel found Tomlinson's books difficult to read. Tomlinson's style of writing did not relate to Rachel's unique instructional needs. Further, Rachel was not selected to attend the Tomlinson conference, a matter that left her disappointed.

For an extraordinary person, Rachel held back from reading and embracing the concepts of differentiated instruction. This is pointed out for two reasons. First, on a walk-through day, I observed her whole class take turns to read aloud a basal reader story. Rachel, seated at her desk in the rear corner of the classroom never noticed my presence. She called students' names to read aloud and children showed great respect by following directions and not disturbing Rachel as she spoke on her cell phone. The second reason is reflected in Rachel's own words following a lesson observation: "This was a lesson on a little star fish and I went over the rules. Don't call my name, raise your hand, don't get out of your seat. And I still have people following me around. And so, it is so difficult."

For veteran teacher, Miriam, to acquire knowledge and practice of differentiation appeared to be a slower, meandering process. But, a direct action happened when enough concepts and strategies pulled together. In essence, it took Miriam's creativity to root differentiation. Creativity, as simple as five students reading by her desk, meant grouped

for instruction. Students loved it and she was serious about her position as a leader for differentiation.

In time, learning centers appeared, flexible groups formed, and instruction focused more on students' interest. Nonetheless, Miriam did not give her smart board a chance. She gave up the opportunity for teaching and learning through technology, but readiness remained the key to her advancement. Miriam worked on skills by her actions and, I believe, she met with success.

In a similar manner, Rachel talked about the benefits of differentiation as much as she questioned the school's potential to be shuttered. But, I never sensed her acceptance of the philosophy of differentiation. She blamed the students, old desks, lack of her own management skills, and an aspiration to enhance her professional skills. Perhaps one's attitude inhabited the potential for higher levels of achievement. In other words, if Rachel embraced the complexity of tasks with students' interest and skills in mind, I believed her visibility as a highly effective teacher would exist as well as the extension of her professional efficacy.

Thus, in light of the length of time devoted to the study of differentiation, many participants treaded softly with aspects of implementation, but not everyone. For example, Rebekah and Sarah totally differentiated instruction across the curriculum, but the work overwhelmed them. With limited experience, yet determination, Rebekah and Sarah attempted to understand the work involved to implement differentiated instruction. Rebekah, however, stepped back, mapped out her vision and recognized her mistakes. She transformed into a teacher skilled in exploring the varied needs of learners through her passion to excel.

By the same taken, I recognized Sarah as a novice teacher. During morning breakfast meetings, Sarah constantly checked her cell phone messages, but rarely engaged in discussions about pedagogy. Her obvious boredom implied a desire to be someplace else. Therefore, despite potential, Sarah struggled with classroom management, yet ignored recommendations offered during observation conferences. Classroom environment balanced between extremes of order and chaos.

As a servant leader focused on openness, honesty, caring, and collaboration, I chose Rebekah and Sarah to attend the Tomlinson conference. An investment in their growth appeared to be a solid position for my leadership. Rebekah continued to move forward with tenacity and dedication. The professional development also helped Sarah, but at the end to the school year, she accepted a position in another school. We lost Sarah as a young teacher with the potential to excel, but we also lost sustainability for differentiation.

In sum, I agreed with teachers that the theory of differentiated instruction remained a challenge and, therefore, extremely difficult to put into practice. But, in response to this question, I felt participants learned much from an exploration of research, but so much more from one another. They did not just learn theory and practice, but rather to bring one another into a fuller life as professional educators. By their actions, participants committed to the future with new knowledge and shared experiences. Our stone building, our beloved Catholic school, became a safe zone for learning and professional efficacy.

Analytic Category 3: Empowerment/Professional Efficacy

Involvement in the action research project helped participants recognize the diverse needs of learners, but it also deepened and widened teachers' sense of empowerment and efficacy. During the conference days of round table and mini-work sessions, participants confidently discussed the four domains targeted to improve practice: planning and preparation, classroom environment, instruction, and professional responsibilities (Danielson, 1996). The domains cast differentiated instruction as a feature of high quality professionalism rather than as a separate entity.

I credited the experience of our professional development for Esther's freedom to ask questions about pedagogy, create amazing learning centers, and initiate small, flexible group instruction based on assessments. But, I also contended the interconnectedness of this action research project opened pathways for Esther to bond with colleagues. Esther, along with other participants, exhibited a great effort to improve practice. Rather than accept her traditional instructional practices, Esther chose to read, learn, and change. Consequently, Esther's self-esteem and professional efficacy blossomed.

Analytic Category 4: Barriers to Knowledge and Practices

It remained inevitable that participants displayed varying levels of understanding the principles and practices of differentiated instruction. Despite barriers, however, I believed each teacher engaged in activities designed to cultivate changes in pedagogical practices. However, not all participants could bend around barriers to progress by being centered in acceptance and a balanced effort.

For instance, from the start, participant Michal appeared mired in resistance to change. Withdrawal from the action research project and from her position as a teacher in our school helped her to seek a position that brought her equanimity. At the same time, Rachel and Miriam resisted change for a long time with the excuse that they needed to visit a site with actual demonstrations of differentiated instruction. Nevertheless, both participants advanced into the learning process. At the end of the day, Naomi made little effort to move from drill and practice routines to advance the depth and complexity of learning. Flexible grouping, learning centers, and features of differentiation, such as scaffolding or tiered tasks, meant too much structure and conjured up an image of hard work. Not due to lack of talent or ability, but rather the investment of her time and energy, Naomi diminished her capacity to be a source of support for her students and a change agent for herself.

Further, in the case of barriers to an understanding of the principles and tenets of differentiation and the implementation of practices, participants described the process as tumultuous. According to participants and Benjamin (2005), to differentiate instruction is complex. Participants feared that some parents or students resented different grading scales in the same class and they questioned if differentiated instruction appeared as a form of in-class tracking. One of the main barriers to implementing differentiated instruction emerged from time constraints due to rigid schedules. Moreover, to change instructional practices, Naomi, Esther, and Rachel felt the need for smaller class sizes and additional human resources.

On the other hand, I expected the teacher participants to change practice with small incremental stages. Substantial alterations to deeply rooted pedagogical practices

meant the acquisition of knowledge, a positive attitude, and a mind-set for an investment of time. Furthermore, teachers realized my passion for an instructional milieu that addressed the learning needs of all students.

Through a plethora of professional development activities, I supported participants' efforts to be change agents and knowledgeable about all aspects of differentiated. I recognized how participants blazed new pathways in our school despite barriers to inhabit progress, yet each participant presented a unified effort to differentiate instruction. Throughout the time of this action research project, participants found the understanding and implementation and practice of differentiated instruction unwieldy, yet they never abandoned efforts to collaborate and learn.

Analytic Category 5: Leadership and the Five Disciplines

My espoused leadership platform reflected the five disciplines and my leadership for differentiated instruction. To facilitate the understanding of changing pedagogical practices, I read approximately 50 books from changing schools to the world of business. I shared material with teachers on a regular basis, but they also shared with each other. Not just shared books, but web sites that made our 10 smart boards an expeditious teaching tool.

Yes, the changes on the scale of this action research project appeared difficult, yet opened pathways for transformative behavior. Knowing what I now know, however, I would work with participants through the five disciplines, but with a deeper awareness of individual participants. Likewise, I would focus on only one of the principles of differentiation at a time.

Moreover, throughout the action research project activities, I questioned whether I served others well (Collins, 2001; Hackman & Johnson, 2009). That is, served to assure participants' means to learn. As a servant leader (Culver, 2009), I watched for growth of the individual and as a feminist leader (Noddings, 2005; Sernak, 1998), I wrapped followers in care within systems thinking. I believed the transformation of ideas and practices (MacGregor Burns, 2003), a metamorphosis in thinking, provided the glue to push forward change initiatives, mental models, a shared vision, team learning, and professional efficacy.

Hence, this action research project, the three theories of my leadership platform flowed, one into the other, in unison. As such, as months of working with participants to explore differentiated instruction and change pedagogical practices (Marzano et al., 2005; Tomlinson, 1995, 1999, 2001, 2003), participants' proclivity to change emerged through guidance and motivational strategies. Such actions resulted in participants' ability to shape mental models, team learning, and a vision for the transformation of pedagogical practices. More than that, I supported participant leadership as our organization sought systemic changes.

Further, to assist teachers' incorporation of differentiated instruction as part of our school culture, I embraced the 10 stages for systemic growth for differentiation identified by Tomlinson and Allen (2000) as follows: Establish a need and articulate a vision, establish common definitions and terms, build understanding and support among stakeholders, link differentiation and best practices, focus school initiatives, attend to competing mandates, plan for leadership and support, allocate financial resources, look

ahead to assessing progress, and plan for a long haul. Hence, as principal, I supported, encouraged, and approved of changes in instruction with eager praise

As a leader for change, I grew confident that differentiated instruction remained an avenue to reach the diverse academic needs of students, but it is not the perfect solution. Yet, it is a valued solution because it provided equity and equality of opportunity to learn for all students. As such, I realized one encouraging aspect of this action research study above all categories and theories of leadership. I am without question – a snug fit in the realm of servant leadership.

Throughout the months of professional development activities, I collected data on discussions, observations, and workshops. I compared the findings of data with the research questions and literature. I modified the questions three times for clarification of direction. In the duration, I continued to reflect on the findings because interpreting them is an iterative process. The process was stressful, but I worked to flesh out meanings below the surface. To do so, I frequently asked: “Why or why not?”

I found listening as the essential element to understanding. As such, for many months I carried a small, soft, red backpack with me whenever I left my house. I never missed an opportunity to listen to the audio tapes of participants in my action research project. I never counted how many times I heard the familiar voices, but I always laughed at the same spoken words, especially from Miriam. She ended her interview with the words, “Now where is she? I am alone with this machine.” Poor Miriam, I rushed out of my office while she was still speaking into the tape recorder because the cry of a child in the hallway pulled me like a magnet. I heard Miriam’s laughter from a distance.

As an auditory learner, listening to the interview tapes amazed me because I connected in a personal sense with participants through their voices. Of course, I observed participants' instructional lessons time after time, experienced months of formal or informal conversations, and visited their classrooms as often as my schedule permitted. But, the interview process was different. Not only did I detect the anxiety of a teacher, but I also recognized when their guard was let down.

I listened to stories with care because participants gave me insights into hidden values and beliefs I could not have imagined. Later, more stories seemed to pour out of participants when they reviewed the interview transcripts with me. One teacher spoke of a serious illness that affected her stamina, but her determination to be an effective teacher removed even painful obstacles. Another participant shared the story of a disabled sibling and the effect on her family life. A third teacher spoke of her father's failure to thrive. One shared wonderful stories of her parents who lived on the other side of the world. I suppose if one is trained, one listens to the spaces of silence as much as the words spoken.

Listening to teachers' stories within the story of this action research study peeled away layers of separation. A profound link between participants' desire to teach well and their ability to capture the knowledge and skills required cycled through many conversations. Over and over, the power of intention threaded the stories of teachers' struggles to improve their pedagogical practices.

It is my contention that participants absorbed enough learning opportunities to put knowledge into perspective or practice. I watched an old black and white film from the 1940's in which James Cagney said: "You can't take out what God has not put in."

Teachers needed professional development to guide behavior, build knowledge of their craft, and support affective needs. I believe each participant owned the capacity to do so.

I submit that participants entered this action research project with the notion that it would not be the same old thing. Through professional development, their pedagogy changed. It became a different exercise to plan a lesson, grade students' work, or be satisfied with the status quo.

The overriding finding determined in the previous chapter revealed that participants' pedagogical practices changed, but to varying degrees. The perceived connection between the activities of professional development for differentiated instruction and teachers' implementation of changes in instructional paradigms was illuminated in the list of factors created in the focus group. Most definitely, teachers owned a plethora of creative ideas, and a growing knowledge base to change practice. But, more than any other factor, teachers emerged from the research with a connection to one another.

Conclusion

When I began this action research project almost three years ago, I seemed years younger. I possessed an intensity and sense of adventure to turn a poor, urban school around. With a deep belief in my servant leadership theory, I wanted to change everything, but reflection told me to listen carefully and open my eyes to the strengths and images spread at my feet. Perhaps we gain more patience with age!

My proclivity to address an issue often moved me in all directions. By taking time to observe the learning culture or to explore theories of leadership to change a school, I was ready for an action research project. Why differentiated instruction? I practiced

elements of differentiation as a teacher, but two powerful events pushed me in that direction. The first was a critical incident that revealed a systemic break in instruction.

When visiting a literature class, I started to assist the student, Elena (anonymous), by asking her to read aloud from the text so that we could discuss the story and answer the questions together. In an attempt to read, she stumbled through each sentence, leaving no opportunity to grasp meaning. English was her second language, but Elena began school in our age three prekindergarten program. After 11 years of instruction, how could we send her to high school as a non-reader? What happened to her equality and equity of opportunity? I contend she will struggle or face failure in high school and blame herself.

My second reason for the urgency of an action research project on differentiated instruction was Paolo (anonymous). For three days in a row, I visited his literature class to observe instruction. On the first day, the teacher positioned on a tall stool in the front of the classroom spoke for 30 minutes about her pet, a recent trip to the Midwest, and her expectations for homework. In the remaining 15 minutes, she directed students to silently read the story of Helen Keller from their basal readers. The required lesson objective was not written on the chalkboard nor was the teacher's plan book available.

The next two visits mirrored the first, but my focus changed. I studied students' faces, especially the expressionless face of Paolo. I later learned his birth place was Peru. Paolo came to the United States at age seven. Although an English language learner, Paolo was attentive in class and answered every question when called upon. But, his decorum during lessons intrigued me, especially because other students laughed and made comments to the teacher.

Paolo's office file showed excellent grades and a high score in cognitive skills. When he took the entrance exam for Catholic high schools, he said the test had many questions about analogies and he had no knowledge of analogies. Nevertheless, he did well on the exam and received a four year scholarship valued at thirty thousand dollars.

I got to know Paolo throughout his eighth grade year. Whenever I teased him about being a brain surgeon, he smiled. On one of his return visits as a high school sophomore, Paolo hoped he would not disappoint me with his news. He did not want to be a brain surgeon. With a huge smile, he said: "I want to be a heart surgeon!"

Time offered me the opportunity to reflect deeply on the learning milieu of our school and of students such as Elena and Paolo. They graduated, yet I wondered if teachers differentiated instruction while they attended our school, would their learning experiences be different. Facing reality became the critical step I took as leader of Cardinal Newman Academy.

I concluded that participants in this action research study awakened new possibilities and sparkle to their own presence as professionals. Through changes of a cultural system, their beliefs, values, and attitudes bound them together. Great leaders are great teachers (Tichy & Cohen, 1997). I began this action research study with clear ideas and values, but I end believing I taught participants to be leaders for their own professional empowerment and efficacy, not followers.

Chapter 8

Leadership Reflection

As a proponent of differentiated instruction for more than a decade, I found its philosophy rooted in years of educational theory, in particular, Vygotsky's (1978) zone of proximal development (ZPD) and the application to general education classroom settings. The zone of proximal development is the range at which learning takes place. As I transitioned into a leader for change to explore pedagogical practices, I felt compelled to help teachers explore the ZPD through the prism of differentiated instruction.

From the start, teachers assumed they met the academic needs of every student, yet through instructional observations, document reviews, and my habit of a three-minute classroom walk-through each day, I witnessed far too many young students disenchanted with the same standardized pedagogies. In spite of teachers' efforts, I knew it was not possible to meet students' myriad needs without deep knowledge, skills, and the motivation to change the status quo.

For certain, students at every point on the ability spectrum within our school needed and deserved a healthy approach to teaching and learning! Upon reflection, I asked, "Could an understanding of differentiated instruction become the communication zone or the gateway to equality for all learners?" Just as the school reform and standards movement searched for ways to respond to the academically diverse populations in most classrooms, researchers for decades conceived differentiation as a means to modify practice and in some instances, remove the barriers of isolation often experienced by teachers (Tomlinson & Allan, 2000).

Tomlinson (1995, 1999) associated a differentiated instructional framework with equity of access to high-quality learning. A philosophy of differentiation also proposed that what students brought to school as learners mattered in how they learned. Therefore, teachers needed to know students in their care as well as their subject matter. In doing so, the one-size-fits-all teachers may discover that the “size” of instruction they select fits almost no one (Tomlinson, 2003).

In other words, differentiated instruction addressed a broad range of learners’ readiness levels, interests, and modes of learning (Gregory & Chapman, 2007; Heacox, 2002, 2009; Tomlinson, 1999, 2001, 2003). Smutny and Von Fremd (2004) asserted instruction rooted in differentiation and a wider range of learning options allowed students of all backgrounds a better chance to reach their potential, achieve higher levels, and be successful in school and life. Nevertheless, as exciting discoveries about the pedagogy of differentiated instruction continue along with a greater awareness, the old ways of *doing* school still appeared alive and well in many classrooms.

Not unlike the conundrum of the 1930s, schools in this new century still assume students finish the same tasks at the same time, the length of the school year remains the same for every learner, the same grading system for students of a given age and grade is identical, and drill-and-practice worksheets reflect the primary educational technology (Tomlinson, 1999). Thus, to plan and execute this action research study, participants combined an understanding of differentiated instruction with the rigorous challenge to explore their own pedagogical paradigms through professional development. Walt Disney said, “If you can dream it, you can do it.”

As such, this project sustained my dream of personal achievement as I examined my leadership through work *with* rather than *on* or *for* participants. From the start, I intended to do more and be more by leading with a deep commitment to change through care (Baker & O'Malley, 2008; Cantando, 2009; Koshy, 2005). Indeed, this action research project strengthened my leadership platform as it sustained a tapestry of three threads woven around a scene of transformational leadership, servant leadership, and feminist leadership theories that holistically interconnected.

Further, to change pedagogical practices, my habitual focus on students' learning turned a spotlight on teachers' learning. Subject-matter knowledge may not always be associated with student learning, but pedagogical knowledge is (Marzano, 2003; Tomlinson, 1999). I learned it took time and fortitude to change. Participants worked, studied, and shared experiences of differentiated instruction within a professional development paradigm month after month, but challenges persisted. Understanding differentiated instruction and possessing the skills to put theory into practice required a multi-faceted framework.

Project participants studied models of cooperative learning, created tiered lessons, tapped into learning styles, tapped into multiple intelligences, and focused on the affective needs of learners. Once a belief in a vision of differentiated instruction built a foundation, participants moved toward knowledge and understanding. They recognized an unleashed driving force to change practice. It took more than extraordinary passion, integrity, and courage. Participants, reflecting upon their actions and enlivened by the transforming power of an open heart, a trust that bound them, and the practice of

conversation, learned and shared the need for professional growth, empowerment, and efficacy.

Wheatley (2002) reminds us that: “There is no greater power than a community discovering what it cares about” (p. 145). The research of Tomlinson brought forth the movement for differentiated instruction (Tomlinson, 1995, 1999, 2001, 2003; Tomlinson & Edison, 2003; Tomlinson & McTighe, 2006) and influenced movements toward pedagogical changes. Rebirth of an old concept gave a new century life-altering insights into pedagogical practices and researchers supported the movement (Benjamin, 2005; Heacox, 2002, 2009; Sprenger, 2003).

Professional development contributed to project participants’ understanding and practice of differentiated instruction. But, Tomlinson’s research, in particular, guided our steps to actually change the one-size-fits-all instructional paradigm. Moreover, participants’ face to face encounters with this researcher created our tipping point.

Like all pilgrims, we moved forward at the journey’s end, yet the experience of the action research project anchored me, the research participant, with its memory. I brought past experiences of leadership into the action research project, and now, with the grace of God, move with new wisdom into the future. In my case, the lessons learned continue to sustain and strengthen me as the gift of participants’ need for one another lift my inward and outward sense of leadership.

I concluded this action research project in terms of my efforts to bear transparent witness to my authentic leadership platform. In the end, this study revealed that I arrived well beyond the place I started. From the outset, the action research project shifted my simpler leadership stance to a complex one where three leadership theories, servant,

feminist, and transformational, linked together, sometimes with force, often with anticipation. It must be said that the openness to a central place allowed the theories to be born in wholeness within me.

From this insight, I balanced power with care to serve a community of learners, bring closure to habits of isolation, and embrace concepts of change. To look back on that journey, I readily recalled wonderful companionships on the road to change (Appendix M). Indeed, I believe participants rode the winds of time to change practices through multiple labyrinth journeys. In the end, we all understood lessons to sustain and strengthen us as we walked into the future with courage, confidence, and a desire to teach and learn with joy.

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Appendix A

Overview of Information Needed

Question One: To what extent did participants perceive an exploration of the principles and practices of differentiated instruction through embedded professional development prepare them to change their traditional instructional practices?

Need-to-know: Could professional development transform instructional practices?

Method: Interview, Observations, Focus Group

Question Two: How did participants develop the knowledge, skills, attitudes, and values they perceived are needed to change pedagogical practices?

Need-to-know: By what means did participants learn the principles and practices of differentiated instruction needed to change practices?

Method: Interview, Observations, Focus Group

Question Three: To what extent did participants perceive certain factors in their systematic inquiry into the principles and practices of differentiated instruction resulted in enhanced feelings of empowerment and professional efficacy?

Need-to-know: What enhanced participants sense of empowerment and professional efficacy?

Method: Interview, Observations, Focus group

Question Four: To what extent did participants perceive certain factors impeded their pursuit of knowledge, consistency, pedagogical innovations grounded in the principles and practices of differentiated instruction?

Need-to-know: Impediments to learning differentiated instruction

Method: Interview, Observations, Focus group

Question Five: How did this action research study help me examine my espoused leadership platform through the filter of Senge's (2006) five learning disciplines and my leadership for differentiation?

Need-to-know: Did my actions mirror my espoused leadership platform? Did my change theory enhance leadership for differentiation?

Method: Interviews, Observations, Focus Group

Appendix B

Principles of Differentiated Instruction

Professional Development

Analyze the scenario you've read or the lesson samples in the video segment to identify specific examples of how these principles were applied. List them in the Evidence of Use column next to the appropriate principle. Then write any suggestions for improving the practice or action from the scenario or video in the Suggestions for Use and Improvement column.

Principles of Differentiated Instruction

Principle	Evidence of Use	Suggestions for Use and Improvement
1. Learning experiences are based on student readiness, interest, or learning profile.		
2. Assessment of student needs is ongoing, and tasks are adjusted based on assessment data.		
3. All students participate in respectful work.		
4. The teacher is primarily a coordinator of time, space, and activities rather than primarily a provider of information.		
5. Students work in a variety of group configurations. Flexible grouping is evident.		

Appendix C

Participant Assessment



Assessing Prior Knowledge and Experience



To plan a professional development program that captures participants' interests and meets their needs, use this form to get input from them regarding their current knowledge of the topic and their learning preferences.

Assessing Prior Knowledge and Experience

Fill out this form and return it to your planners.

Topic: Differentiation

How do you view your current knowledge of and experience with this topic? (Check all that apply.)

- Don't know anything about it
- Have read a little about it
- Have attended a workshop on it
- Have read a lot about it
- Have a grasp of the basic principles underlying it
- Am acquainted with some strategies related to the topic
- Sometimes use one or more strategies related to the topic
- Frequently use strategies related to the topic in my classroom
- Could deliver this content to others in my building or district

What would you like to learn about the topic?	What questions do you have about it?
I would like to learn more about this through examples. I am more of a visual learner and I would like to watch a demonstration.	

continued



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How do you prefer to learn? (Check all that apply.)

- Through large-group activity
- Through small-group activity
- With a partner
- Independently

How do you prefer to share what you've learned with colleagues? (Check all that apply.)

- Through a presentation to a large group
- Through a presentation to a small group
- By talking with a partner
- Through writing
- By inviting colleagues into my classroom to observe
- Through peer coaching
- Other: _____

Source: Adapted from *Literacy Across the Curriculum: An ASCD Professional Development Planner* (p. 12), by V. Blake, L. Kiernan, M. D'Arcangelo, & S. Chapman, 2003, Alexandria, VA: Association for Supervision and Curriculum Development. Copyright 2003 by ASCD. Adapted with permission.

Appendix D

Reflection Instrument Form

In reflecting on the time in which you participated in professional development to explore the principles and practices of differentiation, please recall one particular occasion when you felt overwhelmed or frustrated:

In 2 short paragraphs, please describe details of the experience:

What were you trying to understand?

What helped you move forward to transform the instructional environment?

How, if at all, did you embrace the concept that all students can learn?

Your perception of forming a framework for diversifying instruction is helpful in understanding the professional development experience.

Thank you.

Appendix E

Conceptual Framework

Preparedness to Change Pedagogical Practices

- Well prepared
- Unprepared to know key vocabulary/ principles of effective differentiation
- Somewhat prepared

Participants' Learned Knowledge, Skills, and Attitude to Change Practice

Formal Learning

- Weekly faculty meeting
- Conferences/Workshops
- Teachers' book talks

Informal Learning

- Dialogue with colleagues -
- Journals
- Instructional resources -
- Reflection

Perceptions of Impediments

- Need for real world demonstrations
- Lack of confidence in ability
- Classroom management
- Understand the process (how to differentiate instruction)
- Magnitude of process

Value Centered Pedagogy

- Colleagues as facilitators
- Participant efficacy
- Attitude/values/beliefs

Differentiation/Leadership Framed by Five Disciplines

- Communication (Would you like to talk...)
- Empower/nurture participants
- Create labyrinth pathways toward knowledge and change
- Share vision of a learning organization (Five disciplines)

Appendix F

Demographic Data Form

Thank you for agreeing to participate in this Action Research Project for the study and application of differentiated instruction. Please complete the form below and return it to my office.

Please note: the information collected is completely confidential and will only be used for the purposes of this research study. All names used will be pseudonyms.

Demographic Data Sheet

1. My gender is: _____ Female _____ Male
2. My age is: _____ 23-30 _____ 31-40 _____ 41-50 _____ 50+
3. My race/ethnicity is:
 - a. _____ Caucasian
 - b. _____ African American
 - c. _____ Asian
 - d. _____ Hispanic
 - e. _____ Native American
4. Education _____
5. Grade level/Subject: _____
6. Years in teaching to date: _____
7. Degree/Certification: _____

Your vision to participate in an action research project designed to change pedagogical practices to accommodate the needs of diverse learners:

Thank you for completing this form. Your time and participation is greatly appreciated and will contribute to a growing knowledge base for understanding and implementing the various elements of differentiated instruction.

Appendix G

Participant Demographic Matrix

Name	Education	Years Teaching	Grade	Gender	Age	Ethnicity
1. Abigail	CD	20	pre-K	F	45	White
2. Ruth	BS	22	8	F	47	White
3. Rachel	BS	8	3	F	39	White
4. Rebekah	MA	3	5	F	26	White
5. Miriam	BS	25	2	F	61	Asian
6. Sarah	BA	1	4	F	25	White
7. Esther	BS	25	1	F	46	White
8. Deborah	BA	16	7	F	51	White
9. Naomi	CD	16	K	F	45	White
10. Daniel	BA	6	6	M	29	White
11. Michal	BA	9	7	F	33	White
12. Eunice	BS	7	K	F	41	White
TOTAL						
N =12			F = 11	White = 11		
			M = 1	Asian = 1		

Appendix H

Data Summary Finding 1

Preparedness to Change Pedagogical Practices

	Name	Well Prepared	Unprepared	Somewhat Prepared
1	Abigail	X		
2	Ruth	X		
3	Rachel			X
4	Rebekah	X		
5	Miriam	X		
6	Sarah			X
7	Esther	X		
8	Deborah			X
9	Naomi			X
10	Daniel	X		
11	Michal		X	
12	Eunice			X
Total:		6	1	5

Appendix I
Data Summary Finding 2

Activities to Understand and Practice Differentiation

Name	Meeting	Book Talk	Workshops	Journals	Readings	
1	Abigail	X	X	X	X	
2	Ruth	X	X	X	X	
3	Rachel	X	X	X	X	
4	Rebekah	X		X	X	
5	Miriam	X	X	X	X	
6	Sarah	X	X	X	X	
7	Esther	X	X	X	X	
8	Deborah	X			X	
9	Naomi	X			X	
10	Daniel	X	X	X	X	
11	Michal	X			X	
12	Eunice	X	X	X	X	
Total: 12		12	8	9	4	12

Appendix J

Data Summary Finding 3

Empowerment and Efficacy in Systemic Inquiry

Name	Values	Mastery	Practice	Learning
1	Abigail	X	X	X
2	Ruth	X	X	X
3	Rachel	X	X	X
4	Rebekah	X	X	X
5	Miriam	X	X	X
6	Sarah	X	X	X
7	Esther	X		X
8	Deborah	X	X	X
9	Naomi	X		X
10	Daniel	X	X	X
11	Michal			
12	Eunice	X	X	X
Total: 12	11	11	9	11

Appendix K

Data Summary Finding 4

Impediments to Understanding and Practice

Name	Change	Diversity	Management	Practice
1. Abigail	X	X		X
2. Ruth	X	X		X
3. Rachel	X	X	X	X
4. Rebekah	X	X		X
5. Miriam	X	X	X	X
6. Sarah	X	X	X	X
7. Esther	X	X	X	X
8. Deborah	X	X		X
9. Naomi	X	X	X	X
10. Daniel	X	X		X
11. Michal	X	X	X	X
12. Eunice	X	X	X	X
Total: 12	12	12	7	12
