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INVESTIGATING VARIABILITY IN TEACHING PERFORMANCE
SEEKING PATHWAYS TO EXCELLENCE

A Dissertation

Submitted to the School of Education

Duquesne University

In partial fulfillment of the requirements for
the degree of Doctor of Education

By

Francine Gacka Endler

August 2014

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Francine Gacka Endler

2014

DUQUESNE UNIVERSITY
SCHOOL OF EDUCATION
PROFESSIONAL DOCTORATE IN EDUCATIONAL LEADERSHIP
PROGRAM

Dissertation

Submitted in Partial Fulfillment of the Requirements
For the Degree of Doctor of Education (Ed.D.)

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ABSTRACT

INVESTIGATING VARIABILITY IN TEACHING PERFORMANCE...

SEEKING PATHWAYS TO EXCELLENCE

By

Francine Gacka Endler

August, 2014

Dissertation supervised by Dr. Rick McCown

Teacher learning is critical to student learning (Darling-Hammond, 2002, 2010). The work documented here is driven by an investigation of a long-standing and complex problem of educational practice: the inequitable learning opportunities for students that result from variability in the selection, learning and placement of practicing and aspiring teachers. A multidisciplinary perspective is used to situate the problem of practice theoretically, within a body of empirical research, and within a context of educational practice. Among the perspectives used to examine the problem of practice are theoretical frameworks that support the claim that the problem is a matter of social justice. The investigation also argues that inequitable learning opportunities for students are impacted by a fusion of two critical factors including the avenues by which people are recruited for and granted access to teacher preparation programs and the structure and quality of professional development provided to practicing teachers. The argument acknowledges the concept of variability within systems and practices, but contends that variability within excellence is the environment that will afford quality teachers for all students. Efforts to understand and address the problem are addressed to reveal what has been learned in the investigation to date and how what needs to be learned will form a leadership

agenda that engages a diversity of stakeholders collaborating on an effort to improve an educational system in which the problem of practice exists. The implications of the effort are discussed for individuals, for the system, and with regard to leadership issues that bear on the problem of practice. The work concludes with a summary of what has been learned through the investigation and the implications of that learning for the professional leadership agenda that will be pursued in order to establish collaboratively engaged improvement efforts as a norm of practice at the level of schools and school districts.

DEDICATION

To my uncle whose quiet strength, constant support and loving encouragement
influenced every part of my personal and professional life.

Dr. Rudolph Ivancic 1926-2008

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The journey to achievement within this Doctoral Program commenced forty years ago when a curious seven year old girl asked her uncle “can I be a doctor like you someday?” Many have walked with me, carried me, and provided me with the necessary combination of encouragement, motivation and honesty needed to reach this point. I would like to acknowledge and offer heartfelt thanks to those who have become part of my narrative and to whom I am forever grateful.

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To my committee chair Dr. Rick McCown. Your influence during the past three years has changed me as a leader and a learner.

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Part I: Introduction to a Problem of Practice, an Investigation, and an Agenda

In 2012, the annual conference theme for the American Educational Research Association (AERA) was “Non Satis Scire: To Know is not Enough” (Ball, 2012). While the charge addressed improving connections between research and policy and practice, the theme was hauntingly familiar and echoes in the consciousness of educators, parents and community members across this country who know the importance of quality teachers in every classroom yet struggle with the barriers preventing that reality for all children. We know that there are classrooms of children who are blessed with excellent teachers, but we also know that there are many classrooms that are not so blessed. We know collectively that there is a problem but to know that a problem exists is not enough. In order to address a problem we must understand the complexity of the problem and we must understand the practical context that contributes to that complexity. We must then use our understanding to design, develop and test practical ways of addressing the problem. The work that follows is an investigation of the problem and an agenda for addressing the problem in a rigorous, collaborative and sustained way.

This introduction to the problem, the investigation, and the agenda includes the following three sections: a narrative, a contextualization of the problem of practice and a roadmap. The narrative provides a selective account of key concepts and ideas that have contributed to my study as well as an account of my professional experiences. Both my studies and my professional experiences have shaped my thinking about the problem and about how I might design ways to create opportunities to understand and address the problem in collaboration with stakeholders. Following the narrative of ideas and experiences, the problem of practice is

introduced and briefly contextualized. A roadmap of how the problem is understood and situated as well as how it is investigated and addressed in Parts II through VI concludes the introduction.

A Narrative of Key Concepts, Ideas, and Professional Experiences

The problem of practice that is investigated here is long-standing and pernicious. Some have even claimed that it is intractable (c.f., Cochran-Smith, 2003). However it might be characterized, it is a complex problem that requires the investment of time, energy, and resources across a diversity of experience and expertise.

Those who practice education as a profession, those who prepare professional educators, and those who research education are in agreement when they claim that effective teaching leads to student achievement (Darling-Hammond, 2006, 2010; Delpit 1995; Ladson-Billings, 1999, 2009; and Snowman & McCown, 2012). Systems for measuring achievement of students, including the foundational work of even often questioned value-added assessment systems, demonstrate growth of groups of students with an underlying design connecting student growth with specific teachers. Although not initially offered as a tool for measuring teacher effectiveness, beginning in the 2013-14 school year, Pennsylvania will begin to bank value-added scores and use them as a percentage of calculation for annual teacher ratings. With both research and assessment measures defined and evidence of the problem documented, education is still troubled by what Ball (2012) refers to as the “knowing-doing gap” (p. 285).

In an attempt to close this knowing-doing gap, Ball (2012) proposes a framework called the *Zone of Generativity* “that can assist us in moving from our current level of knowing to a potential level of knowing that is powerful” (p. 287). Through components of reflection, introspection, critique and personal voice, a zone is created which permits individual stakeholders to enter the work where they are in terms of knowledge of the problem,

commitment to the work and individual ability. I offer an invitation to the readers of this scholarly work to enter this *Zone of Generativity* to leave a legacy of quality teachers in all classrooms.

“The journey of a thousand miles begins with a single step” is credited to Confucius and is a fitting premise for the scholarly work and exploration of the contemporary problem of practice identified as *variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable learning opportunities for students*. As I examine my own narrative in relation to this work, and in exploring the work of Strickland (2007), I sadly realize I have never been a dreamer. My pragmatic approach has proven successful for me and my endeavors, but the element of imagining without barriers is not my vernacular. Achieving a goal or producing a deliverable product is the focus and investing time to dream seems unproductive and counter to my goals. Upon reflection, it has been a significant limitation. In proceeding with deconstructing and defining the problem of practice, pragmatism must be balanced with open consideration of possibilities. Strickland (2007) regularly reminded his followers to be prepared to act on their dreams in case they come true. As clarity for this work develops, the stakeholders will be better situated to act upon the dream as it comes into focus.

In that spirit, this Dissertation in Practice begins a purposeful and intentional inquiry into how we recruit, train, place, develop and lead teachers.

Dostilio, Perry and McCown (2011) discuss the structure of School-Academy-Community (SAC) partnerships. School, academy, community partnerships collectively engaging in strategic risk-taking to uncover the narratives that drive our practice and policy on how teachers gain entry to our schools and teach our children will be crucial as this work progresses. A moral imperative exists for an active presence for all voices at this table. In many

venues throughout our country, people discuss the importance of good teachers in our classrooms. Yet, training, recruiting and hiring practices demonstrate many other forces at play producing results counter to those beliefs.

The status quo in training and placement of teachers throughout our systems has become entrenched. Through systematic and intentional inquiry of how teachers learn and subsequently translate that learning to students, conditions of inequity will be revealed. The work is also informed by how schools, the academy and our communities view the issue of human capital management, teacher training, selection, placement and compensation and how that translates to the quality and inequality of student learning.

Teacher learning is critical to student learning. Darling-Hammond (2006, 2010) and Ladson-Billings (2009), speak to content knowledge, a deep understanding of pedagogy and cultural competence for practicing teachers as directly impacting student achievement. Additionally, the emotional components of teaching and learning are inextricably linked to the art of pedagogy. The work of Hargreaves (1998) examines teacher change in relation to emotional dimensions. Paradoxically, while emotion is an integral part of teaching and learning, Hargreaves (1998) notes that it is generally ignored when discussing education reform. Often dismissed as unimportant and a predominantly female quality, the impact on student achievement and teacher learning is supported by the importance of forming relationships with students as a basis for learning. While those looking to reform education dismiss the emotional component of learning, those closest to the field know the emotion cannot be separate from the practice. Additionally, we have witnessed the situations where teachers develop a safe emotional space for children to grow and learn and observe the countless benefits. At times, my pragmatic

tendencies conflict with my counseling training grounded in the importance of relationship building.

My experience as a public school administrator solidifies an unwavering belief that the single most influential relationship developed within a school is that between the teacher and the student. It is the foundation of learning, developing and achieving in the educational environment. Freire (1998) eloquently speaks about the relationship formed between teacher and student where both learn from one another in a fluid manner with both being equally impacted by the learning process. Additionally, Freire (1998) speaks to the “incompleteness” of ourselves as beings given learning is an ongoing and organic process. The student-teacher relationship creates a narrative defined as inspirational and motivational or conversely disheartening, destructive and replete with bad memories.

Education is one of a few institutions where everyone is a direct consumer of the product/services, and therefore, brings a very specific narrative of the problems and conditions as well as a cadre of solutions. Our own personal narratives guide our work and perspectives both consciously and unconsciously. Recognizing and accounting for the narrative involves an awakening on many levels. As my personal narrative unfolds, discovering the connection between individual behaviors as a learner and that of an educational leader are revealed. High standards for me translate to imposing high standards for those around me. A strong internal locus of control provides a positive personal motivation while simultaneously creating a professional barrier in terms of the ability to identify systematic and systemic barriers for marginalized groups.

This narrative is further enriched via my professional life having born witness to the powerful connections that occur between teachers and learners and the profound affect it has on

student learning and self-perception. The significant variable in this equation is the student who conversely possess the least power, and whose lived experiences are oftentimes silenced so as not to disrupt structures that support inequitable opportunities. Countless students and parents, particularly from marginalized communities, have no ability to select who teaches them. Others whose privilege or skills afford them the ability to navigate the social, political and cultural structures within education systems can ensure quality teachers for their children. This scholarly work establishes the urgency for the school, academy and community partnership to work in concert to create systems where all students have access to quality teachers in every classroom and deconstruct the barriers to those opportunities. All who come to table of education bring intricately crafted narratives which fuel how decisions about education are made. While my narrative holds an obvious place of importance in this investigation, the dangers of a single narrative must be acknowledged and challenged.

For most educational leaders, the hiring and placement of teachers is conceivably the most critical component of their responsibilities and directly results in the most significant impact on student achievement. A moral and ethical responsibility exists to place the best teachers in each classroom. When considering a candidate or observing a teacher in the classroom, the ultimate question posed is “Would I want my child in this classroom being instructed by this teacher?” The conflict occurs when the answer is *no* and yet the teacher is teaching somebody’s child. Of equal importance is the professional development of teachers during their teaching career. Closer examination of the problem of practice poses questions about how teachers are selected and trained prior to entering the selection process for teaching positions. Is the journey for these aspiring teachers via a traditional route of training, an

alternative certification program, or was entering the field of teaching a default from another major?

Once teachers begin the craft of teaching, leaders bear the same responsibility to cultivate an environment rich for professional development in relation to content, pedagogy, school environment and relationship building. The moral imagination of all who are invested in education is critical on many levels as public education is at a crossroads. The current structure of professional development for teachers is often perceived as disconnected in many ways and receives criticism that it fails to meet the learning needs of teachers, and ultimately hinders the achievement of students. At the same time, the bar for accountability is increasing. In order to reach those levels of accountability, investing in teacher development is necessary.

Articulating and defining the quality of teacher preparation programs and continuing professional development will be addressed. Examination of the current state of traditional teacher training programs at the college and university level paint a concerning picture. No one component of the school, academy and community partnership holds the singular answer to this multidimensional question. Therefore, the moral and ethical responsibility of training and placing excellent teachers in every classroom is shared by schools, the academy and the community.

My entry point into the *Zone of Generativity* for this work provides a context spanning involvement in all elements of this partnership which established a personal voice steeped in advocacy. The school lived experience is dual in nature as both a student *in* the system, and a leader *of* the system. Teachers who motivated, inspired and set academic and intellectual challenges were easily identifiable. As a consumer of education, the level of variability in teacher performance was recognized very early in my academic career and was noted at all levels

of my learning. Taking calculated risks as a student by engaging teachers and professors in conversations surrounding my learning leveraged advantages for me that were not afforded to some of my fellow classmates. As a leader of learning, the awareness of variability in teacher performance is intensified by accountability for outcomes. As a system leader, selecting, placing and training teachers is under my purview. Many times, I find myself operating in the “knowing-doing gap” (Ball, 2012).

Entering the academy as a *Scholar in Practice* gives way to a systems and social justice frame to the problem of practice resulting in significant learning for me. This lived experience produces a greater understanding of theory, research and policy and how valiant attempts at implementation and operationalization are often unsuccessful. Advocacy based on systems improvement versus silver-bullet solutions was born.

My connection with the community-based element of the partnership perhaps best illustrates the situatedness in relation to the problem of practice. My entrance into educational leadership is non-traditional and results from working with students placed in specialized foster care and witnessing the narratives children encounter when accessing their educational programming. The realization of my privilege in relation to navigating the system resulted in a recalibration of my career to enter public education. The focus is on advocacy to provide the best possible opportunities for students, particularly for those from historically underrepresented groups. Believing *Scientia est Potentia*, “knowledge is power,” my presence in both the world of community and education causes conversations within the framework of public education challenging the dominant narrative.

The frame with which this scholarly work is interrogated is steeped in theory and elements of profound knowledge with a particular emphasis on appreciation for a system.

System of Profound Knowledge by W. Edwards Deming examines how theories of systems, the element of variation, knowledge and the psychology of change work in concert with one another (Langley, et al., 2009).

The shift to systems-thinking as an interrogation of this problem of practice is a result of much debate, introspection, challenging of assumptions, acknowledgement of privilege and risk-taking. The common explanations of teacher performance and student outcomes have often fallen along lines of individuals within the system who are not doing the right things and simply fixing the person will improve the system. While the role of the individual is still relevant to the work, the relationship between the individual, the systems encountered and the subsequent interdependencies gains increasing relevance.

Within the framework of my program, education and social justice are linked with purpose and intention. These connections are evidenced through established coursework, partnership with the University Council for Educational Administration (UCEA) Center for Education and Social Justice and the establishment of groups such as the Critical Friends Network (ProDEL, 2012). The purpose of the UCEA program center design is to create an opportunity for a target area of interest to be established and afford a diverse group of interested stakeholders the chance to work together for a sustained period of time (University, 2014). Eight program centers exist within the UCEA framework, each with a focused area of study and interest (University, 2014). The UCEA Center for Education and Social Justice provides a link with my problem of practice and social justice issues. Most notably, the mission statement of ProDEL, “to transform the practice of educational leadership to improve schools and to do so as a matter of social justice” (p. 2) reveals the notion for improving educational leadership and schools is not limited to traditional outcomes which measure improvement but include a moral

imperative on which improvement will be judged. The moral and ethical responsibility of training and placing excellent teachers in every classroom is shared by schools, the academy and the community. As designs for learning and action are considered, it appears that members of the school, academy and community partnership have been unsuccessful in a common discourse regarding how they view the problem, its origins and the road to solutions. The designs for learning and action will create a challenge space where capacity building can begin. As Staratt (2004) contends

capacity building is not simply a matter of policy implementation. It is also a matter of deep conviction about the ways in which human beings ought to be present to one another and bringing that conviction into the institutional setting of the school. (p. 100)

This imperative is undergirded via the identity of the Duquesne University School of Education reflected as the Spiritan tradition of caring. The program of study espouses the Spiritan tradition of caring to measure the effectiveness of the program via social justice parameters (ProDEL, 2012). The Spiritan tradition in relation to the problem of practice has been contextualized for me in that obstacles exist preventing all students from enjoying the most effective teachers which results in inequitable outcomes. Revealing, recognizing and reacting to those obstacles are a matter of social justice. As Staratt (2004) recounts “for schools to deepen and amplify the way they promote learning as a moral enterprise, they need leaders-both administrators and teachers-who themselves understand learning as a moral enterprise” (p.2).

My program of study is structured to engage the work of those currently practicing in the field and to examine issues of practice occurring in contemporary school situations. With specific intention, the program is a design for learning (ProDEL, 2012). Although terminology

within the ProDEL framework differs from the traditional doctoral dissertation, the rigor and relevance rival the academic standard of a traditional dissertation while adding the dimensions of generative impacts and significant learning necessary to move forward as a professional agenda. Deemed *Scholars in Practice*, the expectation of the work generated is *Scholarship in Practice*. Through purposeful design, the problem of practice for this scholarly work will be explicated in a Dissertation in Practice (DiP) as defined by the ProDEL program as “scholarship focused by a lens of social justice on a problem of practice that is addressed by a design for action that yields generative impacts on the practice of educational leadership the aims of educational improvement” (ProDEL, 2012, p.3).

The problem of practice to be investigated follows: “Variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable learning opportunities for students.”

The information included within the argumentation framework is comprised of academic research combined with historical and contemporary experiences of practitioners in the school, community and academy partnership. This work is defined via the premises of scholarship and significant learning. My program of study has built upon Shulman’s (2004) definition of scholarship as “significant learning that is shared publically in a form that engages others in critical review and that allows others in the field to build on that learning” (ProDEL, 2012, p.3). The learning generated as a result of this scholarly work will be publically shared with members of the partnership to invite critical review on how teachers are selected and placed within the context of school districts and how improvements to that process can be made to positively affect student outcomes. For a *Scholar in Practice* these definitions and frameworks challenge the normative practice.

As the argumentation is established to support the problem of practice, the inclusion of multiple perspectives will engage the process of improvement and generate sustainable dialogue. Ideally, the intersection of multiple perspectives is where significant learning will occur by choice, chance or circumstance. ProDEL (2012) stipulates “significant learning reveals and challenges one’s beliefs and assumptions to such an extent that the learner commits to arguments that she or he was not willing to make earlier” (p.4). Throughout this journey, *struggle* is continually mentioned in relation to significant learning. Struggle in relation to the problems of practice are recounted by the cohort as work has been publically shared. Struggle in relation to revealing and challenging deeply seated assumptions leaves much in its wake from an emotional and intellectual perspective. Perhaps the next chapter of struggle unfolds as stakeholders, within this context, begin to share lived experiences in relation to teachers who impacted their life, historical contexts of systemic and systematic barriers to access effective teachers and engaging others in the work to improve the condition of the problem of practice. From struggle the hope of responsible action is on the horizon. As defined by Welch (2000), “responsible action does not mean the certain achievement of desired ends, but the creation of a matrix in which further actions are possible” (p. 47).

The Problem Made Public

Variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable learning outcomes for students is the problem of practice guided by two overarching claims. The initial claim explores the avenues by which people are recruited for and granted access to teacher certification programs resulting in professionals entering the field with varying pedagogical competencies, skills and knowledge base. The second claim addresses developing teaching professionals already in the field via staff development grounded in sound

pedagogical practices as well as the principles of adult learning theory. As these guiding claims are argued, the convergence of the systems impacting education, learning and how people enter and traverse the systems will be revealed. Systems impact people and, ideally, people impact systems to create improvement. *“Every system is perfectly designed to deliver the results it produces.”* (Langley et al., 2009, p. 79). From this perspective, a problem of practice is a set of unacceptable results.

The designs for learning and action are, at the core, opportunities for stakeholders to reveal and challenge assumptions about themselves in relation to the problem of practice and leverage that information to engage in root cause analysis and cycles of improvement. As the problem of practice is better understood in content, concept and context, opportunities to identify potential improvement efforts become accessible to those engaged in the work. The work of Jonassen and Land (2012) illustrate through the writings of several theoreticians that theories of learning have shifted from transmissive to being constructed by the learners themselves. The designs for action resulting from the opportunity to make meaning of the variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable learning opportunities for students will undoubtedly vary for each stakeholder group represented. As stakeholders come to know and understand their own set of strengths and how those strengths leverage work toward the problem of practice, that will translate to leverage system change resulting in improvement. Perceptions, feeling and personal narratives regarding interaction with teachers are laden with much emotion and opinion. Stakeholders engaging in the work enter the learning process at various stages and degrees of commitment which will ideally impact learning and doing. As noted by Jonassen and Land (2012) “mind and behavior and perception and

action are wholly integrated. That is, we cannot separate our knowledge of a domain from our interactions in that domain” (p. ix).

The ability to operationalize theory and research in context is critical yet often complicated. While continuously bombarded with the latest ideological, pedagogical, curricular or assessment silver bullet, many well-intentioned educators, policy makers and academics focus on solving, curing, or saving a system that is producing outputs synchronous to its structure. ProDEL’s (2012) imperative for scholarship to be generative, and “make an impact on practice” (p. 5), suggests an end result of improving the condition versus solving the problem. For most education practitioners, including myself, that paradigm shift creates a cognitive dissonance difficult to reconcile. We are problem-solvers, negotiators and crisis-managers. Improving scores, increasing graduation and attendance rates, managing budgets and answering critics is typically countered with strategies and interventions to solve the problem. Producing generative impacts for this problem of practice will involve reflective pause to anticipate what will likely improve the condition, how those improvements can be measured and, most importantly, how those improvements can be translated to other contexts. Anticipated generative impacts range from capacity building at the individual strengths and self-efficacy level to leadership development to addressing systems issues impeding hiring and placing the best teachers in every school and classroom.

The context in which this problem of practice is examined is a public school district in a rural area. In order to protect the identity of people in the school district and the communities that it serves, I have given the district a fictitious name: the Rockland Area School District. To further protect individual identities, descriptions or characterizations of the district and

surrounding communities should be understood as representing an amalgam of rural school districts and amalgam based on supportive demographic information.

Rockland Area School District is considered a rural school district. The district covers a fairly large geographic area. All types of housing situations ranging from public housing projects, mobile home parks, and single family dwellings are represented. Like many rural communities the school district is the center for many activities and receives much support from the community. Rockland Area has multiple school buildings that house students from kindergarten through grade twelve.

The financial landscape of school districts in Pennsylvania has changed over the past several years creating challenges in relation to funding, programming, and governance. A decrease in state funding over the past five years has impacted all districts. The level of documented wealth within some districts precludes them from eligibility for large numbers of grants. In districts throughout Pennsylvania, finances have affected programming in relation to the problem of practice most significantly in the reduction in opportunities for professional development and in the hiring/replacing of teaching staff.

Public perception of the financial situation of all Pennsylvania public schools is flooded with information from various stakeholder groups and impacted by actions at the state level in terms of funding for public education in general. The turning tide of negative national sentiment surrounding benefits structure for public employees and the public pension crisis facing many states in the country creates an additional layer of discussion.

The context of public schools in relation to politics and governance is complex in nature. Political structures include Federal and State Departments of Education, the local board of school directors, unions representing professional and support personnel, parent-teacher organizations

and athletic/extracurricular booster clubs, in addition to elected officials representing local, state and national levels. These elected officials have a continuum of opinions regarding public education ranging from support of the efforts of public education to strong support for school choice and vouchers. From a district governance standpoint, school boards in Pennsylvania consist of a nine member board of school directors. Public attendance and participation at school board meetings is minimal.

I am situated at the intersection of the claims of the problem of practice and the context which spans approximately 15 years and encompasses positions as an Educational Specialist, Department Chairperson, Building-level Administrator and a Central Office Administrator. With work experience outside of education, my views on traditions and systems issues provide a counter narrative. Previous professional experiences in the human services sector create a bias within my frame of reference which is noted.

The intentionally designed Dissertation in Practice framework warrants a roadmap for readers and stakeholders to permit engagement with the problem of practice, theoretical frameworks, designs for learning and action and generative impacts in a way that will most meaningfully advance the work of educational leadership. As individuals construct meaning based on environment, experiences and relevance, the non-traditional format of this academic writing allows another foray to explore contemporary issues in educational leadership. The preceding section establishes an introduction and invitation to the work. The introduction concludes with a brief description of remaining parts of this dissertation.

A Roadmap

The remaining Parts of the dissertation in practice organize the work reported as follows: Generally speaking, Parts II and III report on the investigation of the problem of practice that has

motivated this work. Part IV describes the opportunities that have been designed for others to learn about and address the problem. Those designs constitute an agenda for investigating ways to address the problem in ways that result in improvement of practice. Part V describes how the agenda will be tested to determine its efficacy. Part VI provides a summary of the work to date, the next steps in that work, the implications of the work, and the need to sustain efforts across contexts.

A brief overview of each of the remaining Parts anticipates the elements that will be discussed.

Part II: Situating the problem. In Part II, the problem of practice is purposefully and intentionally named: *variability in the selection, placement and learning of aspiring and practicing teachers leads to inequitable learning opportunities for students*. The investigation of the problem includes an examination of the conditions that reinforce and perpetuate this problem of practice. It also includes revealing the avenues by which candidates access teacher training programs that potentially result in varying pedagogical skill outcomes. Additionally, critical review of the impact of professional development and improvements in students learning are presented. A multidisciplinary perspective is intentionally engaged to allow for a 360-degree view of the problem of practice.

Part III: A matter of social justice. Part III situates the problem further as a matter of social justice. It includes an examination of the theoretical frameworks-critical and otherwise-that help frame the problem. Part III connects the investigation of the problem and the agenda for addressing the problem to the mission of ProDEL: *To transform the practice of educational leadership to improve schools and to do so as a matter of social justice* (ProDEL, 2012). As

such, the social justice framework of opportunity theory is linked to framing the problem of practice, the designs for learning and action, and the generative impacts in subsequent sections.

Part IV: An agenda for action. Part IV reveals designs for learning and action, i.e., the opportunities for others to join in understanding and addressing the problem. The designs for learning and action are considered as the gateway for school, academy and community partnership stakeholders to construct a space in which the problem of practice can be understood and discover how designs for learning and action are leveraged to challenge and transform age-old practices in teacher preparation, professional development and placement within our school system. From the interrogation of root causes of the problem of practice and potential ways of addressing the problem, improvement cycles will be spawned. These improvement cycles provide challenge spaces to test a design, create continuous cycles of improvement and glean data which will test claims of the design. From these improvement cycles data and evidence will be used to create frameworks that are usable in the field and serve learners, especially from marginalized communities, and advocate effectively for excellence and equity in education. As the program design supports, the data and rendering of evidence include narratives, artifacts and contextually relevant products which best serve the communities in which they are used.

Part V: Testing the plan. In Part V, the focus shifts to what is termed generative impacts. Historically, educators relentlessly pursue a quick and easy program or process sure to correct the shortcomings of education. These are well documented throughout the decades. Using a lens of improvement science (Langley et al., 2009), and a new social organization for collaboration called networked improvement communities (Bryk, et al., 2011; Dolle et al., 2013), the generativity of the impacts resulting from designs for learning and action are considered. Three anticipated generative impacts stemming from the designs for learning and action are

identified. These generative impacts address individual, systemic and leadership issues surrounding the problem of practice. With anticipated generative impacts providing multiple opportunities to system improvement, input from various perspectives within the partnership will bring a multidisciplinary investment.

Part VI: Epilogue. Part VI is dual in nature. First, it serves as a conclusion to the work completed over the three year journey to date. The conclusion summarizes what has been learned through the investigation and argues the implications of that learning. Second, it defines the work as a professional agenda, including the next steps in that agenda and the steps that will be required to sustain a collaborative effort resulting in continuous improvement toward the goal of enhancing the quality of teaching and learning in classrooms.

With this background of ideas and roadmap, the discussion moves to a deeper exploration of the problem of practice.

Part II: Situating the Problem

“It is the mark of an educated mind to be able to entertain a thought without accepting it”

~Aristotle (2014)

Situating this problem of practice requires entertaining countless thoughts about teaching, learning, leading and changing. It warrants challenging long standing beliefs and normative practices as well as grappling with real-world barriers that continue to distance some learners from obtaining high-quality learning experiences. Part II consists of thirteen sections that render an account the problem and provides a descent into the work. The first section identifies the problem of practice. Once stipulated, this part transitions to conditions that sustain the problem of practice including systems and individuals; the pathways by which teachers reach the classroom; teacher preparation and development; and finally policy and politics. The first section concludes with honoring the voices of teachers, students and stakeholders. The final section exposes systems thinking and the problem of practice. Discussions involving knowledge and variation, leading both individually and systemically and the implications of multidisciplinary influences will conclude Part II. With that organization in mind, we begin by identifying the problem of practice.

The Problem of Practice Identified

Inequitable outcomes for students can result from a variety of events, conditions or structures. For the purposes of this work, inequitable outcomes for students refers to the connection between the effectiveness of teachers placed in classrooms and how students achieve. Some classrooms are blessed with exceptional teachers and excellent opportunities for access to sound instructional practices. Other classrooms and learners do not experience the benefit of strong teaching and learning opportunities. Selection, placement and learning of teachers were

all considered as factors that are closely aligned and support the condition being investigated. Finally, both practicing and aspiring teachers were included as the potential generative impacts hope to address individuals and systems of those entering the field of education as well as those who are currently in classrooms.

Variability in the selection, placement and learning of aspiring and practicing teachers leads to inequitable outcomes for students is the identified problem of practice. With the problem of practice named, the exploration of the conditions that sustain the problem begins.

Conditions that Sustain the Problem of Practice

Multiple conditions supporting the established problem of practice could be examined in the scope of this scholarly work. Attempting to focus the discourse into two over-arching themes, the primary conditions to be considered include 1). The avenues by which people enter the profession of teaching and 2). The connection between teacher learning and student achievement. Simply stated, are we getting the right people into the profession of teaching? And, once hired, are we training, developing and placing teachers to maximize our human capital and to improve student learning and achievement? Integral to both themes is the symbiosis between individuals and systems.

Systems and individuals. Throughout the course of this work, interrogation of the problem of practice and the subsequent guiding claims are viewed from a systems perspective. The individual (whether student, teacher, educational leader, or community member) remains centered although impacted by the multiple systems encountered. The Ecological Model developed by Bronfenbrenner (1974) provides a framework for understanding systems which support conditions leading to the problem. In applying Bronfenbrenner's (1974) ecological model as an undergirding for this work, the "ecological orientation points to the additional

importance of relations *between systems*” (p. 4) is critical to understanding the context of the problem of practice. In my experience with teachers and educational leaders, education is oftentimes viewed as a single system versus a convergence of systems. Acknowledgement of systems that are adjacent, encompassing and tangential, present opportunities to consider issues impacting the hiring, placing and learning of aspiring and practicing teachers. Using Bronfenbrenner’s (1977) impacts on human development as a parallel, I will illustrate how understanding the systems structure in relation to the problem of practice will require observing the interactions of individuals in multiple settings within and among systems. To further explicate this system construction, Bronfenbrenner’s (1977) seminal work identifies four (4) systems in a nested arrangement each contained within the next. They are described as the *microsystem*, *mesosystem*, *exosystem* and *macrosystem*.

A *microsystem* is defined as “the complex relations between the person and environment in the immediate setting” (Bronfenbrenner, 1977, p. 514). For the purposes of this scholarly work, the *person* is defined as the practicing/aspiring teacher and the classroom or professional development space is the learning environment. Within this level, Bronfenbrenner (1977) posits this is a place with particular physical features in which one accepts certain roles and engages in certain activities based on that role. For teachers, the genesis of the role has been crafted by the history of teaching as a profession and encompasses cultural and context specific descriptors. Other individual stakeholders within the partnership who enter the work would also be positioned within the microsystem level. Bronfenbrenner (1977) notes “the relation between the developing person and environment has the properties of a system with momentum of its own; the only way to discover the nature of this inertia is to try to disturb the existing balance” (p. 518).

The *mesosystem* is the next layer within the nested areas and “comprises the interrelations among major settings containing the developing person at a particular point in his or her life” (Bronfenbrenner, 1977, p. 519). Most aptly described, a mesosystem is a series of microsystems. For this work, mesosystem is described as a grade level or department team; a pre-student teacher/cooperating teacher relationship; teachers within a professional learning community; and administrative leadership teams. Interactions within the mesosystem can be both symbiotic and separate.

The next layer that Bronfenbrenner (1977) identifies within the nesting system is the *exosystem*. Defined as an extension of the mesosystem embracing other specific social structures, both formal and informal, that do not themselves contain the developing person but impinge upon or encompass the immediate settings in which the person is found, and thereby influence, delimit or even determine what goes on there. (p. 515)

Examples include local boards of school directors, community groups, churches, and parent teacher organizations. While not inclusive of the person, the proximity to the mesosystem and microsystem create an impact (positive or negative). Specifically in terms of this problem of practice, informal structures of the social networks encompassed in the aforementioned groups create practices and frameworks that support the systems issues being addressed in this work.

The final system identified by Bronfenbrenner (1977) and the most fundamentally different from the previous layers is the *macrosystem*. While not directly affecting the life of a particular person, rather establishing the prototypes or patterning of structures impacting behaviors and actions at the concrete level, the blueprints for what is normatively done within a

system are produced at this level. While Bronfenbrenner (1977) argues that this system does not directly affect the life of a particular person, others might. Defined as “the overarching institutional patterns of the culture or subculture, such as the economic, social, educational, legal and political systems of which micro-, meso-, and exosystems are the concrete manifestations” (p. 515) they are not only structural, but are vehicles that carry information, ideology and motivation both implicitly and explicitly to the other systems. Contextual examples would include the Pennsylvania Department of Education, United States Department of Education, and institutions of higher education.

Within the institution of education, laws, regulations and rules often become operationalized from the perspective of the dominant narrative. The systems, practices and policies have been in place for years and the tendency to repeat those practices because they support the dominant culture of education happen in both large and small districts. As participants in the system, we become involved in repeating those practices. Changing the inertia requires effort and often produces resistance. Rarely does anyone want to change a system, particularly if they are a beneficiary of that system. As positions of leadership within microsystems are held by those with privileged knowledge, practices and access, Kumashiro’s (2002) work on repetition encourages acknowledgement of the repetition within the system and how that supports inequities and oppressive practices. The ability to identify and expose repetition becomes an important part of the improvement efforts. The means by which systems and individuals intersect impacts how aspiring and practicing teachers enter the classroom. The next section discusses the pathways to the classroom.

Pathways to the classroom. The avenues by which people are recruited for and granted access to teacher certification programs results in professionals entering the field with varying

pedagogical competencies, skills and knowledge base. Labaree (2004) argues that “teaching has no established set of professional practices that have been proven to work independent of the particular actors involved and the particular time and place of the action” (p.53). Darling-Hammond and Bransford (2005) emphasize the need for stronger preparation courses for teachers prior to consideration as professionals. The Interstate Teacher Assessment and Support Consortium (InTASC) was created in 1987 “dedicated to the reform of the preparation, licensing and on-going professional development of teachers” (Council, 2014). With the target audience being state agencies charged with teacher licensing and program approvals, both teaching standards and learning progressions have been developed to aid teacher training programs in the education of aspiring teachers. Involvement in consortiums of this nature is voluntary.

Other professions have standards of practice or tenets to which they adhere and are part of the foundational training for candidates entering the field. The Hippocratic Oath for medical doctors and the Canons of Ethics for attorneys are precepts which over-arch the practice of those professions. Those guiding tenets provide evidence supporting how those professions make strategic efforts to be stewards of the discipline and cultivate the next generation. While licenses to practice both medicine and law are issued by states, the practitioners still self-govern through powerful institutions such as the American Bar Association and the American Medical Association. This type of commonly held core concepts are lacking in the professional practice of education. While states have requirements for teaching programs, there is not currently a unified, national direction for standardizing teacher training programs. Professional educational organizations, including the National Education Association (NEA) have worked to establish guidelines and benchmarks that describe effective teaching. Many common themes exist amongst these organizations including the need for teachers with content knowledge,

pedagogical skill and an investment in working with children. To date, involvement with these groups or adoption/implementation of their espoused standards remains voluntary.

Four-year undergraduate teacher training programs in the United States lack a consistent and specifically defined set of measurable skills and outcomes that reflect a national standard for teaching practices. Darling-Hammond (2010) in *The Flat World of Education* discusses the issue of education reform from many frames including economic impact, racial inequity and social/political contexts. In the author's analysis of countries like Finland, Korea and Singapore, which have shown tremendous improvement in teaching and learning, Darling-Hammond (2010) identifies significant attention and investment in how teachers are prepared for the profession and how they continue to receive professional development once they have entered. The national leadership in these countries decided that investing in the training of teachers and establishing national expectations is important and adequate resources are allocated to support that position. In particular, Finland has a national set of outcomes that are addressed by all schools. Examples of these outcomes include students being taught in heterogeneous classrooms (elimination of tracking/proficiency grouping of students), all students learning a third language, and a reduced number of standards that teachers are required to cover in an academic year. Additionally, teachers are selected from one pool of candidates trained by the same university (Hancock, 2011).

Darling-Hammond (2010) also suggests that the United States lack of national standards for teacher preparation results in teachers entering the field “with dramatically different levels of knowledge and skill—with those least prepared teaching the most vulnerable children” (p. 197). The work examines states such as Connecticut, which has made concerted efforts to standardize the training and professional development of teachers, however there continues to be a lack of

commonly accepted skills that teachers are expected to demonstrate upon completion of training programs. Perry (2010) states “education scholars recognize that the profession is lacking a clearly defined set of knowledge and skills as well as professional status at institutions of higher education and they have called for reforms to address these concerns” (p. 11).

The size and diversity of the United States poses a significant challenge to the establishment of a common set of standards for teaching. “The difficulty with education as a profession is that its clientele comes with a wide variety of issues and circumstances that make it difficult to define the service provided” (Perry, 2010, p.10). With the historical context of schooling to be a state’s rights issue with decision-making at a local level, national standards for teaching practices seem incongruent with the current structure. Contemporary discussions surrounding educational reform continue to include a focus on teacher training and preparation with terms such as highly qualified teacher (HQT) and teacher effectiveness at the forefront. With the six year failure of Congress to reauthorize the Elementary and Secondary Education Act (ESEA, 2013), states have developed waivers to redefine accountability based on a state-wide context. Teacher effectiveness has become part of the dialogue within those waivers as a measure of that accountability. Welch (2000) speaks of the dangers of a “single narrative.” In terms of teacher preparation programs, the profession is challenged to consider the varying contexts in which our teachers practice the craft and develop preparation programs that are culturally relevant and do not represent a single narrative. To allow a fuller understanding of the current situation, a historical perspective is needed.

History of the profession and standards of practice. A historical look at the training of teachers in the United States is outlined in Perry’s (2010) work recounting the establishment of normal schools in Massachusetts in the 1830’s which later evolved into post-secondary schools.

Normal schools were defined as vocational schools which taught basic classroom management and instructional techniques (Perry, 2010). Clifford & Guthrie (1990) and Learned & Bagley (1965) discuss variability within teacher training which indicated either no training outside of their own schooling or incoherent training between normal schools. Perry (2010) also cites “critics outside of education at the time viewed the educators’ status much like the status of clergy—with a lens of moral responsibility—believing that educators were called to their profession but did not need to specifically train for the vocation” (p. 13).

Another historical reference to teacher training is evidenced in the work of James Earl Russell at Teachers College at Columbia University where the notion of educator as artist undergirded the reform efforts (Perry, 2010). While pedagogy and content skills were eventually introduced into professional training programs, the underlying aspects of teaching as both an art and a science and a vocation are still prevalent today in discussions about teaching practices. Those affective descriptors, while noble, create difficulty quantifying the skill set in teachers and translating to student achievement and outcomes. While undergraduate teacher training programs in each state have standards that must be met for licenses to be issued, all fifty states are not governed by one common set of standards of practice.

Additional evidence to support absence of standards in teacher training programs is described by Darling-Hammond (2010) as the failure of teaching to be viewed among the ranks of a profession. In the Cookson text *Sacred Trust* (2011), Darling-Hammond defines three tenets of a profession. The first being “that they have mastered a common knowledge base and they know how to use that on behalf of the clients they serve; a level of commitment to the practice of the profession with the welfare of clients at the forefront; and finally accepting responsibility for defining and enforcing standards of practice” (p. 60-61). Darling-Hammond & Bransford (2005)

note professionals have a “social calling that forms the basis of entitlement to practice” (p. 12). Additionally, professionals must “know a great deal about how to achieve their goals for clients in situations that are unpredictable and non-routine; they must be able to enact what they understand in practice; and they must be able to continue to learn from their colleagues and their students about how to meet new challenges” (p. 13).

Others scholars submit definitions of a profession which include people “who have the capacity to solve technical problems” (Sullivan, 2005, p. 84), to Forsyth & Danisiewicz (1985) explicating a profession “may be a fundamental social process embedded in the relationship between society and those who practice certain expert occupations” (p. 60). The discussion as to whether teaching rises to the rank of a profession is not new. Howsam, Corrigan, Denmark & Nash (1976) state, “teachers do not possess a common body of professionally validated knowledge and skills which is transmitted in the process of professional socialization...and which is constantly increased through the career span of the teacher (p. 10). Howsam et al. (1976) also contend “to fail to develop principles, concepts and theories and to validate practice is to restrict the occupation [of teaching] to the level of the craft” (p. 11).

Perry (2010) examines the writings of Gitlin and Labaree and how establishing teaching as a profession was met with barriers ranging from what criteria were used to substantiate its abilities, skills and knowledge, to the need to produce a high number of teachers to meet the demands of filling classrooms. As the demand for teachers increases, Gitlin and Labaree (1996) report teacher training institutions accept almost anyone into the programs. When the demand for human capital is viewed from that lens, the ability to be selective diminishes. Often thought of as the most revenue generating among academic disciplines, teacher training programs occupy the lowest seat on the academy hierarchy and therefore have a perception and professional

acceptance problem at this level as well. Professionalization of teaching spans both teacher training programs as well as those practicing the craft.

The struggle to elevate teaching to the ranks of a profession is evidenced in the narratives of the teachers, leaders and community members. My work with teachers over the past 14 years reveals staggering differences by which a practicing educator views his/her job. The narrative of how elementary teachers most often describe their job as “teaching children” and secondary educators recount their job as “teaching content” leaves little doubt as to why such variability exists in how our students receive instruction within the classroom. The collective bargaining framework paradoxically provides details about work conditions, methods of supervision, and compensation versus defining, rewarding and celebrating qualities or skill sets that illuminate effective teaching practices.

Educational leaders grapple with the duality of teacher attitudes and behaviors that desire professional deference while resisting duties/assignments normally associated with professionals. As leaders become increasingly empowered to challenge current structures of educational systems, definitions of professional can be expanded. Community members are often exposed to negative press regarding teacher performance or conduct and make sweeping decisions about the profession based on the actions of a small minority of educators. In the current structure of teaching and learning within our schools, it is difficult to define the profession let alone create standards of practice. The political climate at the local, state and national level regularly posits how education (most importantly teachers) should act, react and respond to the ever-changing demands of the school systems. Constantly changing the target makes role definition and compliance highly improbable. Christensen (2008) praises public education for its ability to continue to re-invent itself given the constantly changing demands levied on the system.

Eggers and Calegari (2011) discuss making the teaching profession more attractive to college graduates and add the task will take some concerted efforts. The authors also reference a study completed by the McKinsey Consulting Firm highlighting the success in Finland, Sweden and South Korea in relation to approaching the profession of teaching. Compensation, status and resources provided to teachers in these countries were all identified as keys to success. In comparison, Eggers and Calegari (2011) state that teachers in the United States make “14% less than professionals in other occupations that require similar levels of education” (p. 1). This has resulted in teachers being unable to afford to own a home in 32 metropolitan areas.

The move to create teaching standards and establish governing bodies began early in the 20th century and includes investments from philanthropic foundations (during the 1930s and 1940s) as well as professional organizations. Perry (2010) suggests these efforts include the work of the Carnegie Foundation to define and structure normal schools to the establishment of the General Education Board (GEB) by the Rockefeller Foundation which awarded grants to study specific areas of teacher training and advancing the graduate education programs. Perry (2010) also reports with the advent of the 1950s and 1960s, reforms continued in an effort to “establish education and professionalize teaching” (p. 40).

Teachers themselves began to initiate advancement of the profession in the 1950s with the National Education Association (NEA) establishment of the National Commission on Teacher Education and Professional Standards (TEPS). Lindsey (1961) presented the goal of the initiative was to “develop definitive statements that would serve as guides for action programs at the local, state, and national levels by TEPS and other professional organizations and individuals toward the complete professionalization of teaching” (p. ix). Perry (2010) highlights the benefits of the TEPS movement “to advance standards, regulate and structure teacher accreditation

programs and improve admissions and retention of students and faculty” (p. 40). To date, the National Education Association and the American Federation of Teachers (AFT) continue to represent the teaching profession on policy, practice and bargaining issues. Bradley (1999) contends the most important outcomes of the Teacher Education and Professional Standards efforts included protecting the public from teachers who were ill-prepared, eliminating unfair competition for teachers and the debut of teachers initiating a voice in professional development.

The governance and regulation of teaching standards have shifted as the profession has matured. Involvement in defining and monitoring these standards is the concurrent responsibility of local, state and federal entities as well as professional organizations. Perry (2010) concludes

teacher certification had historically been under the control of individual communities until the rapid growth of state education departments during the early 20th century. This expansion prompted discussion over what represented teacher education and eventually led to the development of an accrediting body to standardize training programs. (p. 41)

Bradley (1999) identifies the “first national accrediting organization for education schools” as the National Council for the Accreditation of Teacher Education (p.38). Known as NCATE, this is a result of the collaboration between the Federal government, American Association of Colleges for Teacher Education (AACTE), the National Commission on Teacher Education and Professional Standards (TEPS) and the National Association of State Directors of Teacher Education and Certification (NASDTEC) in the early 1950’s (Perry, 2010). According to Bradley (1999), the initial response toward the National Council for the Accreditation of Teacher Education by colleges and universities was not enthusiastic; however it eventually

became the standard for teacher preparation programs. The research of Conant illustrated in the text, *The Education of American Teachers* concludes that as a result of the lack of universally recognized principals of education, education courses should not be mandated (Perry, 2010). While this conclusion was drawn in the 1960's, it remains a discussion point in contemporary dialogue regarding teacher preparation. Perry's (2010) work reviews various governmental and philanthropic efforts to define competencies for teachers and the most effective methods for colleges and schools of education to prepare teachers for the classrooms.

Many studies, initiatives and efforts have moved the profession forward, however much is left to be defined. While there is certainly no lack of opinion about what teachers should know and be able to do, the historical work of practitioners to self-define these competencies is resulting in political entities, and the public at large, weighing in and legislating what the standard of practice and measurement should involve. It appears as if constituencies external to education do not trust the practitioners to appropriately define the standards by which we practice. Currently within the Commonwealth of Pennsylvania, colleges and universities certify students have met the requirements to obtain teaching certificates and the state Department of Education issues the certificate. In fact, the actual purveyor of the credential is the college/university, with the Department of Education accepting the certification of the institute of higher education. With that background, the discussion moves to the quality and quantity of teacher preparation programs.

Teacher preparation as a question of quality and quantity. The structure of the academy in relation to recruitment, program content and training of teachers supports variability in skill set upon graduation from the programs. As previously noted, while some colleges of education have adopted the National Council for the Accreditation of Teacher Education

program standards, the operationalization of those standards possess degrees of variability. Perry (2010) reviews the historical journey of teacher training programs and indicates that during the late 1960's the coalition of the states, Federal government and professional organizations became vocal about the status of teacher preparation along with the standing of schools of education. The push from the Federal government, implemented via the United States Department of Education, during the next decade centered on the "concept of performance-based criteria and educational objectives" (p .44). Not surprisingly, attempts to define performance-based measures or competencies failed to result in the full implementation of those competencies.

Some educational leaders in the field discuss the variability in quality of student teachers assigned to the public schools. Depending on the structure of the program, some pre-service teachers receive more feedback from their university coordinators regarding their pedagogy, practice and planning. When university coordinators provide aspiring teachers with ongoing, embedded feedback on pedagogical practice, a higher likelihood of implementing more effective teaching and learning activities is afforded to the pre-service teacher. One could argue that variability exists among graduates from other professions such as medicine, nursing and law. I would argue that the variability factor is more compelling in education because the consumers of the profession are by and large children who are governed under compulsory attendance laws and lack the opportunity to select their teacher. When accessing medical or legal services there is more of an opportunity to select who provides the service. Additionally, teachers who were receiving weekly visits from the university coordinators demonstrate an increase in confidence and pedagogy skills as the student teaching experience progressed.

To increase the likelihood that pre-service teachers enter school systems with the optimum level of preparedness, stronger connections between the academy and school districts are critical. Administrators being engaged by representatives from the academy during weekly building visits to pre-service teachers would encourage dialogue. Although students are the direct consumers of the work done by pre-service teachers, and will be impacted by the quality of teaching, little administrative control exists over the selection of the pre-service teacher. The typical protocol is such that a certain number of cooperating teachers are needed to fill a request for placements from each college. The opportunity to review information about the pre-service teacher and to name and frame the needs of the building/district as a method of pairing the best student teacher for a particular grade level/classroom is more intentional. Darling-Hammond (2006) explains the narrative is markedly different as principals speak to the quality of student teachers placed within his/her schools and how that placement is secured via well-established relationships with colleges and universities. To further illustrate that point, several colleges studied use cooperating teachers as adjunct professors and place pre-service teachers in classrooms where program graduates are teaching in an effort to experience, in vivo, what the pre-service teacher learns within the context of the college coursework.

Within the context of this problem of practice, the school districts and the academy engage in a relationship where social and cultural capital dynamics come to bear. Oftentimes the field supervisor positions are held by retired educators, and established relationships exist between the university and the school district. Those relationships possess an inherent dimension of power making critical analysis of program structure, pre-service candidates or specific situations potentially uncomfortable for some of the stakeholders. As funding for education continues to be more tenuous, school districts struggle to get extra support within the

classrooms. Pre-service teachers provide a service at no cost to the district. Leveraging the resource of student teachers incentivizes school districts facing larger class sizes, varying student needs and continuously changing unfunded mandates.

Currently in the Commonwealth of Pennsylvania, 95 colleges or universities have teacher training programs. Of those 95, only 20 are National Council for the Accreditation of Teacher Education accredited (Accredited, 2014). Nationally, 1,345 colleges offer traditional teacher training programs (Feistritz, 2012). That translates into the need for countless numbers of student teachers to be placed in classrooms annually. The effort is often driven by the need to get pre-service teachers into student teaching placements versus thoughtful and intentional connections to strong cooperating teachers. Welch (2000) speaks to resistance and risk-taking. In the reality of high stakes testing, many of the most effective teachers forego involvement with pre-service teachers. The risk of placing the responsibility of student learning into the hands of a novice teacher, which could result in failure to meet the established Annual Measurable Outcome (AMO) targets as well as growth measures, is one they are unwilling to accept.

In a 2002 Annual Report on Teacher Quality from then Secretary of Education, Rod Paige (2002), he references the supporting research demonstrating the imperative that teachers possess strong verbal ability along with content knowledge. While that is the benchmark, Paige (2002) speaks to the structure of the certification system that creates very real barriers which work against recruiting the most talented individuals to the profession. The inconsistencies in the competence of teachers is reflected in the ability for states to set the minimum passing scores on popularly used teacher licensure tests. Sadly, these scores are well below national averages in reading. With the ability for state licensing boards to set the minimum requirements, it is not surprising that upwards of 90% of teachers pass the test (Paige, 2002). Given that set of

circumstances, one could conclude that all teaching certificates are not equal. The state where a teaching certificate was issued could determine the quality of the teaching professional in the classroom. That variation poses an equity issue in terms of our teaching professionals.

Additionally, 2006 findings from the Education Policy Center at Michigan State University illustrate that entrants to the field of education score considerably lower in the Scholastic Aptitude Test (SAT) and American College Testing (ACT) than do students going into the natural sciences and technology. Identifying the overall demographic of teachers as White, middle-class females, the advent of opportunities for women within fields other than education have resulted in a drain of the most talented who are entering education. This drain leaves all members of the school, academy and community partnership, particularly the academy, in a paradox with regard to the spoken objective (highly qualified teachers in every classroom) and the multiplicity of barriers inherent to the current system. The academy plays a pivotal role in addressing this problem of practice. With research that has been conducted on other disciplines being defined as professions, have colleges of education considered how other disciplines successfully recruit the most talented candidates? Christensen (2008) argues that change cannot occur within the same plane of existence, but rather a disruption must occur where nothing (in terms of product) currently exists. The disruption parallel to the academy is occurring with the advent of alternative methods to teacher recruitment.

Alternative certification programs allow a non-traditional entry to the teaching profession and also add another dimension of variability to teacher performance linked to training. Programs such as Teach for America, and Troops to Teachers offer alternatives that marry those with solid qualifications with an entry to the teaching profession while eclipsing the economic and structural barriers of traditional programs. According to the National Center for Education

Information (NCEI), alternative certification programs are in existence, in some form, in all 50 states (Feistritzer, 2012). These programs invite participation by a greater number of African American and male candidates as well as those who enter the profession of teaching later than teachers who receive certifications via more traditional routes.

The genesis of alternative certification programs stem from the need to staff urban and rural districts in subject areas such as science and mathematics. According to National Center for Education Information (2014), “This population of non-traditional candidates wanting to become teachers is growing significantly. The quest for how best to certify these people for the occupation of teaching has spawned the development of numerous alternative routes to teaching” (Section 1). With state Departments of Education and colleges and universities recognizing the need for staffing, conversations are occurring which address alternative certification programs in tandem with traditional programs. Alternative certification programs appear truly market-driven as the focus of recruitment and training is location and content specific. Given the demographics, life experience and interest in working in understaffed areas, those trained through alternative programs could provide the lever for community stakeholders to impact teacher quality, training, and placement of teachers who understand the social and cultural context of the systems in which they teach.

Qualifications and experience of university faculty in departments of Education are significant in relation to the training of aspiring teachers. The academy is invested in the training of teachers as countless colleges and universities prepare students for careers as educators. Promotional literature from each institution indicates programs are competitive and graduates are well prepared to enter the classroom. A criticism of the academy, particularly by practitioners, is the failure to prepare teachers for real-world classrooms and the demands of the profession.

With coursework perceived more theoretical than practical, practitioners often view university instructors as far removed from the realities of public education. Since the academy is working to educate future teachers, the knowledge base of instructors at the university and college level should reflect contemporary public school issues. Ball (2012) challenges the attendees of the American Educational Research Association annual convention to specifically address ways in which educational research should connect with practitioners in the field.

Perry (2010) completed a historical review of initiatives intended to address reforms in teacher programs within schools of education. Reports such as *A Nation at Risk* (1983), published by the Federal government not only examine the concerns surrounding student achievement, but call for the examination and critique of schools of education. Some programs sought voluntary participants in the hopes that colleges of education would take an introspective look at programming. Mandates, such as the reauthorization of the Higher Education Act of 1965, imposed penalties as a means to introduce new ideas and procedures to schools of education (Perry, 2010). From my vantage point as a scholar practitioner, the review of initiatives to improve teachers and teacher training reduces to a few common themes including: identification of skills and competencies of effective teaching; preparing teachers in both content skills and pedagogy; establishing teaching as a profession; and making connections between higher education and schools. Despite the efforts, Perry (2010) recaps the 100 years of work by stating

the consensus seems to be that there has been very little, if any change or reform of colleges of education. A possible reason may be that we have had little understanding of how the change process happens, who are the key players, and what factors influence this process in schools of education. (p. 53)

My personal educational experience recalls the most effective higher education programs to include faculty comprised of former educators as well as those whose careers were exclusively in academia. The benefits of a strong theoretical perspective combined with scholars in practice resulted in programs with a broad vantage point. Staffing within schools of education consists of a bifurcated system in which research faculty are focused on publication to stay on a tenure-track and lack interest, experience or connection to instructing in the field. Faculty hired as practitioners are perceived as disconnected from research disciplines and fail to garner the respect of the more formally-trained academicians. Compounding the internal structure of colleges of education, within the larger system of higher education, these professors are often the lowest paid and least respected among their colleagues (Darling-Hammond, 2010). Darling-Hammond (2006) recounts the work of several colleges and universities that have made significant improvements in teacher training programs.

Upon completion of the teacher preparation program the learning for aspiring and practicing educators does not cease. The next section gives consideration to ongoing professional development with teachers and the potential impact on student achievement.

Professional development with teachers as learners. The second over-arching condition which supports *variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable learning opportunities for students* considers that quality professional development increases the likelihood for gains in student achievement. Years of education research consistently support the most important factor in student achievement is teacher quality. Previously in this scholarly work, the impact of recruiting and training aspiring teachers and maintaining quality programming in higher education or alternative certification

programs is interrogated. At this juncture, the discussion transitions to the responsibility of school districts to deliver ongoing professional development.

Effective professional development that improves student achievement is founded on sound pedagogical practices and principles of adult learning. A walk through most in-service or professional development days in schools across this country renders a similar scene of large groups of disengaged adults being fed information in the hopes it will effectively translate back to their classroom practices. In my experience well-meaning educational leaders often miss the mark with this critically-important responsibility. Educators' knowledge of child and adolescent learning theories fall short of the learning needs of adults. Brookfield (1988) shares the six principles of adult learning theory to include: voluntary participation; mutual respect; collaborative spirit; action and reflection; critical reflection and self-direction. When employed, these principles can create a condition intended to maximize teacher learning.

Coburn and Stein (2006) support the tenets of adult learning theory as they look at the implementation of educational policy through the lens of communities of practice and teacher learning. Coburn and Stein (2006) indicate that while implementation of new pedagogical practice tends to focus on individual learning, the teachers relate to the culture of the school/learning environment, the routines they have developed, and how new practices can be implemented based on what they already know. The social context of learning plays a significant role in the professional development of teachers. Additionally, teachers' professional relationships are a factor in learning as well as in change of practice (Coburn & Stein, 2006). The ways in which these communities develop is complex, multi-layered and steeped in cultural context. Much informal learning takes place within the context of professional development, and that informal learning structure cannot be negated in terms of pedagogy or practice.

Ongoing professional development, including structured mentoring and job-embedded activities, allows teachers with all levels of experience to review their teaching practices and apply what they have learned directly back into the classroom. To further elaborate on the role of mentoring as a vehicle for professional development discussions surrounding culture, context and effectiveness of mentoring and critical friend structures is warranted. Whether mentoring is purposefully structured or occurs organically, the benefits of a mentor-mentee relationship encompass both pedagogy and emotional components of teaching and learning.

Darling-Hammond (2010) examines the structure of professional development in high-achieving countries and those where significant reform has occurred within the sphere of education. Two stark differences are revealed in comparison to practices within the United States. First, there is an ongoing and substantial investment in the “quality of teaching” (p. 198). This is demonstrated by the commitment of weekly collaboration and professional development afforded to each teacher which ranges from 10 to 25 hours per week. Darling-Hammond (2010) reports that in the United States, teachers spend approximately 80% of their time teaching whereas teachers in Organisation for Economic Cooperation and Development (OECD) countries spend on average of 60% of the time teaching. Even if teachers in the United States want to engage in reflective practices, the current structure of the work day and/or work week does not afford the opportunity. Collective bargaining agreements generally delineate work time; length of the work year; and scheduling of classes. Additional mandates from the state mean more content to cover. Adding training days to the calendar involves additional compensation. Beyond that, even with the advent of professional learning communities and co-teaching opportunities, the historical contexts of teaching perpetuate being a sole practitioner and teaching in isolation. When a teacher’s pedagogical practice becomes more transparent and

observable, there is more concern with perceptions of incompetency in the classroom. Increased levels of planning time means a paradigm shift in how schools and teaching have occurred for decades.

The role of community members in decision-making regarding professional development for educators has been either inconsistent or non-existent. Initiatives by state departments of education require the development of strategic plans, including sections on professional development for educators, which are to receive input from a professional development committee. Parents and community members have representation on the committee. Delpit (1988) suggests...“that appropriate education for poor children and children of color can only be devised in consultation with adults who share their culture. Black parents, teachers of color and members of poor communities must be allowed to participate fully in the discussion of what kind of instruction is in their children’s best interest” (p. 296). Engaging in dialogue about types of instruction best for children serves as a foundation for creating meaningful professional development that is contextually appropriate. Parents who possess social and cultural capital are comfortable engaging educators in discussions surrounding how their children are instructed while parents of poor or minority children may be less apt to do so in a *formal* sense. My experience in working with parents considered economically disadvantaged revealed their ability to informally share perceptive insights on how their children learn, and a willingness to share that information with school personnel with whom they have developed a trusting relationship. When the structure of sharing this information became formalized the likelihood of engagement decreased.

Mentoring and teacher induction is a significant lever for improving teacher effectiveness and retention. In mentoring new teachers, Darling-Hammond (2010) suggests that the highest

achieving countries have intensive programs for new teachers that include working directly with an expert teacher, having a reduced teaching load to allow for honing of skills and increased time to reflect on best-practices. In these countries, new teachers are not left to discover on their own how to manage classrooms or implement curriculum. In the United States, the situation is often different. Quay (2011) believes that teachers are “especially sensitive to the degree of collegiality and collaboration among peers” (p. 11). With the high turnover rate of new teachers, particularly in school districts with significant need, it is little wonder why novice teachers abandon the profession. The power of the cohort is important and assists with critical reflection.

Some educators may be uncomfortable when engaging in critical discussions surrounding their own teaching practices. The fear of being perceived as unable to teach or manage the classroom inhibits teachers from asking for administrative assistance or support from peers. Conversely, teachers are reluctant to share teaching strategies known to be successful for fear of being portrayed as a braggart by colleagues. Despite the increases in co-teaching and professional learning communities, the world of a classroom teacher is still insular and creates a cocoon of comfort and complacency. Human capital management encourages developing teacher leaders within the teaching ranks as coaches, mentors and critical friends. The infusion of scaffold supports for teachers aim for results in improved practice. These scaffolded supports could include teacher induction programs of longer duration, increasing the frequency of consultations with the principal and providing release time for mentor teachers to work more closely with newly hired professional staff.

The work of Forlenza-Bailey, Sentner and Yost (2000) and Key (2006) examines the role of critical reflection and critical friends groups on pre-service and practicing teachers and his/her effectiveness within the classrooms. Key (2006) reviews research conducted over a ten year

period in the early 2000's that speaks to the perceptions of critical friends groups (CFG) versus the actual impact they have on student learning and teacher effectiveness. Evidence would suggest that critical friends groups have been beneficial in improving cultures of communication and community of teachers as well as reports of increased levels of professionalism by teachers. The more substantive connections to the actual change in teacher's thinking and professional practice, and the actual impact on student learning are not as clearly defined by involvement in critical friends groups. While the potential certainly exists for the latter, additional research using more quantitative methods is warranted.

Given the culture of teaching and the structures of measuring teacher performance, it is not surprising to find that while teachers reported engaging in a certain degree of reflection, it oftentimes does not progress to the depth beyond niceness and positive comments. The ability to engage in critical reflection requires both investment and internal structures of the participants as well as systemic supports and attitudes that foster this work. This process cannot be rushed.

As scholar practitioners look to develop structures that support this type of reflection, great pause must be taken to determine if the stakeholders in the current system possess the tools to engage in this type of work. As broader applications are made to the school, academy and community partnership within the context of the problem of practice, efforts would directly connect to developing structures where this type of critical reflection was taught and supported. Careful and caring conversations must occur before the dialogue can move to courageous conversations.

Dewey's (1933) thoughts about teachers and teacher education suggest that the most important quality for teachers in critical reflection. His definition of reflection explicates that it is an active, persistent, and careful consideration of any belief or supposed form of knowledge in

light of the groups supporting it and future conclusions to which it tends. Additionally, Dewey (1933) identified three attributes of reflective individuals being: open-mindedness, responsibility, and wholeheartedness. Given those points, Dewey (1933) charged teacher educators with creating intellectual and professional structures and experiences for preservice teachers to reflect on critical levels.

When considering the current structure of professional development, planning time and interaction with students, the opportunities for critical reflection and friend groups is scarce. For some, the thought of engaging on that level is paralyzing and disconnected from the daily work done in the field. For others, the risk of engaging versus the real or perceived rewards from doing so does not warrant the investment. And, for leaders, their lack of comfort with leading these groups is eclipsed by the firestorm of administrative tasks which provide both an ever-present distraction as well as a legitimate excuse to avoid engagement. While educational leaders intuitively know that pedagogy is both an art and a science, we oftentimes overlook the emotional component of teaching and learning (for both the teacher and student) and discount its impact on school reform.

The standard professional development within schools in the United States, as heavily constrained by collective bargaining agreements, is limited to a few days per year and does not allow the best conditions for transfer of the skills back into the classroom. In my professional experience as an educational leader, the comments offered by teachers are that what is offered by the district has no connection to their classroom. Hence the high absenteeism and lack of teacher engagement on in service days. For all educational leaders, including myself, the high absenteeism is a call to action. Teachers are hungry to learn relevant information that can be used within the context of the classroom to help improve student learning. Their failure to attend

is a message that what districts are offering for professional development is not worthy of his/her time. Instead of vilifying teachers for lack of interest in continuing professional development, it is a charge to administration to create engaging and useful professional development. This problem of practice does not exist in isolation. The next part of the work explores how policy, politics and outcomes shape the terrain.

Policy, politics and outcomes. *Variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable opportunities for students* is a high leverage problem evidenced on both a macro and micro scale within the United States. Teacher effectiveness measures are a polarizing topic of discussion at the federal, state and local level. With the reauthorization of the Elementary and Secondary Education Act (ESEA, 2013) six-years overdue, the statistically unattainable measures of 100% proficiency of all students in mathematics and reading by the year 2014 have propelled the federal government to accept waivers for Adequate Yearly Progress (AYP). In September 2013, Pennsylvania's waiver was accepted with one of the key elements in surrounding teacher and principal effectiveness measures. Pennsylvania was one of the last states to apply for the waiver with the term of the waiver running only two years through 2015 (ESEA, 2013).

The precursor to the application and implementation of the flexibility waiver is the introduction of Race to the Top funding as a means to improve teacher quality. The enactment of the American Recovery and Reinvestment Act (ARRA) of 2009 includes a component to reform education in four areas (U.S. Department of Education, 2009, November). Two areas specifically target teacher and principal effectiveness via the creation of data systems to track student growth, and recruiting, rewarding and retaining effective teachers and principals and placing them where the greatest need existed. Pennsylvania's participation in accessing Race to

the Top funding demonstrated its commitment (in both policy and politics) to connecting student achievement with the performance of individual teachers and leaders. With the promise of funding to assist in the implementation of the new teacher evaluation system, a vast majority of districts in the Commonwealth applied for this competitive grant and began piloting teacher observation frameworks that include closer linkages to student measures of success. A pervasive narrative in discussions regarding teacher effectiveness and failing schools surrounds high percentages of teacher annual ratings as satisfactory when schools are failing and the achievement gap continues to exist. This examination focuses on an individual basis versus a systems perspective.

Continuing to build upon research supporting the direct connection between teacher effectiveness and student achievement, additional frameworks have been established to link teachers to students, standardized test scores and growth measures. With the adoption of Act 82, Pennsylvania's Elementary and Secondary Education Act (ESEA) Flexibility Waiver introduced a summative evaluation system that for the first time connects student performance (achievement and growth) to teacher evaluation ([Pennsylvania], 2013). While the largest percentage (50%) of the teacher rating is based on classroom observation, the remaining 50% is linked to student data, including locally determined measures of effectiveness. While Act 82 stipulates "no teacher can be rated *needs improvement or failing* solely based on student test scores" ([Pennsylvania], 2013) the data will reveal and validate what has long been known by educational leaders, parents and community members. Some teachers positively impact student achievement and others do not.

The advent of Race to the Top and Act 82 are the most recent in a long line of discussions regarding teacher effectiveness. Selecting and placing qualified teachers was of importance in the 1840's as Horace Mann submitted his Fourth Annual Report to the

Massachusetts state board of education (Spring, 2011). In part, this report included the ideal characteristics of teachers for the common school. The following were listed: “perfect knowledge of the subjects; an aptitude for teaching (which he believed could be learned); the ability to manage and govern a schoolroom and mold moral character; good behavior and morals of teachers” (p. 144). Examination of the current Charlotte Danielson Framework for Teaching reflects the same areas stipulated in the four domains for effective teaching (planning and preparation; classroom environment; instructional delivery; and professionalism). Since the inception of the common school movement, teacher quality was associated to student success, contained both personal characteristics as well as intellectual capacity, and was laced with moral expectations to be governed by local school boards (Spring, 2011). Not much has changed in 173 years.

Research supports the connection between teacher quality and student achievement. Curtis and Wurtzel (2010) succinctly explain the high leverage nature of the problem of practice by stating “after more than a decade of studying value-added measures of teacher effectiveness, most researchers believe that the quality of a student’s teacher is the most important influence a school can have” (p. 70). The works of Ladson-Billings (2006), and Darling-Hammond (2006, 2010) demonstrate that all students do not have equal experiences within their formal education and document both quantitative and qualitative data in support. Each one of us can recount the teachers most pivotal in our personal learning. In our professional lives we can readily observe the variability in teacher quality within our own systems and the impact on student achievement.

The education debt referenced by Ladson-Billings (2006) continues to impact students exponentially with no significant end in sight. Improving this condition would be to increase the overall quality of teaching and decrease the variability in teacher quality and is what Curtis and

Wurtzel (2010) look to accomplish with the management of human capital within the education system. The concept of debt, within any discipline, does not bode well for the circumstance.

Within the context of student learning and years of instruction lost or diminished, failure to address this condition will result in losses of educational opportunities our society will be unable to recoup.

The problem of practice is important; it needs to be addressed in order to leverage change. Dolle, et al. (2013) and Bryk, Gomez and Grunow, et al., (2011) speak of high leverage problems in the frame where, if addressed, a difference will occur in how the system operates. This is not intended to be a minor fix, but one that has lasting impact with systems change. The issue stated above would likely cause the academy, and practitioners who train teachers via non-traditional programs, to re-examine delivery of teacher preparation programs. School districts would be challenged to rethink how teachers are recruited, evaluated, promoted and managed. In addition, districts would establish minimum skill sets as prerequisites for all teachers entering the district.

Engaging in this type of work involves raising the consciousness of stakeholders for a risk and reward. To produce this caliber of educational improvement, all members of the school, academy and community partnership are challenged to engage in what Welch (2000) identifies as “strategic risk taking.” The systems that currently support education in this country are long standing and provide benefits to certain groups of people while distancing others. Groups who experience privilege may discover more risk associated with engaging in a resistance to reform and transform education. As resistance is generally denoted as a negative, the willingness of teachers or administrators to resist comes at some cost professionally. Perhaps Welch (2000) most aptly frames this problem of practice as high leverage by saying “...if we cease resisting, we

lose the ability to imagine a world that is any different than that of the present...” (p.46). When considering the education of children, we cannot afford to imagine the same system and expect different results.

Professional development and mentoring programs for teachers remains relevant. The need is demonstrated by teachers request, discussions with teachers who exit the field of teaching, and data that shows the percentage of teachers who leave within five years of entering the profession. Curtis and Wurtzel’s (2010) work identifies two groups of teachers within the field as either exiting early (within three to five years) or staying long past usefulness because they are too far into careers to make a change that will be as financially lucrative. In either case, considering human capital management in relation to teaching and administrative staff may offer some resistant and risk-taking views currently being explored in pockets of school districts within the United States.

Education has documented countless numbers of formal measures designed to capture and define qualities of effective teaching. School communities and parents have ideas about the qualities of effective teaching and are oftentimes shared within and amongst informal networks inside the community. If the community is supportive of the teachers within the school system, the informal networks prove beneficial. If the converse is true, the discontent further distances the stakeholders from the discussion. In many school districts, community members are not formally engaged around the dialogue of qualities of effective teaching. Two recently established frameworks within the Commonwealth of Pennsylvania offer levers to engaging the community voice in a more formal manner. With the passage of the Elementary and Secondary Education Act flexibility waiver for Pennsylvania, accountability measures such as the School Performance Profile (SPP) and the Pennsylvania Value Added Assessment System Teacher

Specific-Reporting (PVAAS) directly link teachers to student performance (ESEA, 2013). Within the School Performance Profile, both student achievement on standardized tests and measures of annual growth are indicated and factor into the overall score for the school. While the Pennsylvania Value Added Assessment System Teacher-Specific Reporting is unavailable to the public (at this juncture), it is used administratively toward an overall performance score for the teacher. District and building-level value-added data is available and shows by grade level and subject how cohorts of students are performing. Particularly within smaller school systems it is easy to identify teachers within content area and subject area. Strategically engaging the community in discussions regarding effective teaching using these tools potentially creates the challenge space that has long been absent.

Voices of teachers, students and stakeholders. Teacher assignment and placement of teachers within school systems marginalize certain groups of students. Oftentimes the least experienced teachers are placed in the most challenging environments with little support or mentoring. The newest teachers are typically assigned to classrooms with the neediest students. Cookson (2011) provides evidence that annual teacher turnover is about 16%. For new teachers who have been assigned to high-poverty areas with challenging students, the turnover can be as high as 50%. Quay (2011) also proposes not only do new teachers lack the requisite experience, but the recruitment and mentoring systems in place are inadequate and fail to prepare these teachers to teach in schools with students who present with the highest level of need.

In April 2010, Secretary of Education, Arne Duncan, pronounced that less than 2% of teachers in the United States were African American males (Education, 2010). Ball (2009) questions that with the population of students of color projected to be more than 50% by 2020, are the cultural needs of students being met within a teaching population comprised of

predominantly White educators? Ball (2009) posits that changes in student demographics have been dramatic whereas the teaching force demographics have been slow to change and continue to be predominantly White and middle class. Recruiting efforts such as the *Call Me Mister Programs* focus on attracting African American males into the teaching profession. Recruiting and placing a diverse teaching population is high leverage and likely to yield educational improvement.

In Finland, Sweden and Singapore, where educational reform has been successful, the prevailing attitude is that teaching is a highly-respected profession and being assigned to work with the most challenging students connotes the level of teaching expertise one possesses (Darling-Hammond, 2010). With student achievement and teacher effectiveness such polarizing topics in the current political climate, teaching the most struggling students is not always considered a coveted position to hold. Informal discussions with principals, particularly at the secondary level, reveal the most experienced teachers instruct students in the advanced placement and college bound classes and those who are new to the staff (with or without experience) are teaching the most vulnerable students.

Most educational leaders describe those entering the profession of teaching as possessing an intrinsic motivation to work with children and contribute to the future of our society. If money is the ultimate enticement one might select another profession. However, internal motivation goes only so far until the reality of economics descends. Most teachers believe in improving the condition of those students who are disadvantaged. Realistically, the desire to work in schools/districts with high needs will wane if there is no perceived benefit. If working conditions are challenging, teachers and administrators lack resources to meet the needs of students and punishment is imposed for not reaching levels of proficiency, the torch will

ultimately be passed and those within the profession will search for other venues to practice the craft.

Hancock (2011) suggests the reason for the success of Finland's schools is the result of selecting the top 10% of college graduates to earn master's degrees in education. Additionally, the author suggests that countries that have experienced high levels of reform and improvement in student achievement have not seen a benefit in creating unequal systems or not preparing or supporting new and developing teachers. Darling-Hammond (2006) looked at six university teacher education programs that include purposefully designed frameworks to encompass a master's degree and have formal acceptance into the program. While the success in Finland cannot be minimized, making comparisons to reform possibilities in the United States should be approached with caution. How does the choice in educational institutions influence where you will get a better education? Both business and government are weighing in on education reform and teacher effectiveness as high leverage with initiatives through the Gates Foundation, and President Obama's Race to the Top funding.

The signature pedagogy in use by the ProDEL program, known as *systematic and intentional inquiry*, is defined as "a process that reveals and challenges what we believe to be true, and then is shared, reviewed critically, and used by others in pursuit of educational equity and excellence" (ProDEL, 2012, p .5). The phrase "systematic and intentional inquiry" was first used to argue that teachers should take an inquiry stance with regard to learning from their own teaching (Cochran-Smith, 2005; Cochran-Smith & Lytle, 1990). Working with a number of colleagues over the years, Connie Moss developed systematic and intentional inquiry into an approach that educators can take to reveal and challenge their own assumptions regarding problems they encounter in their practice (Brookhart, Moss, & Long, 2010; Cunningham,

Schreiber, & Moss, 2005; Moss & Shank, 2002; Schreiber, & Moss, 2002). While both uses-as a professional stance and as an approach to professional learning-are pertinent to the signature pedagogy cited here, it is the work of Moss and her colleagues that best exemplifies the approach that is applied to the current problem of practice. Stakeholders hold assumptions about problems and their causes. Failure to reveal and then challenge assumptions often leads to the enactment of solutions that do not effectively address the problem. One failure leads to another.

The variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable outcomes for students has relevance to my professional life for the past 20 years from work both outside and inside public education. Current structures of professional development within education at large have triggered questions about how to bridge what teachers learn into the classroom. Investment and engagement in this work comes from observations of how teachers develop as professionals once they have entered the field. Revealing connections between enhancing professional practice and student achievement is critical to the current work, designs for learning and generative impacts. As a scholar practitioner, the most effective professional development for me has been job-embedded and included components of action-research and reflection. Conversely, the vast majority of the professional development for which I have been responsible to organize and deliver has been stand-alone with little connection to the classroom. This knowing-doing gap offers a prime challenge space to explore and effect systemic change.

Professional development in most school districts could be described (by both teachers and leaders) as *done* to teachers versus engaging them in significant learning. Ball (2009) defines *generative change* as “a process of self-perpetuating change wherein a teacher’s pedagogical practices are inspired and influenced by the instructional approaches and theory that

he or she is exposed to in a professional development program” (p. 3). Teacher training programs containing an apprenticeship or internship approach, under the supervision of a master teacher, often allow for this kind of introspection and reflection on the craft of teaching.

One of the most overlooked sources for information on how students learn best is the students themselves. “Educators may consider students difficult to teach simply because they come from families that do not fit neatly into what has been defined as the mainstream” (Nieto, 1994, p. 394). Sonia Nieto (1994) saw the relevance of recounting the narrative of students in relation to educational reform. Nieto (1994) contends that research focusing on student voices is relatively recent and scarce. In her work to uncover the narrative of underserved students, information was gleaned on how the student’s view of school policies, practices and the effects of racism unfolded within his/her own personal context. Common themes occurred in relation to cultural acknowledgement and sensitivity within the school system as well as resiliency on the part of students themselves. An important part of the narrative echoed the relationship building with teachers and the impact it had on students. Students are adept at quantifying characteristics they like about teachers and which ones they do not. Not surprisingly, Nieto (1994) discovered that many of the issues adults and policy-makers have identified are also voiced by the students.

Data surrounding student achievement and teacher effectiveness is relevant to the systematic and intentional inquiry of the problem of practice. Darling-Hammond’s (2010) examinations of research conducted by Ronald Ferguson concluded “what the evidence here suggests most strongly is that teacher quality matters and should be a major focus of efforts to upgrade the quality of teaching. Skilled teachers are the most critical of all schooling inputs” (p.106). While other factors such as class size are considered, they are smaller in magnitude than the teacher effect. Even when well-qualified and highly trained new teachers are hired into

school systems, a productivity decline occurs as new teachers are not as effective initially and sharp rises in the effectiveness are seen after the first two to three years in the classroom (Darling-Hammond, 2010). Within school districts across Pennsylvania, examination of the data connecting teacher effectiveness via the Pennsylvania Value Added Assessment System Teacher Specific reporting and student outcomes will be part of regular administrative discussions.

Ball (2009) incorporates the significance of narratives of the human experience and illustrates how it is a means by which humans interpret life and make sense of our experiences. In the author's study of culturally and linguistically complex classrooms, the lived experiences of teachers involved in the study was critical as they reflected on their own story as well as the change in teaching practices and student learning as a result of the professional development. As educational leaders, are we intentionally connecting reflection with professional development? Assuming the righteous intention of leaders who design professional development, there is a failure to acknowledge and investigate the connection between training and improvement to student learning. A palpable element of risk exists within the teaching community to verbalize lack of confidence with teaching a concept, a particular content area or group of learners. For Ball (2009), the premise was to "assist teachers in replacing their feelings of insecurity, discomfort, and inadequacy with feelings of agency, advocacy and efficacy" (p. 48). Weisberg, Sexton, Mulhern, Keeling, Schnuck, Palcisco and Morgan (2009) in *The Widget Effect* report, argue that current teacher evaluation systems provide an inflated sense of competence too early within a teaching career. The current culture of teacher observation and evaluation fails to create the matrix where learning about teaching is never really done and receiving a rating less than superior is unacceptable. Within the recently adopted Act 82 parameters, the four categories of ratings include failing, needs improvement, proficient and distinguished ([Pennsylvania], 2013).

The training protocol includes discussions with both administrators and teachers outlining that the distinguished category is one where teachers visit but are not permanently located. A structure of this nature supports efforts to minimize an inflated sense of competence and have educators at all points in their career examining areas where improvement can occur.

Narratives of stakeholders tangential to education are critical to the systematic and intentional inquiry of the problem of practice. Throughout the course of my normal professional activity, opportunities have been presented that allow discourse with colleagues from other disciplines surrounding teaching, learning and leadership. It is from such intersections (both formal and informal) that I learned how those stakeholders to the system perceived many things about school systems. Since many other professions directly or tangentially intersect the world of education, discussions with business leaders, elected officials, clergy, and members of higher education occur on a regular basis. Engaging leaders with different spheres of influence about the challenges facing education always provided new perspectives on age-old issues.

Regardless of when and where the discussions or forums occurred, two common themes continuously emerged. First, school systems did not appear to do a good job of engaging those external to education. Although national professional organizations often organize targeted visits to elected officials or state capitols, direct contact with elected officials at the local and state level appeared to occur infrequently. Business owners noted that conversation was initiated by schools most often when they were looking for financial assistance or sponsorship, but rarely for collaborative ventures. One positive example of how schools collaborate with business includes programs such as teachers in the workplace. This offers the chance for teachers to see, first hand, the types of skills needed for a particular business or industry. Teachers are then able to embed

competencies and concepts into instruction that will help to support and enhance those skills needed for the workforce.

Another recurring conversation theme surrounded the institutional constraints that prohibit leaders from running a school district with greater efficiency. The implication was not that leaders were incapable of leading, but rather the existing bureaucratic barriers stifled the ability to lead. These discussions provide valuable perceptual information while also establishing communication pathways of how business, academy and the community can aid in further exploration of the problem of practice. If people were provided the correct environment and opportunity, there may be a greater willingness to engage in a deeper understanding of the problem and move from discussion to action. The need to work across boundaries becomes clearer if we see the educational system as extending beyond the walls of classrooms and schools.

Systems Thinking and the Problem of Practice

Problems of practice exist in contexts where practice is enacted. Even so, it is helpful to have a frame through which problems in a particular situation can be viewed. Situating the problem of practice here will be done by considering (1) inquiry focused on improving situations (Knowledge and Variation), (2) leadership (Leading Individually and Systematically), and (3) examining the problem from multiple perspectives (Multidisciplinary Influences and Implications).

Knowledge and variation. Examination of this problem of practice is structured such that the goal is not to simply find a solution to the problem, but rather to take measured steps to improve the system. This is a divergence in thinking from previous methods of theoretical inquiry. Systematic inquiry as a means of exploration into the variability in the selection,

learning and placement of aspiring and practicing teachers is best explained via the lens of profound knowledge. Langley, et. al. (2009) explicates the writings of W. Edwards Deming, who proposed a body of work called a “System of Profound Knowledge” (p.75). Deming’s concept was developed to examine how to implement changes that result in improvement and can be applied to a variety of settings and is defined as “the interplay of the theories of systems, variation, knowledge and psychology” (p. 75). The interrelated parts of profound knowledge consist of the following: appreciation for a system; understanding variation; building knowledge; and the human side of change. Deming (in Langley, et al., 2009) offers “profound knowledge gives us a lens to view our organizations differently” (p. 76). Considering the high leverage nature of this problem, and the intersection at which public education is positioned, failure of all stakeholders to view educational organizations differently will leave us destined to replicate and reinforce the conditions that support the problem of practice.

Although Deming (in Langley, et al., 2009) identifies four interdependent parts within the theory of profound knowledge, for the purposes of this work, appreciation for a system and understanding variation will be the two primary foci. Defining the properties of a system, in general, is important before applying it to a larger context. A system is “an interdependent group of items, people, or processes working together toward a common purpose” (Langley, et al., 2009, p.77). Deming noted “management’s job is to optimize the system, that is, orchestrate the efforts of all components toward achievement of the stated purpose” (p. 77). Within the context of this work the intensity of people and the processes is dynamic and creates both possibility and hope.

The challenge, and ultimate success, of any system is the synchronicity of the interdependent parts. Deming cautioned for the need to include multiple measures to understand

the impact of changes both on a micro and macro level. As change is laced with psychological components, when data intersects with emotion the outcome is often unpredictable. The paradigm shift to a system versus individual approach to the problem of practice is one that will likely be met with resistance. Systems theory offers several other key ideas which include: system boundary; temporal effects; leverage; constraint (bottleneck); and types of change. (Langley, et al., 2009). Within the designs for learning and action and generative impacts section of this work, several of these components will be explored at a deeper and contextual level.

As we move to map appreciation of the system to the problem of practice, the *people* include teachers, leaders, student, parents, and community stakeholders. The *process* is identified in several planes including: teachers entering the field of education; placement of current teachers; and professional development provided to teachers. Some or all of the aforementioned *people* engage in the process (or processes) at different intersections with a splintered goal often not self-defined, but rather imposed by people or systems operating from an outside boundary. With competing systems, stakeholders and agendas, creating the challenge space where each process and its participants can identify a common goal will be critical to moving this professional agenda forward. Langley, et al. (2009) advocates the Central Law of Improvement as “every system is perfectly designed to deliver the results it produces” (p. 79). As those invested in this work, stakeholders are challenged to look critically at this system, our role in the system and how we support outcomes, both positive and negative, generated by the system.

Now that system has been defined both generally and in context to the problem, understanding variation becomes relevant. Variation exists in everything that is observed or

measured (Langley, et al., 2009). While variation can generally be identified by people within the system, how it is defined and addressed differs. Examining variation, over time via data which has been plotted, will allow the determination as to whether the patterns are predictable or unpredictable. In Langley, et al., (2009, p. 80) Shewart identifies common causes and special causes of variability. *Common causes* are systems inherent, affect everyone and all outcomes. *Special causes* are not systems imbedded, do not affect everyone, but arise from special circumstances. Depending on the cause of variation, the interdiction is either a change to the system or removing the special cause that created the variability within the system. A conceptual understanding of variation will allow stakeholders to engage the structures to impact change. As educational leaders our understanding of variation will not only reveal systems issues, but the systemic issues that have privileged some and disadvantaged others.

The aforementioned discussion of variation focuses on the system versus the individual. Within education, reform agendas have been promoted as systems change efforts, however the instruments of change have largely been centered on individual performance (i.e. teacher and principal effectiveness, standardized testing, etc.). Previous sections of this work articulates characteristics of effective teaching; data surrounding admissions criteria for teacher candidates; standardized test scores for those entering the profession; and the inability for educators to establish criteria commensurate with other disciplines that would elevate them to the status of a professional. While few would dispute the role individuals play within the system and their impact on variability, the *system* is seldom the main focus. The most pivotal significant learning for me transpired within the context of systems versus individual. I would argue the relationship is symbiotic rather than adversarial, and as such, the symbiosis between the individual and the system cannot be underestimated. If, in fact, the Central Law of Improvement is accurate, then

individuals within the system are also “perfectly designed” to produce the results they do. “It is often easier to blame people than to take a hard look at how the system affects behavior”

(Langley, et al., 2009, p. 84).

The convergence of the human side of change and long standing systemic structures are significant and pose a formidable challenge to any sustainable improvement. A meaningful understanding of the differences in people; behavior; extrinsic and intrinsic motivation; and attracting people to the change are all facets organizational improvement (Langley, et. al, 2009). Given the psychological nature of change, the impact is highly personal. Langley, et al. (2009) posits “we tend to perceive the behavior of others through our own filter” (p.84). As we examine this problem of practice, understanding the motivations of all stakeholders in relation to this work will illuminate behavior that supports as well as resists change. Since we tend to perceive the behavior of others through our own filter, caution is needed to ensure that behavior (and our interpretation of it) is used as a lever to the improvement process. Given a clearer perspective of variation and change, leadership structures become the next area of discussion.

Leading individually and systemically. Leadership structures within the teaching profession help to explain conditions that lead to variability and create disincentives for professional growth. Within the ranks of the teaching profession there are not clear stratifications of leaders. Generally, making a step to leadership generally means either moving into an administrative position, or becoming a leader within the context of teachers unions. One facet of human capital management to be explored, through systematic and intentional inquiry, is conceptualizing leadership and differentiating professional development to meet the needs of those teachers who are certainly leaders within schools and provide recognition for those efforts. One narrative within the world of teaching very much supports the tremendous divide between

teachers and administrators. Teachers often describe their former classroom colleagues who move to administration as abandoning the profession. Administrators are accused of forgetting demands of the classroom and becoming distant to the needs of teachers and students. Absent strong leadership to bridge the perceived divide, schools and students suffer when teachers and leaders do not share a common focus on student achievement.

This work provides opportunity for leadership within the Rockland Area School District to be redefined. Recognizing that all educators are not interested in moving to formal leadership positions within either teacher unions or administration does not eliminate the leadership potential they possess with and among colleagues. Creating opportunities for teachers to take or extend leadership roles within the areas of selection, placement of teachers and professional development planning broadens the investment and increases the accountability. Within the Rockland Area School District there are examples of teacher leadership, however it is not represented in all areas.

Evidence of this limited leadership opportunities within school districts is clear to both internal and external participants. Dr. Jerry Weast, former Superintendent of Schools in Montgomery County, Maryland, credits the gains made within that system as a result of moving toward a Level IV organization (Weast, 2009). “We started to blur the lines of leadership and see that leaders can come from all areas of our school system. We started to blur the lines of authority, and put authority and responsibility together” (Weast, 2009, Section 1).

The problem of practice not only affects the school systems, but it crosses the boundaries of community and academy in profound ways. Welch (2000) examines the importance of community in decision-making. Within the context of this work, the school, academy and community partnership is collectively defined as the academy (trainers of teachers and leaders);

schools (employers of teachers and leaders) and community (consumers of teachers and teaching). Within many districts, these systems exist and operate both in parallel and tandem depending on the situation. While the current climate is to operate as three parallel systems, Darling-Hammond (2010) found that when these components work in tandem (as a community) the result is well-trained teachers who impact student achievement, benefit communities and keep the academy current with the realities of the classroom.

A counter-narrative from academe in regard to the problem of practice is offered by Schank. Schank (2011) paints a scathing narrative of the structure of higher education and the negative effects that it has on teaching and learning in the k-12 system. While the discourse is based on his narrative of learning and journey as both a student and teacher, it offers another explanation of learning in the human mind and whether the results that we are getting within the current framework of public education are not surprising given the contemporary teaching methodology. Schank's (2011) proposal to teach not via subject, but rather cognitive processes, offers an avenue to meet the needs of students based on real world applications and his/her genuine area of interest.

As staff development occurs within higher education, consideration for training that would address the tools needed to survive and thrive in a public school is relevant. Professional development for members of the academy connecting them to the daily operations and conditions of classrooms, school buildings and school districts may assist in aligning teacher preparation programs to increase the likelihood for success in the classroom. Conversely, K-12 educational leaders would benefit from revisiting traditional and non-traditional preparatory programs to observe the rigor, structure and the certification requirements governing the academy. The work of other disciplines impacts leadership efforts of individuals and systems.

The final section in Part II provides a look into the influences of other disciplines in relation to the problem of practice.

Multidisciplinary influences and implications: The role of the academy in teacher preparation is not solely academic. From an economic standpoint, colleges and universities are flooding the market with teachers. In the Commonwealth of Pennsylvania alone, 95 colleges and universities have teacher preparation programs. Biggs and Ulwine (2011) purport that “teacher colleges regularly graduate thousands more students than can possibly find teaching jobs” (Section #1). Basic tenets of supply and demand exist where the supply of teachers supersedes the demand and subsequently drives down the teacher salaries. This is evidenced every time rural or small school districts advertise for an elementary teaching position and over 200 applications are received. The selection criterion in Finland indicates that the top 10% of graduates are recruited to earn master’s degrees in education. Consideration by the academy to increase the rigor of selection criteria into undergraduate teaching programs may result in a better trained group of aspiring teachers that would lead to a more competitive marketplace. A competitive marketplace might prove financially counterproductive to the academy. This intersection of the politics and economics of teaching and learning creates what Bell (2004) refers to as an interest convergence. Although players may come to this interest convergence from diametrically opposed positions all have something to gain, and that creates a common point for discourse.

The role of community in placing and training teachers is important yet oftentimes underutilized. Large schools systems, such as Montgomery County, Maryland, under the leadership of Dr. Jerry Weast, understood the importance of examining systemic issues and involving the community in decision-making regarding education, student achievement and

teacher/leader development and retention. During his tenure, Dr. Weast defined community both internal and external to the district (Weast, 2009). The range of wealth within Montgomery County is significant and when the percentage students considered economically disadvantaged increased and threatened the privilege of the highest income earners, the investment to improve education for all students became relevant (Weast, 2009). Weast (2009) contends that recognizing “there is more to equity than equality” and some students required more supports than others, the conversation shifted to shared leadership, authority and responsibility (Section #1). Within Dr. Weast’s tenure at the Montgomery County school system and the changes that occurred, critical elements of success also included slowing down reactivity and setting goals that were clear and compelling.

The problem of practice is relevant in relation to community data and growth as there are concrete economic and social benefits to communities with high achieving/performing school systems. In the converse, the negative impact of school closure on the community is evidenced in the ProDEL cohort work with the Hazelwood project. The public hearing proceedings regarding the closure of schools illustrates a complicated and emotional web. While the official public comment is permitted, it is oftentimes the discussions following the hearing that complete the narrative. What ignites the community to become involved in the education of our children? Does the lack of social capital (real or perceived) within groups of parents influence their ability to provide input? When districts consider a full redistricting plan in conjunction with the school closure, is the response from the community different? Whose interests are served when schools are closed?

Cookson (2010) maintains that increasing high school graduation rates can positively impact the economy in general and decrease spending in relation to crime related costs, health

care and welfare assistance. School districts are preparing the future workforce, many of which remain in the communities in which they were educated. Interestingly, Chambers of Commerce reports often state the essential skills they would identify for graduates are not always taught within public school curricula. School systems that can quantify high levels of student achievement; solid extracurricular activities; and esthetically pleasing buildings and grounds can translate into higher property values and a strong tax base from the perspective of real estate developers and agents. Generally speaking, school systems with a stronger tax base can offer higher compensation packages for employees and therefore, theoretically attract experienced teachers from competitive programs. The economic component of tenure generates much discussion among school boards as conferring tenure is a \$3 million dollar decision (Curtis & Wurtzel, 2010). It might be argued that having more money within a school system should lead to better professional development opportunities.

The Chambers of Commerce regularly partner with schools via committees focusing on early childhood education initiatives as well as developing students to enter the local workforce. Leaders within these organization look to schools to not only dialogue, but to be receptive to ideas that business can bring to education. That dialogue is sometimes perceived as critical versus constructive when systemic issues that impede progress are mentioned. The business community is cognizant of the skill set needed in today's workforce and has a vested interest in the schools' ability to deliver that product.

Finally, school districts and the programs they provide establish an identity for the community and the residents as is evidenced by the viewpoint of those who reside within and outside of the district. Those traditions are so engrained that when discussions of consolidation are raised, even if economically sound, the opposition is vehement. For better or worse, school

districts are quintessential to the identity of the communities in which they exist. Darling-Hammond (2010) indicates most teachers entering teacher training programs desire to work in suburban school districts and often want to return to the districts in which they were educated. Recruiting teachers to work in urban or very rural school districts is more challenging. Pride surrounding the history and traditions of small town school districts set a baseline for decision-making in relation to selection, hiring and placement of teachers. Many alumni seek employment after finishing teacher training programs.

With the advent of No Child Left Behind (2001) (NCLB) and the availability of data regarding the performance of schools, parents and community members have increasing levels of access to information regarding public and charter schools within the community. The recent passage of the Elementary and Secondary Education Act Flexibility waiver for Pennsylvania spawned the School Performance Profile (SPP) affording consumers additional information about schools, issues a score, and allows comparisons both inter and intra district. Organizations such as Communities for Teaching Excellence and Parent Revolution are mobilizing and educating parents to increase levels of advocacy and dialogue with schools (ESEA, 2013). These parent-driven organizations are making an impact as evidenced in California with the Parent Revolution organization enacting change at the legislative level with the inception of the Parent Trigger law empowering parents to take control of the failing school in their community. The California Superior Court recently upheld this law and the parents' right to enact it. The legal precedent set and the subsequent actions will be closely monitored throughout the country. Although this movement is California-based, it is quickly moving to other major urban areas and has captured the attention and backing of those with financial capital such as The Gates Foundation, The Broad Foundation and The Walton Foundation. Clearly, the mission and

message is being articulated in such a way that not only have they garnered followers to the cause (predominantly parents who want a good education for their kids) but those with the financial capital to make things happen.

It is in the context of exploring the perspectives across the boundaries of school, academy and the community where *responsible action* (Welch, 2000) is best defined in terms of this work. “Responsible action does not mean the certain achievement of desired ends, but the creation of a matrix in which further actions are possible” (p. 47). With the education of children, all members of the partnership are responsible to one another for our actions and inaction. It is time in this work to pause and create the space where further discussion is possible. Perhaps it is here where our most challenging and rewarding work will occur. Creating the space begins with engaging in courageous and difficult conversations. The education community will enter this discussion at a distinct disadvantage. We have failed to train those at all levels of education to critically examine our practice and “turn ourselves inside out, giving up our own sense of who we are, and being willing to see ourselves in the unflattering light of another’s angry gaze” (Delpit, 1995, p. 46).

Investment in the problem of practice is likely to yield educational improvement as defined by the Carnegie Foundation. *The Triple Aims of Improvement*: engaging environments for student participation; effectiveness overall in advancing student learning, and increased efficiency in using educational resources will be used to develop, implement and measure the designs for learning and action as well as the generative impacts created through this work (ProDEL, 2012, p. 8). The work of the Carnegie Foundation has engaged educators, leaders, policy makers, researchers and entrepreneurs and additional information gleaned from this professional agenda will add to that knowledge base.

Darling-Hammond (2006, 2010) highlights school systems in Connecticut and North Carolina where purposeful efforts between higher education and school districts in relation to teacher recruitment, training and placement have resulted in more prepared teachers entering classrooms, additional support and mentoring for novice teachers and lower rates of teacher turnover. The system structure, support networks and dialogue between schools, community and the academy resulted in opportunities for success for teachers as well as the increased likelihood of greater student achievement. Building capacity in these areas within the context of rural public schools will support the work of the problem of practice.

Variability in performance is not a situation unique to education. The issue of variability in performance has been addressed in other professions with some degree of success. Gawande (2010) in his work *The Checklist Manifesto* examines how variability within other disciplines, particularly medicine, results in complications and unnecessary patient deaths. His premise about how activities as simple as hand-washing are known to greatly reduce the spread of infection, yet countless numbers of medical professionals fail to engage in this simple behavior prior to having contact with patients. Examining human behavior, motivation, and methods to ensure this practice revealed many assumptions about how to reduce variability in performance and outcomes. Not surprisingly, the actions of the participants were not willful neglect. Systems created fertile ground to support certain behaviors and prohibit others. “Every day there is more and more to manage and get right and learn. And defeat under conditions of complexity occurs far more often despite great effort than from a lack of it” (p. 12).

Gawande (2012) also examined quality control and innovation via a national restaurant chain to determine if the efficiency with which they were able to deliver the product could be mapped to medical care. An interesting behind the scenes look at the process and candid

discussion with the manager revealed similarities between restaurants attempting to deliver a range of food (medicine delivering a range of service) at a reasonable cost with a consistent level of quality. The combination of clear objectives and instructions with tacit knowledge (knowledge not reduced to instruction) produced outcomes that were both cost effective and consumer accepted. Additionally, the manager shared, “I’d study what the best people are doing, figure out how to standardize it, and then bring it to everyone to execute” (p.8).

How is the aforementioned connected to this problem of practice? Many disciplines struggle with the same issues faced by education. Regulation, funding, and outcomes impact the people whom they serve. Variability in all of these disciplines effect the bottom line however it is defined. By looking to the work of Gawande (2010, 2012), and making applications to education, improvement is possible.

Failures of ignorance we can forgive. If the knowledge of the best thing to do in a given situation does not exist, we are happy to have people simply make their best effort. But if the knowledge exists and is not applied correctly, it is difficult not to be infuriated.

(Gawande, 2010, p.11)

Perspectives from different disciplines aid in identifying additional narratives and information surrounding the problem. From an educational review of data within this very doctoral cohort, 36% of the students identified “an excellent and dedicated teacher” as the most relevant right based on his/her reading of *The Sacred Trust* by Cookson (2011) (R. Hopson, personal communication, October 5, 2011). The term lifelong learner is often used to describe teachers and expectations for their development throughout the course of their career. As the notion is well-intended, it lacks support via professional development as districts fall short in the

development of relevant programming to support teacher learning. Pennsylvania requires induction programs for new teachers, principals and superintendents. *No Child Left Behind* (NCLB, 2001) verbiage requires teachers to be highly qualified and speaks to certain levels of training to obtain that distinction. A dissonance exists between that policy imperative and recent action by the legislature of Pennsylvania and the Department of Education that imposed a moratorium on the Act 48 professional development requirement.

The business community readily suggests strategies that education can use to improve performance. From the lens of business, the applications of certain management theories and whether teachers are motivated by rewards and sanctions attached to performance measures is relevant to the contemporary discussion. Critics of merit pay for teachers (primarily teacher unions themselves) are convinced merit pay cannot be successfully and equitably applied to teaching. Is this line of reasoning simply perpetuating a drive to mediocrity? Team building and workplace culture are important in all disciplines and create a level of investment in the organization. Some leadership frameworks may drive people with a competitive and creative spirit away from teaching. Hess (2013) takes an unorthodox look at educational leadership in his book entitled *Cage-Busting Leadership*. Hess contends that as the stakes for education reform are exponentially increasing, the need for leaders to confront and bust the roadblocks is more important than ever. He states "...instructional leadership, strong cultures, stakeholder buy-in, and professional practice are all good things. The mistake is to imagine that leaders can foster these things successfully or sustainably without addressing the obstacles posed by regulations, rules and routines" (p. xi).

A report authored by Weisberg, et al., (2009) entitled *The Widget Effect-Our National Failure to Acknowledge and Act on Differences in Teacher Effectiveness* explores the politically

charged topic of teacher evaluation systems, the underpinnings of how we engage teachers in the process of evaluation, and how we can continue to show strikingly high percentages of teachers being rated as satisfactory while there are large numbers of schools who are considered failing. The argument made by Weisberg, et al., (2009) is that schools fail to assess performance accurately, fail to act meaningfully on the information gleaned by the assessments, and succumb to the “widget effect, which describes the tendency of school districts to assume classroom effectiveness is the same from teacher to teacher” (p. 4). Within the scope of this report, comments from teachers in several school districts, representing five states, indicate they are aware of underperforming teachers within their own systems, are frustrated by the lack of administrative work to improve or remove them and feel a sense of frustration that high performing teachers are not being recognized, compensated and retained. While high achieving and committed teachers may not readily connect with some component of business leadership theory, they are aware of being compensated the same as underperforming teachers. Because that narrative is counter to the tenets of collective bargaining agreements, there is a risk associated with teachers who verbalize disdain for underperforming teachers and merit pay.

The work of superintendents who participated in the Aspen Institute’s Urban Superintendents Network was used to look at human capital management and the critical piece of the equation it is in terms of school leadership and management. Curtis and Wurtzel (2010) note four major elements necessary to explore: pathways to teaching; induction and tenure; leadership opportunities and performance management; and compensation/rewards in terms of proactively placing the most effective teachers with our students. These ideas are contrary to established frameworks for managing teachers yet provide a lens through which to view this most important task. The work of this group coincides with the concepts covered in the New

Teacher Project report illustrating that little training is given to administrators on how to properly use the evaluation instruments, and subsequently how to effectively use the information gleaned to improve teacher performance and student learning. If, in fact, the work of the building level administrator is critical in making the evaluation decisions, where is the investment in training principals to use this information for the benefit of students and not the comfort of teachers who have become accustomed to being told their teaching is good or great? When novice teachers are given high ratings at the beginning of their teaching career, it sets the stage for low expectations of teacher performance and inhibits the ability to look at one's practice critically.

From a lens of history and political science, the historical underpinnings of public education speak to a system that is vastly different from present educational concerns. Ladson-Billings (1999) speaks to the way current educators refer to a romanticized version of Public School Way Back When (PSWBW) as a time when there were no problems in schools. Additionally, Ladson-Billings (1999) concludes that the structure of teacher training continues to be from a White, middle-class perspective and the inequities continue to be perpetuated. Since education is not mentioned in the United States Constitution and is a matter of state governance, the genesis of Federal Government involvement with the operation of schools, creating mandates and funding streams has changed the landscape. If local control is the charge, by definition, the education system will be inherently different based on the perceived needs, values and culture of the community.

The lens of psychology and counseling, afford a valuable perspective to this problem of practice. Teachers often self-describe as people who like routines, avoid risk taking and are change-averse. Researchers have conducted studies to examine traits that would constitute an effective teacher. Teachers' and leaders' personality traits within the Myers-Briggs Type

Indicator (1985) describe a skill set that may or may not support set the leadership necessary to make the substantive changes needed within the educational system. Those entering the field of education inherently may not possess innate leadership skills. Consideration of hiring leaders for education external to the current pool of educators might be relevant. For leaders, knowing how your faculty and staff view their environment, work best, and respond to change is important when designing and implementing improvement efforts. Some contend that the system of education is largely occupied with people who are not inherent leaders and are change-averse. Moving toward disrupting familiar and comfortable narratives will be difficult. Based on the cultural shifts occurring within our population of students, consideration for the personality strengths and cultural competence of teachers has gained a level of increasing importance. What personality types do we need leading the charge for reform? If personality types generally remain constant, is promoting teachers to the ranks of leadership placing people who are not leaders by nature into the wrong positions? Perhaps this is a role for professional development.

As the designs for learning and action are created and generative impacts are projected for this professional agenda, understanding, examining and incorporating lessons from a multidisciplinary perspective will help to prevent a repetition of the current structures of education. With a greater understanding of the problem of practice, the discourse moves to include social justice and theoretical frameworks which explicate the moral imperative for the work.

Part III: A Matter of Social Justice

“Injustice anywhere is a threat to justice everywhere”~Martin Luther King, Jr.

Part III situates the problem further as a matter of social justice. This part begins with explaining why social justice is a component of the work. Opportunity theory is then considered as a social justice frame for the discourse. Culture, context and poverty converge as factors impacting students and access to excellent teachers. The social constructivism section examines the importance of stimulating learning environments and disadvantages that are created for students who lack access to those learning environments. Part III concludes with the impact of power and the problem of practice.

Why Social Justice?

A guiding component of the work within the Professional Doctorate in Educational Leadership at Duquesne is “to transform the practice of educational leadership to improve schools and to do so as a matter of social justice” (ProDEL, 2012). In an effort to pursue that mission, a social justice framework is used to understand the problem of practice, to design learning and actions to address the problem, and to measure how generative the attempts to address the problem might be. Theoretical frameworks presented in this section reflect how the problem has been situated above and will prepare the reader for engaging the agenda for action and the impacts of that agenda to follow.

Social theories and epistemological frameworks are vehicles to explain the problem. In considering both the broad scope of this problem of practice, along with the context in which the problem will be examined, social theories addressing opportunity, poverty (both social and biological impacts) and social constructivism will be discussed. Although each theory and framework stands independently, collectively they scaffold the resulting inequitable learning

opportunities for students. While all children have access to education, not all are granted the same opportunity.

Opportunity and Education a Paradox in Terms

The discourse surrounding opportunity in education garners various responses. The myth that opportunity exists for all students and families has clouded the ability of educational leaders, policy makers and community members to examine root causes to disparities in student achievement and provided a false sense of comfort that everything is being done to ensure opportunities for all students. Fiercely protecting this myth permits continued analysis of data that consistently shows achievement gaps between minority and white students result from deficits in a student's culture, genetics, effort or ability. The burden of responsibility shifts from the system to the individual. "And for Americans of all backgrounds, the allocation of opportunity in a society that is becoming ever more dependent on knowledge and education is a source of great anxiety and concern" (Darling-Hammond, 1998, p. 28) charges us to view the problem of practice in a light of equity, particularly for minority and poor students and families who lack the social and cultural capital to ensure they are receiving quality instruction.

Darling-Hammond (1998) posits "the assumptions that undergird this debate miss an important reality: educational outcomes for minority children are much more a function of their unequal access to key educational resources, including skilled teachers and quality curriculum, than they are a function of race" (Darling-Hammond, 1998, p. 29). The United States educational system retains the unflattering distinction of the most unequal in the industrialized world, "where students routinely receive dramatically different learning opportunities based on their social status" (Darling- Hammond, 1998, p. 29).

The historical context of opportunity theory is recent and relevant. School segregation in the United States occurred within the last 50 years at both public schools as well as institutions of higher education. Many contend de facto segregation continues as most urban schools are attended by two-thirds of minority students and these schools are substantially underfunded compared to their suburban counterparts (Darling-Hammond, 1998). Using metrics ranging from funding to qualified teachers and curriculum offerings and resources, schools that service larger numbers of minority students have substantially less resources than schools who educate a majority of white students. Conversations about “good schools” rarely include urban districts or those in very rural locations. “Most good schools have secured their advantages by excluding—by economics, neighborhood, achievement scores, or racial codes—those who represent the other half (or more) of children” (Darling-Hammond, 1996, p. 6). Even when minority students are able to access quality school systems, the likelihood of being “tracked” into lower level classes with less challenging curricula is significant. Although the system structure excludes certain students and families from access to schools with the best resources, the responsibility to educate and support the students who lack the opportunity and access is not relinquished. This stratification has established a self-fulfilling prophecy whereby students and parents believe they are unworthy of a quality education and educational leaders believe they are powerless to impact system improvement or improve the deficits of the students and families.

Opportunity theory is supported via economics in relation to the funding of public education. Skolnik and Curry (2011) highlight per student funding disparities between students in the New York public schools and their suburban counterparts in Scarsdale, NY. Funding directly impacts the amount of money spent on professional development; wages for teachers and resources available to children. Does the amount of money spent per pupil really improve

academic performance and create better opportunities for students? Legislators within the Commonwealth of Pennsylvania, as well as critics of public education, would contend the increase in the amount of money spent on public education in the last 20 years has not resulted in improved student achievement.

Recent research illustrates that money makes a difference in the quality of education, especially as it is used to pay for more expert teachers, whose levels of preparation and skill prove to be the single most important determinant of student achievement. (Darling-Hammond, 1996, p. 6)

Darling-Hammond (2011) cites court cases at the state level that occurred in the early 1970's challenging the constitutionality of funding of public education. The 1973 case *Robinson v. Cahill* challenged New Jersey's school financing as creating unequal opportunities for students. Similar cases were argued at the state court level in California, Connecticut and West Virginia. However, the challenge at the federal level through the 1973 *San Antonio Independent School District v. Rodriguez* case rejected the argument that "education constituted a fundamental right under the federal Constitution" therefore no additional challenges to unequal funding could be made at the federal level.

Opportunity theory, economics and geography intersect in the plane of teacher salaries and where, geographically, teachers practice their craft. Darling-Hammond (2000) suggests an established tendency exists for teachers to teach in the areas in which they were raised and educated. Boyd, Lankford, Loeb, and Wyckoff (2003) posit "The importance of distance in teachers' preferences particularly challenges urban districts, which are net importers of teachers" (p. 12). While some who enter the profession hail from urban areas do return to the cities to

teach, the number of teachers needed eclipses the pool of candidates. Although teaching professionals could be described as altruistically motivated to the vocation, compensation continues to be an important factor. Historically, teacher pay has been lower than that of other professions and from 1990 through 1999 “declined relative to other professional salaries” (Darling-Hammond, 2000a, p.19). Along with financial compensation, teachers consider work conditions, characteristics of students and mentoring/professional development programming as factors that influence job selection. Those non-monetary considerations eliminate urban and very rural districts from consideration by highly qualified teachers who have the choice of venues.

The final illustration of opportunity theory for consideration in relation to the problem of practice is access to quality teachers and challenging, culturally relevant curriculum. The pedagogy and content delivered to students is significantly linked to opportunity. “Surprisingly in the United States of America, children who are required by law to attend school are not guaranteed the right to a knowledgeable teacher” (Darling-Hammond, 1996, p. 6). In 1993, the National Commission on Teaching and America’s Future noted 25% of those hired each year are considered underprepared teachers (Hunt & Carroll, 2003). Teachers with limited or underdeveloped pedagogy skills and content knowledge are less able to effectively create learning opportunities for students that promote high engagement and achievement. The perceived need of students from minority or disadvantaged populations is pedagogy and content focused on rote memory, highly structured classroom environments and content considered less rigorous than given to White students. Darling-Hammond (1996) contends the narrowing of this opportunity gap rests on “the advancement of teaching” (p. 7). Teachers will need to be taught a new way of teaching that is counter to established practices heretofore and acknowledges several

factors including the diverse ways that students learn, where they enter the learning process, and culturally relevant content (Darling-Hammond, 1996). Initiatives of this nature are not single-handedly accomplished. It requires intersections of schools, community and the academy.

As opportunity theory is explored in the context of rural school districts, initial responses by some stakeholders may be to question its applicability and relevance. From a salary and benefits standpoint, teachers are competitively compensated. The lack of racial diversity and the geographic location may present the perception that the district is absent groups considered marginalized or with less access to opportunity. Given that context matters, the next section takes a deliberate look at how culture and poverty establish context.

Culture, Context and Poverty

Within the discourse of education at the community, school and academy levels, poverty remains the insurmountable barrier to student achievement. Ladson-Billings (2006) references Michael Harrington's phrase *culture of poverty* "is used to describe what they [teachers] see as a pathology of poor students and hide behind poverty as an excuse for why they cannot be successful with some students" (p. 104). Hernstein and Murry (2010) define *culture of poverty* as being attributed to genetic differences in intelligence or deficient child rearing. If we can point to lack of experience or exposure to activities or customs of the dominant culture or child-rearing practices that are counter to the experiences of the predominantly white middle-class teachers, then the responsibility for students failure to achieve can be squarely placed on them absolving the teachers and system of responsibility for responding to the needs of the students. Ladson-Billings (2006) argues that with the structure of teacher preparation courses so closely connected to psychology, aspiring and practicing teachers link all behavior and actions to culture. Additionally, Ladson-Billings' (2006) counter narrative, the *poverty of culture*, suggests

the deeply-seated individual centered nature of the United States and “the supreme reliance on individuals” means that we look at students as individually responsible for their success in school (p. 106). Lack of understanding surrounding the complex interactions of individuals, families, communities, schools and society and the outcomes that result in poor experiences for students often leave educators and educational leaders placing blame squarely on students and families. For me, refocusing the discourse from individuals to systems-thinking is critical to the professional agenda and the contemporary problem of practice.

In her work with pre-service teachers, Ladson-Billings (2006) discovered that behavior, or differences (race, gender) in students that were counter from that of the teacher were often categorized under a broad heading of culture. The author proposed that culture defined behavior became a proxy term for race and was the de facto excuse for why teachers were unable to connect with students. Interestingly, while teachers were quick to use culture to explain students, they failed to view themselves through a lens of culture (Ladson-Billings, 2006). Additionally, while attempting to engage parents, cultural expectations of behavior are filtered through the lens of the teacher and often results in conclusions that parents are unwilling to become involved with the school.

Ladson-Billing (2006) offers several suggestions to build this capacity in teacher preparation programs. The two most pivotal to this scholarly work include allowing teachers opportunities to interact with students in non-school venues where they are experiencing success and to become observers of culture in relation to the communities where they teach; in relation to themselves; and finally viewing themselves as cultural beings. When educators fail to view themselves through a lens of culture and benchmark their understanding against those of the non-dominant culture, rich opportunities for learning and engagement are missed.

Whether referenced as *culture of poverty* or *poverty of culture*, the connection to Opportunity Theory and the social justice frame for this work is established (Ladson-Billings, 2006). By virtue of economic condition/definition, social or cultural capital, a growing number of students and families lack the opportunity to access a quality education. In concert with that schism remains the dominant narrative that due to certain “cultural factors” some children will be less successful within the educational system. As this work unfolds within the context of rural school districts, the challenges presented are two-fold. Initially, since the racial composition of most rural Pennsylvania districts is predominantly Caucasian, cultural differences may be dismissed as race is the metric by which culture is most readily defined. Next, structuring opportunities for teachers and educational leaders to engage students and families in non-school settings will likely disrupt the schema of traditional parent involvement.

Until recently, the effects of poverty on learning and student achievement focused solely on the lack of money and experiences afforded to children. The financial and intellectual privilege of middle class and wealthy families were evidenced through increased opportunities for quality early childcare/pre-school experiences, access to travel and enriching activities. Children exposed to these conditions fared better upon entering school and, generally, throughout his/her school experience. Conversely, children who lacked the opportunity to engage these experiences were at a deficit (in comparison to their same-aged peers) upon entering school. Tough (2011) states “in the nineteen-sixties, federal policy-makers were influenced by scientific research that established direct connections between childhood disadvantage and diminished educational outcomes” (p. 5). Results of this research and subsequent policy were programs such as Head Start and Title I, which remain active currently.

Tough (2011) also highlights the work of Anda & Felitti whose Adverse Childhood Experiences (ACE score) is being used to establish linkages between traumatic experiences during childhood and long-lasting health related issues that bridge into adult life. (2011, p. 3). The questionnaire asks patients to self-report on “adverse childhood experiences such as parental divorce, physical abuse, emotional neglect, and sexual abuse, as well as growing up with family members who suffered from mental illness, alcoholism, or drug problems” (p. 3). From those responses, a score was generated. The author’s visit to the clinical practice of Dr. Nadine Burke, at the Bayview Child Health Center near San Francisco, revealed a practitioner exploring the physical effects of anxiety. The advent of the Adverse Childhood Experiences score worked in concert with Dr. Burke’s interest in “evolving sciences of stress physiology and neuroendocrinology” (Tough, 2011, p. 2) and allowed her to use these scores with her young patients “to demonstrate a strong correlation between Adverse Childhood Experiences scores and problems in school” (Tough, 2011, p. 6). If the biological and physiological impact of childhood trauma and stress could be mitigated for students in poverty, the hope would be for a greater level of success within the school system.

One biological indicator examined along with the score is the impact on executive functioning. The ability to plan, organize, curb behavior and integrate experiences are mental skills associated with executive functioning. Tough (2013) offers, “children who grow up in stressful environments generally find it harder to concentrate, rebound from disappointment and harder to follow directions” (p. 17). Within a classroom setting, the aforementioned descriptors are often reported by teachers when children are experiencing difficulties academically, socially or behaviorally. When students come from economically disadvantaged situations, conclusions are drawn that the behavior is a result of poor parenting or the lack of interest on the part of the

parent. Conversely, those same reasons are not always offered when students come from middle to upper class families. Factors external to the parental involvement are thought to be the primary precipitator. Tough (2011) mentions that the work Adverse Childhood Experiences research is not limited to the Bayview Health Clinic. Researchers and physicians, including those at Harvard, have utilized this information for other projects exploring the effects of poverty on childhood development and health issues. “Among scientists who study children in poverty, executive function is attractive as improving executive function seems like a promising vehicle for narrowing the achievement gap between poor and middle class children” (Tough, 2013, p. 18).

Two potentially important outcomes from this work deserve consideration, and are being led by those with influence. Tough (2011) shares the work of Shonkoff, a professor of pediatrics at Harvard Medical School, is advancing these efforts and offers valuable insight. First, in linking research to policy and understanding “it’s not like we need a strategy for learning and a strategy for health and a strategy for character. The beauty of the science is that it’s showing us how all of these have common roots” (p. 31). Second, physicians, like Dr. Burke, along with social workers and psychologists are engaging in multidisciplinary rounds and approaching the delivery of primary medical care in a manner more aligned with the how specialty physicians practice. Using the Adverse Childhood Experiences scores early in the diagnosis and treatment process will ideally lead to more systemic interventions with longer lasting impact. Perhaps the most far-reaching result of this work revealed that poverty itself that was not compromising executive function of poor kids, but the accompanying stresses (Tough, 2011). In progressing with this important work, interventionists from all disciplines can recognize that it is not poverty

alone that is the impacting event. As educators, recalibrating our approaches to teaching economically disadvantaged students is warranted.

Protective factors are pivotal to the ability of children to demonstrate resiliency and successfully eclipse events that cause disruption and turmoil in their life. With newly discovered connections between Adverse Childhood Experiences scores, potential health risks and compromised school performance, locating effective interventions is imperative. Tough (2013) restates what has been widely researched and demonstrated. Parents and other caregivers who are able to form close nurturing relationships with children can foster resilience in them that protects them from effects of harsh environments. “High quality mothering, in other words, can act as a powerful buffer against the damage that adversity inflicts on a child’s stress-response system” (Tough, 2013, p. 32). A Minnesota study conducted by Sroufe and England followed 267 mothers and children and reported those children who were securely attached in infancy were categorized by teachers as effective in terms of behavior (Tough, 2013). Interventions with families would include therapy designed to build or repair the parent-child relationships. In the educational context, developing positive and nurturing relationships with students can assist in building that capacity. Within the context, how learners (both adults and children) make meaning becomes increasingly important. The next section acknowledges social constructivism as a supporting component to Opportunity theory.

Social Constructivism and Making Meaning

The final theory presented to support Opportunity Theory as framing the problem of practice is social constructivism. Constructivism’s premise “holds that meaningful learning occurs when people actively try to make sense of the world—when they construct an interpretation of how and why things are—by filtering new ideas and experiences through

existing knowledge structures” (Snowman & McCown, 2012, p. 211). How each learner constructs meaning in a learning situation varies given what experiences, frames and filters they possess. Regardless of the mode of constructivist learning model being employed, four overarching tenets are present. They include: prior knowledge, multiple perspectives, self-regulation and authentic learning (Snowman & McCown, 2012). Of those listed, economically disadvantaged students oftentimes enter the learning environment with a limited depth and breadth of prior knowledge than peers from a higher socio-economic standing. Additionally, limited exposure to social and cultural experiences impact multiple perspectives often held by those of more robust financial means.

For the purposes of this scholarly work, social constructivism has a particular relevance. As leveraging the psychological tools of one’s culture in learning situations results in meaningful learning, students who lack opportunity and access to stimulating learning environments and teachers who are strong in content knowledge and pedagogy are at a distinct disadvantage. When classroom or learning environments are governed by more direct instruction and rote learning with less student centered activities, the social construction of learning is limited. Additionally, minority students are constructing meaning from a different lens which might not be contextually understood by the teacher or peers. Parents of economically disadvantaged students often faced similar learning environments and, as such, lack the experience needed to navigate the education system and are unable to advocate for more intellectually robust opportunities for their children.

Social theories and epistemological frameworks are not the common vernacular used in faculty rooms and professional development settings in public schools. Yet, theories such as Opportunity Theory, along with many others, unfold daily in the workings of classrooms and

school districts nationwide. Educators can describe the real-world application of these theories. As a scholar practitioner, consciously examining these theories in relation to the district, students and community will drive the designs for learning and action, and generative impacts. With an understanding of the theoretical connections, the discussion transitions to how institutional networks of power impact the problem of practice.

Spheres of Power, Influence, Social and Cultural Capital

Institutional networks of power in relation to my problem of practice include the academy, state licensing boards, school boards of directors, teachers unions, State and Federal governments. Each institution is composed of a hierarchical system. Each system asserts economic, political and social power differently with the balance of power fluid given the issue. The perception of those in power and leveraging power varies based on the individual's relational position to the institution or system. While the publically stated focus of these networks of power is often centered on children, outcomes usually fall short. Students leverage no power.

Certain structures within the academy are powerful based on the teacher training programs that are offered and the level of acclaim achieved. Colleges and universities invest considerable time and resources to distinguish themselves as the best choice for prospective students. Darling-Hammond (2006) highlights issues inherent to the structure of the academy that creates barriers to high quality teacher training programs. Darling-Hammond (2006) contends that dissatisfaction within the state of public education is mirrored within the teacher training programs at the university level as well. Within the university system, funding for teacher training programs are often the lowest and, subsequently, the salaries of teacher educators are less than others within the system. That poses an interesting parallel to how public

school teachers are compensated. Darling-Hammond (2006) also concludes that professors within departments of education see themselves as content specialists versus teacher-educators which create a barrier to developing all-important networks of connections to pre-service teachers. With Colleges of Education viewed as the lowest ranking within the academy hierarchy, the degree to which they are able to recruit high quality candidates is brought into question. Conversely, they tend to be the academic revenue-generating centers of the university systems. An inherent ethical dilemma exists between the economics of revenue generating versus making entry to the program selective.

While professions such as medicine, engineering and law are not immune from the effects of politics, education is squarely in the crosshairs. State licensing boards are an institutional network of power that is prey to the changing tide of political sentiment. In other disciplines, non-governmental professional boards govern standards and practices. In education, the governance is state-based and subject to variability from frequently-changing administrations and political parties in power.

Perhaps the network of elected power most closely positioned to the school district is the board of school directors. In Pennsylvania the main functions of the school board of directors are policy creation, taxation and hiring. Local control being the charter for these elected officials results in variability throughout the Commonwealth in terms of taxation, resources and the implementation of policy. This sets a foundation for teacher salaries, hiring and training of teachers. Social capital influences the composition of school boards and raises questions about the equitable structure of representation of the community. Individual districts determine whether school board members are elected by attendance boundaries or at large. There are no established prerequisites to act as a school board member. State organizations such as the Pennsylvania

School Boards Association offer trainings for newly elected members, although it is not mandatory.

Networks of power are seldom acknowledged as present within the structure of a classroom, however educators, parents and most importantly students are keenly aware of the dynamic. At the micro level, this power has become institutionalized and while children cannot define it in technical terms, they can tell you very succinctly how it plays out every day in their world. Delpit (1998) examined what she named as the *culture of power* and the “five complex rules of power that explicitly and implicitly influence the debate over meeting the educational needs of Black and poor students on all levels” (p. 280). More importantly, Delpit (1998) believes that teachers must specifically instruct all students on the rules of power, both explicit and implicit in order to move toward a more just society. The author notes the following as the five aspects of power outlined in the *culture of power* (p. 282):

- Issues of power are enacted in classrooms.
- There are codes or rules for participating in power; that is, there is a “culture of power.”
- The rules of the culture of power are a reflection of the rules of the culture of those who have power.
- If you are not already a participant in the culture of power, being told explicitly the rules of that culture makes acquiring power easier.
- Those with power are frequently least aware of—or least willing to acknowledge—its existence. Those with less power are often most aware of its existence.

Delpit (1998) posits that the first three have been generally addressed within the sociology of education with the final two receiving less attention. For the context of this work,

the most relevant three tenets of power are numbers two, three and five. These rules of the culture of power apply not only to classrooms, but arguably are evidenced within school buildings and districts. Delpit (1998) explicates the rules for participating in power are evidenced through linguistics, presentation of self and communication. Next, since the culture of schools is based on the culture of middle class, students who enter school from the middle and upper class fare better than those from non-middle class homes. It is important to consider that children who do not fare well socially in the school setting due to the middle class norms may be very successful in the cultural norms of their community. This is often undiscovered due to educators typically not engaging with students and families in community based settings. Finally, and perhaps most poignant for students and families, is the last premise where those in power don't know or aren't willing to acknowledge their power. Strikingly, those with the least power are acutely aware it is not afforded to them.

Within the context of school districts, school buildings and classrooms, the subtleties of power dynamics are recognized in some situations more than others. Accordingly, those power structures impact teachers, parents and students. Even as adults within the system, the ability to leverage power, or challenge the dominant power structure comes with a level of personal risk. The decision to engage those risks becomes very personal and pivotal. The realization of the risk-reward scenario from both a systems and individual level has become increasingly connected to how opportunities to learn about the problem of practice and subsequent generative impacts will be created and implemented. The culture of power imbedded within the institutional networks influencing teaching and learning warrants examination.

Teachers, particularly novices to the profession, are hesitant to challenge systems issues or methods of instruction. The fear appears two-fold. First, direct and indirect messages have historically been sent to new teachers advising “be seen and not heard” during the first year of teaching and therefore many are reluctant to add to the discussions or challenge the normative practices. Second, teachers often view themselves as impacted by the system and unable to shape or change the system. Accepting that premise legitimizes deferral of responsibility for the lack of success for certain groups of students and families. Perception of operating outside of the accepted system structure could result in a less than optimal teaching schedule or building placement.

Educational leaders intersect the networks of power in multiple planes. They possess a range of vision from the microsystems of power in their classrooms and buildings to the larger systemic power differentials. The educational leader is best positioned to recognize the culture of power; engage the dialogue impacting social justice; and create opportunities for generative change given he/she is the primary conduit between schools, community and the academy. That position poses both risk and reward. Have we prepared our educational leaders to enter situations and hold up a mirror to practices that reveal inequities? Are educational leaders equipped to use positional power and authority to advance the education of all students, and are they being held accountable? Most importantly, does a culture exist where revealing truths, other than the dominant narrative, is appreciated or admonished? “We must learn to be vulnerable enough to allow our world to turn upside down in order to allow the realities of others to edge themselves into our consciousness” (Delpit, 1988, p. 297).

Funding of public education inherently defines power differentials between affluent and marginalized communities. Upon examination of the institutional networks of power that frame the problem of practice, it is valuable to examine the timelines and structure with which state budgets are approved and the impact it produces on school districts, and most importantly, students. Levin and Quinn (2003) authored a report entitled : *Missed Opportunities: How We Keep High Quality Teachers Out of Urban Classrooms* where a key issue examined spotlights how hiring timelines result in the loss of the most qualified candidates for teaching positions in urban school districts. The report explicates that uncertainty regarding the budget delays the hiring process. Levin and Quinn (2003) add that forty-six states in the United States have fiscal years that end June 30th and oftentimes budget extensions are granted. Thus, school districts and boards of directors are projecting budget needs without solid numbers. With hiring decisions left to the summer months, many well-qualified candidates interested in teaching in urban settings accept positions in other districts to guarantee employment. Given the hiring structure within school systems so concentrated to a particular time of the year, it is critical to make hiring selections as early as possible to ensure school districts have the most competitive pool of applicants, particularly for positions difficult to fill. For stakeholders unfamiliar with the system, the connection between budget timelines and teacher effectiveness could easily be missed. Conversely, that connection is very clear to those within the governmental structure and because budget approvals continued to be delayed by government officials it appears systematically and systemically ignored.

Within the funding context alone, an inequitable structure exists between wealthy versus poor or rural communities. As such, wealthy communities are able to spend more per pupil on the education of the students. Skolnick & Currie (2011), discuss that even within the constructs

of the New York City Public Schools there are disparities in opportunities made available to students. Some public schools situated within the more affluent communities of the Upper East Side have more robust fundraising opportunities and can purchase additional enrichment opportunities or staff members. Speculation surrounded private monies were used to subsidize the compensation package of former City of Pittsburgh Schools Superintendent Mark Roosevelt. The recent exodus of City of Philadelphia Schools Superintendent, Dr. Arlene Ackerman, was also funded through non-disclosed private funding (Matheson, 2011). Private monies funding the compensation packages of the Chief Educational Officers of public schools creates an inequitable power structure and potential conflicting agendas for superintendents as well as elected school board officials.

Governing bodies such as the local school board and state legislature are entities of the state. Equitable representation of stakeholders in education becomes increasingly critical given the amount of power that certain governing bodies wield. Representation at the state level is based on population, and is subject to population shifts. Rural areas are particularly vulnerable and can result in underrepresentation for a population of residents who already lack social and human capital. Legislative decisions regarding teacher training is inherently based on the context of organizational power. The Governor appoints cabinet positions, including the Secretary of Education, whose agenda supports that of the majority party at the time.

Significant institutional networks of power within education are the unions that represent those employed within school systems. The strength of the teacher unions varies geographically within the United States. In any district, unions are generally the largest group of employees who retain the most bargaining power. Collective bargaining agreements have the potential to impede student achievement by virtue of language surrounding observation, supervision, training of

teachers and transfers within the school system. Understanding the limits and allowances can provide leverage for leaders.

Levin and Quinn (2003) and the work of The New Teacher Project address the lack of quality teachers in urban classrooms while examining the structure of collective bargaining agreements and the complex transfer and bidding scenarios that exist when vacancies occur within a district. Seniority is the prevailing force that governs these transfers. Timelines for when teachers are required to submit letters of retirement are late in the year and are sporadically enforced, which can create vacancies well into the summer. Additionally, the collective bargaining agreements generally preclude administrators from considering outside candidates, concurrently, for jobs within their building. This often translates into the buildings that are in most need, or most difficult to staff, having novice or under-qualified teachers filling the classrooms as the doors are opening for the first day of school.

The efforts for reform on a national level include engaging teacher unions to examine how the structure of collective bargaining agreements may be negatively impacting student achievement. Secretary of Education, Arne Duncan, appealed to the National Education Association as a partner in exploring how to support, encourage and compensate the best teachers as well as reconstruct the framework of collective bargaining agreements so that the intended purpose is honored and provisions that create barriers to student success are removed (U.S. Department of Education, 2009, July 2). The intent of collective bargaining agreements is to define employment expectations and parameters. The creation of these agreements is a negotiation process that involves both teachers and administrators. When these contracts are being developed, both parties have an opportunity to examine priorities and define the scope and impact. Teachers are often painted in a negative light when the discussion of contracts arises.

Administrators play an equal role in the creation of these documents and bear the responsibility of the outcomes.

Hess (2013) provides a counter-narrative to the complaints of administrators who blame collective bargaining agreements for management and personnel inefficiencies within the education system. Hess believes educational leaders fail to understand and leverage what decision-making capabilities exist within the contracts, and also argues that educational leaders are not trained in any type of business model framework that might support more assertive decision-making. One particular criticism levied by Hess (2013) is the failure of educational leaders to acknowledge what literal and metaphorical cages exist and how they can be busted. While Hess' message has been received by many within the education community as arrogant and unsupportive, he has revealed a systemic practice that sparked discussions.

A mindset and historical practice exists among some teachers regarding what group of students teachers should be assigned to instruct. When a novice teacher enters the profession, messages of putting in your time are pervasive and placing these teachers with the neediest groups of students proves difficult for the teacher and often results in a gap in the educational progress of the student. A pattern exists between seniority, teaching high achieving students and that it is an inherent right of passage for a teacher who has paid his/her dues. A clear message is crafted reinforcing high-achieving students deserve teachers who have more experience and are worth the investment. Additionally, the practice of entering the teaching system by any means and then transferring out of a bad/low performing school once an opening occurs, fails to consider the qualifications of the teacher(s) or the effect on the continuity of instruction. The most glaring omission from this conversation is the impact on students. With institutional

networks of power defined and impacts on dominant and subordinate communities named, the cultural dimensions of power are considered.

Power within a school system encompasses more than just positional authority. Educational leaders are granted authority via the context of their job. The ability of the leader to successfully and justly exercise that authority is not inherently conferred by position. The ability to create cultures of trust and acceptance and to engage followers has less to do with positional authority and more with leadership. Teachers and other staff members hold important leadership roles not by virtue of position, but rather perception by peers. Leadership is measured in relation to content knowledge, pedagogy or ability to affect change. Transformational leaders in any discipline are keenly aware that harnessing the leadership qualities of those in the organization result in larger system-wide improvements.

Payne (2005) examines the *hidden culture of poverty*, which describes the structure and operation of public schools to be from a decidedly White, middle class lens. When students and parents fail to meet the standard of behavior or engagement of the middle class, opinions are consciously or unconsciously formed predicting that students are unable to be successful and that parent's do not care. With that as a premise and decision-making framework, there are cultural dimensions of power that immediately place minority and poor students and families at a disadvantage. It must be noted that Payne's work has been severely criticized for advancing a deficit view of students who experience poverty (e.g., Luke, 2012). Nevertheless, Payne's work does bring into relief how cultural dimensions of power can operate in practice.

Payne's (2005) work made a significant impact on me both as a learner and leader in relation to cultural dimensions of power. First, the stark realization of how the structure of meetings and dialogue with parents was preventing the most authentic engagement caused

realignment on many levels. In a middle-class effort to do what was considered correct, meetings and conversations were often structured in ways that supported the schema of the educational team and failed to consider what would be most culturally comfortable for families. If the meeting was unsuccessful, the student didn't improve or the parents failed to respond, the educational team could then blame forces external to the system and not look to our involvement in creating the space for communication and participation.

Perhaps most importantly, when I was speaking of students and parents from economically disadvantaged situations, a conscious effort was made to shift the frame of judgment from white middle-class standards to considering the cultural context of the family and how to best include them in the process. Candidly speaking, on many levels this was a complicated and emotional paradigm shift. As a leader, and problem-solver by nature, resisting the urge to impose a solution is difficult. For the educational team, placing blame on the systems or situations external to the educational environment is easier than looking at how our system issues are impacting the achievement of students and engagement of families. Parents entering a meeting in a room filled with educators are often overwhelmed by the sheer number of people. If the parents' own school experience was poor, the stage is set for not only addressing the pain of the past but ensuring that history is not repeated with their child. Each stakeholder in this setting has an expectation of the other. "Each constituency defines its own responsibilities as narrowly as possible to guarantee itself success and leave others to the broad and difficult for integrating students' total education" (Haberman, 1991, p. 294).

Gender is a cultural dimension of power warranting consideration within this work. Although historically teaching has been a predominantly female occupation, leadership within the ranks of education continues to be predominantly male. The history of teaching as a

profession clearly illustrates that women were “welcomed into the teaching ranks by local school boards because women could be hired at lower wages than men” (Spring, 2011, p.141).

Additionally, women were sought to teach as they were thought to have inherently strong moral character and would be able to convey that to students. The historical practice of holding teachers to a higher moral standard (even within their personal lives) continues today and is reflected in the Pennsylvania Code of Conduct for Professional Educators. Curiously, the definition of morally appropriate behavior is left to the standards of the community. Spring (2011) purports, “this control of the social life of teachers contributed to the low status of teaching” and placed a closer scrutiny on females (p. 144). When and if women moved into the ranks of educational leadership, is there a different moral standard for their behavior?

The Pennsylvania Association of School Administrators (PASA) indicates that currently, only 27% of superintendents within the Commonwealth of Pennsylvania are female. 137 out of 500 Superintendents of Schools are women (J. Zelenski, personal communication, April 3, 2014). Nationally, 95% of school superintendents are White and 86% are male (Glass, Bjork, & Brunner, 2000). A study conducted by the American Association of School Administrators (AASA) questioned the lack of females holding the rank of Superintendent of Schools cited several reasons to support that reality. Among them is the fact that the pathway to the superintendency is often via the position of high school principal, a leadership role most often held by men.

I have the personal experience of the dissonance between expectations for women leaders to be nurturing and affective-focused while simultaneously charged to make the tough decisions in ways characterized as decidedly masculine. Sadly, the role seems to require a binary execution of traits, which leads to a display of leadership that is not integrated or authentic.

Gender does become a dimension of power as the leadership roles continue to be represented by males.

Skrla and Scheurich (2004) address the theoretical framework of deficit-thinking as a widespread paradigm effecting education and particularly influencing those in leadership positions. This framework posits the reason for failure of students (predominantly students of color and economically disadvantaged) are as a result of familial deficits and dysfunctions. Subsequently, these students are then over-represented in some areas (special education identification; discipline referrals; placement in alternative education classes) and under-represented in other areas, namely identification for gifted and advanced placement coursework. Skrla & Scheurich (2004) reveal how continuing to perpetuate this deficit thinking framework allowed the focus and blame of failing schools to be placed external to the district and maintain the comfort and complacency that exists when looking at student achievement and school system failures. Additionally, their work examined ways that accountability and making the “invisible visible” was connected to diminishing deficit-thinking within those specific districts.

The framework in districts locally and statewide is the deficit-thinking model when conducting meetings or discussions (formal and informal) regarding student progress. The discussions center on the deficit of the student, and/or what is causing concern about the student. Interventions are focused on the deficit and rarely are discussions centered on the strengths of the student or the family. Resiliency or protective factors possessed by the student and family are not initially considered.

Tavernise (2012) contends -researchers have found the achievement gap as measured according to race has narrowed, but the gap between rich and poor continues to widen and is receiving little attention from lawmakers. While it is widely accepted that students from

wealthier families do better in school, those with greater financial means also have the social and cultural capital to invest in additional activities which include exposure to the arts, tutoring and travel. This cultural and social capital also allows parents to be selective about the schools in which their children attend. With an understanding of the social justice theory used to frame the problem of practice, in addition to the theoretical frameworks that support the professional agenda, the conversations within this work progress to the designs for learning and action.

Part IV: An Agenda for Action

“Mind and behavior and perception and action are wholly integrated. That is, we cannot separate our knowledge of a domain from our interactions in that domain” ~Jonassen & Land (2012, p. ix).

In Part IV, the ways of addressing the problem of practice in order to improve educational systems will be examined. Part IV begins by defining designs for learning and action and includes an overview of the Rockland Learning and Leading Collaborative as an example. Ways of constructing the learning space are defined in the next section. Appreciating the system and identifying the Rockland Learning and Leading Collaborative follow. Challenging the system structure is considered which leads to a conceptual blueprint for the designs for learning and action. Part IV then looks at how designs for learning and action can be operationalized. Finally, Part IV concludes with how these designs serve learners, leaders and communities and provide for continuous professional growth.

With that organization in mind, we begin by considering designs for learning and action.

Defining Designs for Learning and Action

The designs for learning and action are, at the core, opportunities for stakeholders to reveal and challenge assumptions about themselves in relation to the problem of practice and leverage that information to engage in root cause analysis and cycles of improvement. As the problem of practice is better understood in content, concept and context, opportunities to identify potential improvement efforts become accessible to those engaged in the work. The work of Jonassen and Land (2012) illustrate through the writings of several theoreticians that theories of learning have shifted from transmissive to being constructed by the learners themselves. The designs for action resulting from the opportunity to make meaning of the *variability in the*

selection, learning and placement of aspiring and practicing teachers leads to inequitable learning opportunities for students will undoubtedly vary for each stakeholder group represented.

As stakeholders come to know and understand his/her own set of strengths and how those strengths leverage work toward the problem of practice, that will translate to impact system change resulting in improvement. Perceptions and personal narratives regarding interaction with teachers and education are laden with much emotion and opinion. Stakeholders engaging in the work enter the learning process at various stages and degrees of commitment which will impact learning and doing. The designs for learning and action created by this partnership of learners will be an infrastructure undergirded with tools to address the problem of practice including but not limited to: protocols for hiring new educators and placing existing ones, educator professional development, metrics for measuring professional development, meaningful relationships between public and higher education resulting in productive student teacher placement, leadership capacity-building, and a fluid challenge space to permit ongoing conversations about engaging, effective and efficient teaching and learning. To better appreciate the aforementioned designs, learning environments and networked improvement communities warrant additional discussion.

The Rockland Learning and Leading Collaborative (RLLC) is a single design for learning and action framework which includes four scaffolded layers. The layers are intended to provide opportunities to learn about, discover, act upon, improve and impact the variability in the selection, learning and placement of aspiring and practicing teachers leading to inequitable learning opportunities for students. Throughout the course of this section, different elements of the Collaborative will be discussed. It is important to note the Rockland Learning and Leading

Collaborative is being discussed in a conceptual context, so the examples given are not all inclusive. Once the Collaborative is operationalized real-time information will be generated. This design will be examined via several avenues including the constructs of learning, the context of application, stakeholder engagement, theoretical perspectives, leadership and practice impact, equity issues and data. Each component is integral to the next, and is necessary to address the complexity of the design. At the conclusion of this section, the people, processes and plan will have been established and allow for the discussion of generative impacts. Considerations for learning environments help to set our understanding of the Rockland Learning and Leading Collaborative.

Learning has been studied for centuries. The works of Socrates, Plato and Aristotle have long been considered the inception of debates on how learning is accomplished and how one becomes educated. Honoring the history of learning as rich and varied, for the purposes of this scholarly work, in particular the designs for learning and action, learning will be framed to propose a paradigm shift from educator transmissive practices to more progressive theories which examine meaning making as the process of learning. Contemporary learning theories focus on the social nature connected with meaning making (Jonassen & Land, 2012). As a scholar practitioner, the social connection to learning and making meaning of existing and new information is not only personal, but evidenced professionally. Relative to the professional agenda, the social context in which members of the school, community and academy partnership will learn about the problem of practice will be pivotal to producing the tools to launch generative impacts. This is uncharted territory. As suggested by Tribus (1996), “one of the inescapable features of a paradigm shift is that in the beginning, those who are learning of the new paradigm interpret it in terms of the paradigm they are to leave” (p. 1).

From a constructivist viewpoint, meaning and learning is personally defined. As information and research about learning has evolved, a theoretical shift has been introduced suggesting that information is not transmitted from teacher to student, but rather is constructed by the learner (Jonassen & Land, 2011). For the purposes of the Rockland Collaborative, student-centered instructional environments will provide a framework to engage the work and supports this scholar practitioner’s epistemological framework of learning. Although referred to as “student-centered” members of the school, community and academy partnership are students of the problem of practice and therefore the connection has relevance to the creation of the partnership. Land, Hannafin and Oliver (2012) offer four core assumptions of student-centered learning environments which include: “centrality of the learner in defining meaning; scaffolded participation in authentic tasks and sociocultural practices; importance of prior and everyday experiences in meaning construction and access to multiple perspectives, resources, and representations” (p. 8). These assumptions will be used to engage members of the partnership within the context of the Rockland Area School District.

The constructs of student-centered learning will establish the framework by which stakeholders will begin engagement with the problem of practice. Given the learning environment has been explicated; networked improvement community (NIC) is the next construct to explore in relation to the designs for learning and action to address the problem of practice. Bryk, Gomez and Grunow (2010) build from the work of Engelbart (2003) in defining a *networked improvement community* as “a distinct network form that arranges human and technical resources so that the community is capable of getting better at getting better” (2010, p. 5). Bryk, et al. (2010) discusses the three broad domains of Engelbart (2003) as activity in relation to organizations and organizational fields. The domains are as follows:

A-level activity is front-line teaching and learning in classrooms; B-level (or secondary) activity is encompasses activities within-organization efforts intended to improve the work on-the-ground and C-level activity is characterized as inter-institutional establishing the capacity for learning to occur across institutions. (Bryk, et al., 2010, p. 6)

In addition to the aforementioned components of networked improvement communities, the participants in the work and how these participants will be organized within the learning environment will occur in such a way “that enhance the efficacy of individual efforts, align those efforts and increase the likelihood that a collection of such actions might accumulate towards efficacious solutions” (p .4). Historically with educational improvement, the context and improvement efforts have remained at a local level and transference, even intra-system has been relatively ineffective. Even best-practice programs and frameworks have experienced difficulty when transferring to other contexts.

The Carnegie Foundation for the Advancement of Teaching has invested significant intellectual and financial resources to explore educational research and development and how improvements can be made to effectively connect the work done by both researcher and practitioner. Bryk, et al. (2010) argue “that the complex problems of practice improvement demand that a diverse mix of skills be brought to bear and require reconsideration of, when and how in the arc of problem solving, this diversity of expertise is best exploited” (p. 2). This type of research requires different and dynamic interactions between researcher and practitioner and an ongoing dialogue between the field and the research setting. As the research and development enterprise in education has fallen short of intended outcomes, the Carnegie Foundation has looked to other fields and disciplines, external to education, to examine how these large networks

have successfully coalesced to address problems and make significant change. Considering the improvement work of professions outside of education is a paradigm shift in and of itself. The enterprise of education, and educators ourselves, have rightfully earned the arrogant reputation of discounting the transferability of improvement in other professions thinking that the systemic and systematic constraints of education are somehow more than experienced by any other industry. With education under such intense scrutiny by multiple constituencies, perhaps now the existing conditions are ripe to examine relevant problems of practice within the methodological framework of improvement science.

Through the exploration of the problem of practice and theoretical frameworks to examine the problem, it became clear to this scholar-practitioner that the variability in teacher quality has been discussed since the early 1900's with very little movement to mitigating the problem. Gladwell (2002) compellingly unfolded the narrative of social and societal epidemics that impacted our country. If, in fact, teacher quality has been written about and discussed since the early 1900's why have we not reached a tipping point? Have there not been Mavens, Connectors and Salespeople who traversed the education world completely capable of making this change? Von Hippel (2005) argues, "the problem-solving work of innovation requires access to 'sticky' information regarding user needs and the context of use" (p. 15). The Collaborative space is intended to strategically place Mavens, Connectors and Salespeople, and provides access to the "sticky" information needed to create substantive change. Literally and metaphorically, what could be "stickier" than education?

With learning environments and networked improvement communities prescribed, the narrative turns to the designs for learning and action within the Rockland SD. *Variability in the selection, learning and placement of aspiring and practicing teachers leads to inequitable*

learning opportunities for students is a formal academic statement for the simple realities that the differences in how teachers are chosen, learn and are placed results in children have unequal learning opportunities. As Bryk, et al. (2010) recognize “for this and most other significant problems in education, there are many voices that attempt to characterize the problem” (p. 4). School districts are responsible for hiring, placing and professionally developing teachers. Attempting to address the problem statement in total proves daunting and could serve as a deterrent to even the most committed change agent. As representatives of the partnership engage in dialogue to address this problem of practice, motivation to the work and disruption of stabilized beliefs about this condition will be critical to root cause analysis and change agency. With designs for learning and action defined, constructing the space for learning begins.

Constructing a Space for Learning and Discovery

The Rockland Learning and Leading Collaborative is first a discussion space created for opportunities to understand, appreciate and engage the problem of practice, by exploring strengths-based theory and positive psychology. This strategically selected starting point is one in which many can enter with low risk. Each of us can make a personal connection to our strengths, skills and talents and see how it relates to chosen professions and vocations. Honoring the student-centered learning constructs, each partner in the Collaborative will define meaning in the process; prior and everyday experiences will aid in the construction of meaning; authentic tasks and socio-cultural practices will be scaffolded to support participation and multiple perspectives and resources will be availed. To ensure the connection between theory and practice theoretical and empirical antecedents are considered.

The Collaborative creates a starting point for engaging stakeholders in the discussion. The initial phase intends to examine the strengths of the participants how those strengths,

knowledge and expertise can lead to developing processes to revealing the strengths of practicing and aspiring teachers. Relevant theoretical and empirical antecedents are seated in the strengths-based theory work of Donald Clifton (1997), Tom Rath (2007) and the Gallup Organization.

Strengths-based theory/psychology argues that we spend far more time, energy and effort remediating our shortcomings than focusing on our strengths. Clifton and his associates at the Gallup organization devised the conceptual framework for strengths-based theory to encompass strengths, themes and talents (Hodges & Clifton, 2004). Talents are defined as “*recurring patterns of thought, feeling or behavior that can be productively applied*” and are viewed as naturally occurring (Hodges & Clifton, 2004, p.257). Strengths, defined as “*the ability to provide consistent, near-perfect performance in a specific task*, must be developed and are the product that results when one’s talents are refined with the acquired skills and knowledge” (Hodges & Clifton, 2006, p.257). The deficit-thinking model often utilized within school systems runs counter to the aforementioned premise. This is evidenced when discussing students who are experiencing difficulties, parents who challenge the normative practices of the school system, and in addressing personnel issues. Rarely is the conversation framed to identify a person’s talents and strengths or to consider interventions based on strengths.

“Results from a recent Public Education Network/*Education Week* poll indicate that nearly one in three believes that the best strategy for improving students’ scores is to improve teacher quality”(Gordon, 2002, p. 1). National, state and local efforts on improving teacher quality have often centered on subject-matter and pedagogy. While important components of teacher selection, in isolation, they do not guarantee an effective teacher. Individuals can recall teachers who were knowledgeable and created a classroom structure, but they lacked a connection to them, and believed little was learned from them. Gordon (2002) opines

Our tendency is to assume that anyone can be a teacher with the right amount of training and determination. But the evidence, as many principals will confirm, is that the right talents for a job, when absent, are very difficult to teach. (p. 2)

Strengths-based theory posits the missing piece of the teacher quality equation is the talents associated with the most effective teachers. Through research conducted by the Gallup Organization, using ratings from principals and students, results indicated the best teachers have “measurable talents in three important areas which include *motivation, relationships and structured learning*”(Gordon, p. 2). Gordon (2003) notes the following regarding these themes: **Motivation** spoke to the factors that “called” people to the profession/vocation of teaching. Those motivated to teach had a connection whether by family of origin, positive or negative experience with a teacher, and believed students could reach the high expectations established for them. **Relationships** included the ability to cultivate relationships with students, parents, colleagues that demonstrated caring and respect. Students knew the teacher cared about them! And, **Structured Learning** spoke to the means by which teachers designed and delivered lessons to students that were not only conceptually and content specific, but taught students how to “learn”. In selecting and placing teachers within school districts, certification credentials and academic performance are easily determined, but the metric to discern the aforementioned talents is more elusive. At the expense of our students and families, discovering whether or not these qualities are present in teachers occurs after hiring and placement in classrooms. While Pennsylvania’s new Educator Effectiveness Framework (Act 82 of 2012) rates developing relationships with students/families and creating learning environments, the teacher is already in the classroom and influencing students. If significantly absent from the teacher’s repertoire,

development of these talents would be highly unlikely based on the tenets of strengths-based theory. Professional experience of this scholar-practitioner would support that attempting to instill or increase motivation for the job or relationship building is challenging and few supports exist to successfully remediate in these areas. It is in this area that teacher training programs play a pivotal role to determine whether or not these characteristics are present in pre-service teachers and whether or not students should continue through education programs if they are not present.

Strengths-based theory is supported by other theoretical frameworks including neuroscientific studies demonstrating that synaptic connections developed within the brain are stronger for those tasks that are used more often. Hodges and Clifton (2004) cite evidence supporting that at ages as early as three years to fifteen years the brain is organizing itself “by strengthening the synaptic connections used often while infrequently used connections weaken over time” (p. 260). This real-world application supports people’s tendencies to engage in activities in which they are most interested and feel most competent. Participation in activities that support talents and strengths are not only affectively connected to behavior, but psychologically and physiologically as well. Given this information, the ability for stakeholders in all levels of the partnership to recognize his/her own strengths and talents relative to the problem of practice and the potential to leverage educational change is significant.

Positive psychology and positive organizational behavior provide additional theoretical antecedents that support the Rockland Collaborative and strengths-based theory. Positive psychology is defined as “the scientific study of optimal human functioning” (Sheldon, Frederickson, Rathunde, & Csikszentmihalyi, 2000). The focus of positive psychology is to uncover how individuals, communities and organizations function best and to place less of an

emphasis on the deficits or failures within a system. The rise in positive psychology efforts also stems from a lack of attention to strengths within the discipline of psychology where the emphasis tends to focus on intervention and prevention. As leaders in education are continuously attempting to match job assignments with strengths, we also see the contagious effects when positive outcomes or achievements are the focus rather than what remains wrong with a system. Students, in particular, are very savvy and can easily note when teachers and those in the school building like their job. As the Collaborative will include the challenge space to explore the systematic and systemic barriers that address the problem, noting the system strengths will be important so those capacities can be leveraged.

Luthans (2002) defines Positive Organizational Behavior (POB) as “the study and application of positively oriented human resource strengths that can be measured, developed and effectively managed for performance improvement in today’s workplace” (p. 52). Luthans (2002) takes note to separate this work from personal development/self-help best sellers by stipulating measurable outcomes and impact on workplace performance. The authors connect this work to both leadership/management development as well as human resource development. Five measurable constructs identified by Luthans (2002) comprise Positive Organizational Behavior. They include: confidence/self-efficacy; hope; optimism; subjective well-being; and emotional intelligence. While constructs collectively define Positive Organizational Behavior, for the purposes of this professional agenda, additional discussion surrounding self-efficacy as both a contributing factor for engagement in the Collaborative and a predicted generative impact resulting in teacher self-efficacy will be the focus.

The work proposed by this professional agenda requires significant investment. Demands on time, finances, and human capital are finite. To establish the best possible

conditions for success of the Rockland Collaborative, participants must believe their involvement in the process will matter. Educational leaders, with righteous intent, have made futile attempts to convince people that implementation of the latest “evidence-based programs” will solve the problem du jour. Unfortunately, the human component of the change/improvement process was underappreciated. If people feel as if they had no impact on the outcome their investment was likely limited. As Bandura (in Luthans, 2002) offered, “unless people believe that they can produce desired effects and forestall undesired ones by their actions, they have little incentive to act” (Luthans, p. 59).

Self-efficacy is defined by Luthans (2002) as “an individual’s conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (p. 60). If people are to engage in the Rockland design, perception and or belief that their involvement in the process can impact how teachers are hired, placed and receive professional development is pivotal. More importantly, they need to believe that these impacts will affect students, ensuring that all students have equal opportunities for well-qualified teachers. Perhaps, people will enter the Rockland design space for reasons other than student access to quality teachers. Belief systems about the structure of hiring, past negative experiences with teachers or school systems, or simply the opportunity to “tell educators how to fix the problems” are all plausible motivators. Those are all scenarios bound to unfold in the difficult work of the problem of practice. Recognizing, honoring and establishing a shared reality of the context will move the design from discussion to action.

Self-efficacy presents both as general and context/ task specific. A person can possess a general sense of self-efficacy but lack a sense of efficacy with a specific task. Since the

Rockland Collaborative will present challenges for members to confront in relation to both the district context and his/her own skill set, the ability to establish opportunities to test interventions and note gains will be important to both support the general self-efficacy of the members and build context-specific self-efficacious behaviors. Should the members lose or lack the belief that they can make a difference in this condition, the likelihood of the designs and generative impacts improving the condition significantly diminish. These theoretical and empirical antecedents will assist stakeholders in examining systems issues and barriers. The learning space is a system. In order to best maximize a system, participants must develop an understanding and appreciation for the system. The next section provides a deeper understanding of systems.

Appreciating the System

Current systems for hiring and placing teachers support barriers to maximize human capital. Listen closely to conversations surrounding hiring and placing of teachers and you will likely hear more complaints than compliments about the system. References to nepotism, protections of collective bargaining agreements and age-old traditions of who teaches what levels of students are the standard chat. The Central Law of Improvement posits “*every system is perfectly designed to deliver the results it produces*” (Langley, et al., p. 79). Therefore, we as members of the system, both active and passive, have created a system producing exactly what the design allows. Therein lays the issue. Inequitable learning opportunities for students are not a morally or ethically permissible result. The Rockland Learning and Leading Collaborative is an intentionally-crafted intersection of subject matter knowledge and profound knowledge where the capability to make improvements is increased (Langley, et al., 2009).

W. Edwards Deming as a teacher and lecturer influenced managerial practices world-wide (Tribus, 1996). As a transformational leader, Deming developed a management style

known as *Profound Knowledge*. Deming's explanation of profound knowledge encompasses appreciation for a system; understanding variation; building knowledge; and the human side of change (Langley, et al., p. 76). For the purposes of this work, understanding variation and appreciation for a system will be addressed in greater depth. Leaders within systems may well possess a tacit knowledge of these constructs; however consciously viewing the system in question through this lens is intended for greater more sustainable improvements.

Understanding and *appreciating* a system is often vexing for those embedded within and paralyzing for those on the periphery. Critical work of the Rockland Collaborative will be taking at 360-degree gaze at the system, engaging and challenging personal beliefs about the system and determining how and where intersections with the system can create opportunities to improve the condition. While Langley, et al. (2009) defines a system as "an interdependent group of items, people, or processes working together toward a common purpose" (p. 77) it is commonplace to cognitively construct a system as *one* of the factors above and not a combination. Natural tendencies to determine fault/blame seem easier to levy on one piece of the whole rather than the entirety. It also affords the opportunity to deflect personal accountability if part of a system is defined as non-functioning. Examining each component in the system in isolation from the others will result in less than optimal efficiency. I would argue within the context of this problem of practice a failure of past attempts at reform included examination of system components in isolation. Langley, et al. (2009) share the work of Deming noting other key ideas to consider within system appreciation which include: system boundaries; temporal effects; leverage (a piece which will be closely considered within the challenge space); and types of change. At the least common denominator, the first point of consideration is the system. Oftentimes, the initial consideration is the person. The shift must be to consider the system in

total and build capacity from there. With a greater awareness of system appreciation, we move to develop an understanding of variation.

Variation exists in everything that is observed, measured or tracked. The means by which we interpret variation and use that information for decision-making has a far reaching impact. Variation is not the issue. Understanding the variation enough to engage the correct action is the key. Variation within teaching is not a concern in and of itself. The goal is to increase the quality of teaching and decrease the variance in teaching quality. Variation within the range of excellence would enable all students to have access to excellent teachers.

Two noteworthy considerations regarding variation are posed by Shewhart (in Langley, et al. 2009) whose seminal work regarding developing the theory to understand variation was established in the 1920's. First, Shewart offered, the plotting and evaluating of data over time will reveal two situations: both predictable and unpredictable patterns. Shewart defines *common causes* as “inherent in the system/or process over time, affect everyone working in the system/process, and affect all outcomes of the system/process” (p. 79). *Special causes*, conversely, “are not part of the system/process all the time, or do not affect everyone, but arise because of specific circumstances” (p. 80). Identifying the type of causes and determining whether it is a stable or unstable process, will drive whether the intervention warrants a change to the entire system or one component to the system. All action taken for purposes of system change does not yield improvement. Developing a deeper understanding of variation, how to measure and properly identify it will greatly benefit improvement efforts.

Deming's theory, while conceived within the world of business, has been applied to other contexts, including non-profits and healthcare. Deming's work has been likened to the forward-thinking precepts of Dr. Reuven Feuerstein (in Tribus, 1996) who pioneered new ways of

thinking about how children learn. Both men looked at systems (business and education/learning), how people/students function within the system and how managers/leaders govern the system. With this paradigm shift, the roles and responsibilities of those who work in the system have changed. The Rockland design works to set those conditions to test change, evaluate the effectiveness, and then bring to scale across contexts. Tribus (1996) notes “making change possible means more than making teachers responsible. They must become *response-able*, which means much more attention to teacher training and development than is now the norm” (p.5). With a better understanding of profound knowledge, appreciation for a system and understanding variation, our discourse moves to how the designs fit the context of the Rockland Area School District.

Rockland Learning and Leading Collaborative

Context matters. Researchers and practitioners are cognizant of the contextual realities in which education unfolds, yet regularly fall short of honoring this condition when attempting to implement institutional or instructional change. For the Rockland Learning and Leading Collaborative, not only will the context be acknowledged, but the concept of situativity will be established. For this work, situativity extends constructivist learning theories in an anthropological sense to grow from an individual’s context within the designs for learning and action to the community context. Lave (1993) suggests that “developing an identity as a member of a community and becoming knowledgeably skillful are part of the same process, with the former motivating, shaping, and giving meaning to the latter, which it subsumes” (p. 65). While stakeholders in the designs for learning and action enter the learning-scape as individuals with specific skill-sets and talents, the exploration and cycles of improvement are developed and implemented from a place of community or group process.

The context of a school district will organically define the parameters of the Collaborative in tandem with testing improvement cycles and implementation to scale. Rockland (like many other districts) is well-positioned to engage learning in this new paradigm for two significant reasons. First, the national focus on educational reform and the increased dialogue for educational “choice” has caused public education to recalibrate how the system meets the needs of students. Increasing public access to information about the performance of schools in areas such as standardized testing, curricular offerings, post-secondary readiness, school climate and fiscal responsibility have allowed consumers of public education to question processes like never before. School districts work to establish themselves as reputable and continuing that reputation requires ongoing assessment of systems and realignment in areas if warranted.

With the 2013 launch of the School Performance Profile (SPP, 2013) in the Commonwealth of Pennsylvania, the aforementioned components are individually assessed a value and then an overall score is given for each building within a district. The ability to compare performance both intra-district (between elementary schools) as well as inter-district is now available. Additionally, with building and district data now being included in teacher performance ratings as per the launch of Act 82 of 2012 (Educator Effectiveness Law), the silos of education pose a significant barrier ([Pennsylvania], 2013). The performance of the group *will* affect the individual. Investing in how teachers are hired, placed, and receive professional development no longer rests with the human resources department. Most importantly, the professional staff is invested in the craft of teaching and demonstrates a motivation engage the discourse.

Secondly, leadership changes within school districts, in addition to leadership shifts in community and business settings, often result in new voices to the discussion. In each of these venues, leaders are aware that the education of our students impacts their respective system in some fashion. Whether altruistic or selfish, weighing in on this discussion has become increasingly important. The conversations are already occurring. Moving the discourse from criticism and blame to reflection and action is likely where the most impact will be realized.

The relevance of the design for district level participants is conceivably most intense as the nexus of change and improvement will be measured at the building and district level. In many school districts, teachers have historically been involved in the hiring of new teaching staff as part of the interview/selection committee. Additionally, teachers have had an ancillary roll in brainstorming professional development activities. Those experiences provide knowledge of systems and structures currently in place. From a district leadership perspective, the relevance of this design contains both an operational and moral urgency. The current industry standard system of hiring proves frustrating as the window for hiring is narrow and timelines are connected with budget approvals which are tethered to appropriations from the state legislature. Limited days for professional development compounded with mandated training demands create situations where implementing meaningful, job-imbedded professional development is scarce. Good intentions are eclipsed by too many demands and too little time. Leveraging the system to improve either condition, even minimally would be a welcome event for school leaders.

The relevance of the Rockland Collaborative to the academy is present within this context. Rockland, like all school districts in the Commonwealth, hosts student teacher placements from a large number of colleges and universities. Aspiring teachers have rich experiences working with teachers in the district, and the district is continuously contacted to

accept student teaching placements. For this constituency, engagement in the design for learning will be new. Needs of the academy in relation to preparing teachers is inconsistently communicated with public education. Enrollment of students in education programs and subsequent placement of teachers in school districts is impacted by the hiring, placement and professional development systems of public education. More importantly, with student test scores being directly linked to teachers, accepting student teachers into the classroom will be a more purposeful decision on the part of teachers. If practicing teachers decline student-teachers, this will pose a significant problem for teacher training programs. Selecting quality student teachers will be increasingly important.

The final group for consideration regarding the context of the Rockland Collaborative is the Board of School Directors. With an overwhelming portion of school district budgets allocated to personnel costs, systems improvement in this area directly impact a main governing function of school boards. With the current systems structure surrounding dismissal of teachers, reductions in programs/staffing, and transfer/placement of teachers, maximizing the efficiency with which the system functions impacts policy, finances and programming. Involvement of the school board with hiring, placement and training of teachers varies by district. While not intended to be daily managers of hiring functions, the ability to participate in discussions or systems improvement is key given that approval of personnel matters and district budgets impact these daily operations. With the context of the Collaborative design established, the discussions move to how the design for learning and action will challenge and transform status quo practices in educational leadership.

As previously discussed, the Rockland Collaborative is one design inclusive of four layered processes. One facet of the design work specifically focuses on transforming status quo

practices in educational leadership. Next to the effectiveness of a teacher, the most important driver on student achievement is the educational leader. Not only are the principals leaders of learning, but are human capital managers and “critical links between strategy and execution of personnel resources” (Curtis & Wurtzel, 2010, p. 69). A potential root-cause analysis driver of the design would be the impact of educational leaders on the problem of practice.

Within the Commonwealth of Pennsylvania, legislative challenges to redefine leadership at the terminal position within school districts has been enacted with the passage of House Bill 1307 (Samuels, 2012/2014) which, for the first time, permits the Superintendent of Schools to have an advanced degree in a discipline other than education. This alternative certification credential posits that professionals with training in business, management or law would offer a perspective counter to that of superintendents who progressed through the system. The dominant narrative within the education community remains that unless you have been an educator, you would be unable to successfully lead a district. The move to certify those in other disciplines to lead our public school systems is something educators with 25+ years of experience never imagined would come to fruition. The presence of this scholar-practitioner within the educational leadership community challenges the status quo given my leadership trajectory is non-traditional. How will this influence the Rockland design? This phase of the designs for learning and action affords experts from other fields to offer successful strategies/structures used for selection and placement of employees and determine an intervention to test. With an understanding of the Rockland Learning and Leading Collaborative, the next section offers opportunities to disrupt the normative practice.

Disruption, Discourse and Dialogue by Design

Challenges to any system, even those considered minimal, are viewed as disruptive by those directly involved. That *disruption* is what visionaries such as Strickland (2007), Hess (2013), and Christensen, et al. (2006, 2008) espouse. The methodology by which each author proposed the disruption varied, but the message was consistent. In order for substantive system change to occur, the need to disturb existing practices was necessary. Christensen, et al. (2006), suggest “organizations are set up to support their existing business models because implementing a simpler, less expensive, more accessible product or service could sabotage their current offerings. It’s almost impossible for them to disrupt themselves” (p.96). Christensen, et al. (2006) propose a “catalytic innovation” which shares foundational features of disruptive-innovation with offering good alternatives to underserved customers given a focus on social change at a national scale. We are not looking for solutions to support the existing framework; we are looking to “unstick” the system that we currently have. Identifying these catalytic innovations begins where disruptions in the system are already occurring. Within the context of the Collaborative, examining the hiring practices of other districts and non-public entities are sure to reveal disruptions.

The work of Hess (2013) challenges the leadership establishment within schools to recognize the constraints but work strategically to leverage what latitude exists to move the educational enterprise forward. The idea is to know your culture, structure, and collective bargaining agreements and be willing to think about the implementation of those structures in ways that have not previously been considered. Discussing and implementing changes of this nature are sure to produce resistance and a certain amount of conflict regardless of how measured the efforts and the leader’s ability to set the stage for change. Hess (2013) relates the

sentiments of a school district solicitor “there are too many leaders who come out of the teaching profession, and they have a desire to be loved. That makes it difficult for them to make tough choices and reach out and ask, ‘show me another way’” (p.122).

Strickland’s (2007) system disruption may not present as audacious as that of Christensen, et al. (2006, 2008) and Hess (2013), however it remains equally as powerful. Each and every component of change to how students are educated and received as *people* within the education setting was counter to the normative practice. Each learning environment that he created was a design and tested new prototypes of system improvement. With every change or cycle of improvement, he was ever mindful of the human component that accompanied the change and the associated risk. “But when we risk ourselves, our time, our careers for what we believe, we can accomplish things we never imagined” (Strickland, 2007, p. 105).

The work of these and other change agents serve as examples to educational leaders that in order to transform the status quo practices in educational leadership, the disruption must come externally as we have limited capacity and motivation to create disequilibrium upon our own systems despite good intentions. The purposeful and intentional involvement of stakeholders outside of education in the Rockland Collaborative serves as that disruption with resulting improvements to educational leaders both at the building and district level.

Challenging and transforming the practice of educational leadership serves both as an end result of the design and the professional agenda of this scholar-practitioner. With that consideration, a closer examination of current leadership practices governing hiring and placing of teachers was needed. In 2013, I conducted a small-scale qualitative research study to gather information as to how current Superintendents of Schools understand strengths-based theory, and the connections to hiring, placing and performance of teachers within his/her own systems.

While specific data collected from the study will be explicated in a later section of this work, a synopsis of the questions and spirit behind the discussions merit inclusion at this juncture.

A vast majority of educational leaders acknowledge the most important job to which they are entrusted is the hiring of teachers. Given the importance of this charge, the process appears variable, incongruent and difficult to quantify. “I know a good teacher when I see one” is a phrase often used within the hiring process, yet succinctly describing qualities those teachers possess remains a bit more elusive. To determine or measure those qualities is even rarer. As is typical with most practitioners, we have been schooled in the theory of our respective disciplines and it subconsciously drives our practice. Sadly, we are often unable to speak confidently about those connections between theory and practice, and if we do it is often interpreted as being disconnected from the daily operations of educational leadership.

The Superintendent of Schools presents hiring recommendations to the board of school directors. The five questions posed to Superintendents ranged from his/her understanding of strengths-based theory; what, if any, connections there are to teacher performance; reasons for variability in teacher performance and obstacles faced by Superintendents when selecting teachers for positions. The discourse with these four leaders unfolded much like a Venn diagram. Each respondent was individual in some responses, yet common themes emerged from the conversations. For this scholar-practitioner, the most revealing element was the lack of measurable data used to make a de facto lifetime hiring commitment. There is no substitute for instinct and experience; however the ability to capture qualities of effective teachers and use that to improve hiring practices would result in transforming educational practices. Use the people to reform, reframe and leverage the system. As the work outlined how the Rockland Learning and

Leading Collaborative addresses the context and looks to challenge leadership practices, the agenda seeks to garner support by those who hold stake in the process.

The design is informed by understood by and supported by those who hold stake in the design. Ideally, representation includes all levels of the school, academy and community partnership. Those investing enter the process at different developmental levels and stages. While the term *developmental stage* is traditionally connected to the work of educational theorists, in this context developmental stage refers to his/her level of knowledge and engagement to the work. While the scholar-practitioner would like to script the motivations and understandings of those who hold stake in the design to support personal schemas, the stark reality remains that all journeys to and through the Rockland Learning and Leading Collaborative are individualized and evolutionary. A prerequisite (conscious or unconscious) for claiming stake in this design includes the realization that challenging the normative practice and repetition that exists within the system will be a recurring and uncomfortable benchmark. Kumashiro (2002) speaks to repetitions of “certain privileged knowledge and practices” that lead to oppression within systems and thinking (p. 1). Addressing that repetition is part of the design. Given that imperative, those identified to hold stake and enter the process will be determined in a manner that is strategic yet fluid. The degree to which individuals encounter and disrupt his/her schemas will ultimately determine the level of commitment to the work. As Kumashiro (2002) reflects,

students, educators, and researchers, including those committed to social justice, often want certain forms of social change but resist others, sometimes knowingly and sometimes not. One reason that a desire for social change can coincide with a resistance to social change is that some educational practices, perspectives, social relations and

identities remain unquestioned. In fact, people often consider some practices and relations to be part of what schools and society are supposed to be, and fail to recognize how the repetition of such practices and relations can help to maintain the oppressive status quo of schools. (p. 1)

When district leaders look to recruit followers to the work, it is important to be aware that solely recruiting those who support the dominant narrative will likely perpetuate similar outcomes. Soliciting the views of those whose input is rarely requested and counter to personal beliefs may be initially uncomfortable, but may result in some unexpected positive outcomes. Conversation starters that are non-threatening and ask individuals to describe good educational experiences or ideas of important concepts surrounding education are appropriate. Most likely, conversations will evolve at the intersection of the individual's knowledge and position (real and perceived) in relation to the work.

As this work was shared with members of the school, academy and community partnership, it is important to establish a common language for words such as *informed* and *understood*. An ongoing challenge in the design process is to ensure that each portion of the partnership views him/her as important and relevant within this context. Within conversations, clarity surrounding views on teaching, learning, and leadership will become embedded based on the narrative and personal journey of the respondent. Common intersections will occur within the discussions, and using those common themes to establish improvement opportunities will be pivotal.

Creating a level of importance or urgency surrounding the current state of education and education reform is evident. Adding the need for strong leadership at various layers within the

education organizational structure is another valuable discussion topic. Within the discussion of educational leadership, acknowledging that educational leaders were significantly constrained by the system uncovers a point that could be leveraged. Although common threads will exist within these discussions, differences in how education is viewed, delivered, managed and funded will also unfold. Utilizing various means to engage stakeholders in these discussions to further understand perceptions about the problem of practice will ultimately enhance improvement efforts.

The rich dialogue with community members offers both lenses of perception and perspective as well as a compass for this scholar practitioner as the Rockland Learning and Leading Collaborative is built and the professional agenda progresses. The continual discussion about involving the community into school systems seldom moves beyond a superficial level. When challenges to the practice have been posed by those extant to education the reception by the education community has ranged from defensive to denial. Many attempts at educational reform have produced similar results. Kumashiro (2002) posits “the problem that educators need to address is not merely a lack of knowledge, but a resistance to knowledge, and in particular, a resistance to any knowledge that disrupts what we already know (p. 71).

The Rockland Learning and Leading Collaborative has been informed, understood and supported by those who have a vested interest in the work. Integral to any improvement effort is the need for assessment data that tests the claim of the design. The next offers structures for assessing the design.

A Conceptual Blueprint of the Design as Plan-Do-Study-Act

The Collaborative will generate a blueprint of actions aimed at improving the condition of the problem of practice which yields assessment data intended to test the claims of the design.

Within the structure of the Rockland Collaborative, root causes will be named and a design for improvement created and tested. The framework for this process is known as a Plan-Do-Study-Act (PDSA) cycle. Bryk, et al., (2010) define the PDSA cycle as “a broadly used tool in improvement research across different fields” (p. 24). Building from the work of Langley, et al. (1996), when used across networks it allows activity to occur in tandem, in different contexts but with evidence accumulating (p. 24). To better contextualize the framework of the improvement cycle, the following sections provide an explanation and viable illustration for each of the four elements.

The entrance into the improvement cycle framework is the *plan* stage. At this juncture Bryk, et al. (2010) has participants both analyze causes and assess current systems. Guiding questions are posed to uncover understanding of the problem and the system in which it is embedded. Innately, participants bring his/her knowledge, experience and emotions surrounding the condition to the challenge space. Given personal frames, solutions naturally support the individual schema and often fall short of the deep understanding needed to address complex problems. The urge to solve or mitigate the problem from a single point of reference, while noble, generally fails to meet intended outcomes. It is at this nexus where learning with and from others in the challenge space during the planning process will allow for “shared understandings of what otherwise might be tacit and partial explanations about the nature of a problem and the larger system in which it is embedded. The planning process creates a mechanism for participants to identify and articulate locally specific knowledge and how it fits into a larger tapestry” (Bryk, et al. p. 26).

The Rockland design will illustrate the plan phase of the cycle via the following possible progression. First, developing a shared understanding and creating a common language of how

teachers are selected, trained and placed within classrooms is pivotal to moving the improvement agenda forward. In formulating that shared understanding, participants must know themselves, develop knowledge of others, reveal assumptions surrounding the system, and appreciate the problem in ways counter intuitive to his/her reference point. Use of a strengths-based metric to illuminate the unique talents and skills of participants creates not only a deeper understanding of self, but offers knowledge of others and how he/she conceptually interprets the problem. Compilation of that data renders evidence supporting strategic use of the human capital from an intragroup capacity in addition to identifying strengths of effective educators as deemed important by the stakeholders. Questions such as “What strengths, skills, and talents do we want Rockland educators to possess?” and “How do we best construct a system (or make changes to the current system) that will optimize the likelihood of getting the strongest teachers into the system?” would likely be posed to the group or to the community at large to gather input. This group would specifically define what constitutes components of strong teachers. The definition would likely include those strong in content as well as pedagogical practices. Evidence to support the definition would be obtained through classroom observation, student/parent surveys and standardized testing data.

Integral to improvement efforts is the struggle surrounding the development of a shared understanding of the problem and determining a framework to navigate the plan phase. At the confluence of this struggle well-intentioned participants may become discouraged and disengaged when efforts to solve the problem fail and those failed attempts are benchmarked against all of the preceding efforts. The pounding anthem of “we tried that before and it didn’t work” is toxic to future improvement efforts. The same struggle will likely exist within the Collaborative. With substantive investment in the plan phase, potential for a stronger starting

point will yield sustainable processes for continuous improvement. Bryk, et al. (2010) suggests the use of two tools, *program improvement maps* and *driver diagrams* either proceeding or within the plan phase. A *program improvement map* is a means to understand the complexity, nuances and multiplicity of forces, factors and influences on the challenge space. It allows a large, over-arching view of the systems to be considered. A *driver diagram* is “a tool to help organize our theories and ideas in an improvement effort” (Langley, et al. 2009, p. 429). Driver diagrams are engaged when trying to determine what change can be made that will result in improvement. Resulting deliverables include specific targets crafted and adopted by all members. The targets intentionally shift ownership to a shared responsibility versus a person-driven, silver bullet solution.

From my perspective, the aforementioned work is the most critical to the ultimate success of the Rockland Learning and Leading Collaborative. Common understandings of the instructional, human capital, informational, student and governance systems affecting selection, placement and professional development of teachers are complex both for internal and external stakeholders. Much rests on the educational leader guiding this group. Care, courage and commitment are required to foster the discussion, hear that which is difficult, and acknowledge the end result isn't *perfection*. Also, internalizing that risk and failed attempts are acceptable outcomes. In a climate where failure is not lauded, the improvement cycle is even more foreign. Presumably, those invested in the Rockland design are results-driven individuals. Increasing their capacity to accept a paradigm of improvement science is an intended outcome.

“Organizations do not empower people; people empower themselves once they see the opportunity and understand how their values and aspirations are aligned to the needs of the

organization. The leadership of the organization has the primary responsibility of aligning the will of the people involved to the purpose of the organization” (Langley, et al., 2009, p. 189).

With a shared conceptual understanding, common language and framework from which to build a plan, the next element to explore is the *do* phase. For the Rockland Collaborative... we know, we have a plan, it is time to *do*.

Via the use of driver diagrams, the Rockland design establishes a trial which includes an objective, questions/predictions, plan to carry out the cycle (who, what, when, where) and a method for data collection (Langley, et al., 2009. p. 97). For the purposes of illustration, and not to usurp the democratic selection process, the proposed objective of the trial is to determine the most effective method by which potential teaching candidates to the Rockland Area School District are selected for an interview. The group predicts there are multiple vehicles to obtaining the interview. They also predict some methods may “advantage some and disadvantage others.” The trial includes participants both internal and external to the system and will commence during the spring hiring season. An essential component of including participants external to the system rests in their ability to provide a lens that is not steeped in repetition experienced by those within. Additionally, participants from other disciplines will be able to benchmark the current processes within the district against successful hiring practices in other systems. Multiple measures of data collection will be used and include, but are not limited to, tracking sheets, surveys, observations and interviews. Special care will be given to structure valid, but user-friendly measurement instruments as participants are not trained researchers. Data collectors will receive training on effective means of data collection and reporting. At the conclusion of the cycle, formal, anecdotal, and qualitative data will be gathered and prepared for analysis.

With both the “plan and do” cycles completed, the Rockland design moves to the study phase. Once the data has been collected and displayed in a way that best illustrates the information, participants engage in discussion and analysis driven by what was discovered and probe areas that remain undiscovered (either intentionally or unintentionally). For each part of the interview process observed, baselines are determined and used to benchmark all subsequent improvement actions. Integral to this segment of the improvement cycle, Bryk, et al. (2010) believe the improvement question most closely examined is “how will we know if the proposed change is really improvement?” (p. 27). Shifting from thinking an intervention worked to documenting observable gains, demonstrating improvement over baselines, testing schemas and patterns of past behavior will be the new norm. Educators have long functioned on teacher recommendation versus data based decision-making platform. Use of empirical data within the classroom/building level is a fairly recent phenomenon and still contested by some educators, especially those who consider teaching an *art* versus a *science*. Bryk, et al. (2010) offer the precepts of improvement science require a connection with experimental design to collect empirical data.

Since obtaining an interview is only one part of the hiring process, future considerations for improvement cycles of the design would likely expand to other phases of the selection and placement process. Given that probability, archiving the baseline data collected in this iteration, in tandem with streamlining data collection measures, will improve future collection efforts. These documents also serve as evidence of the improvement efforts of the design as well as helping to create a narrative (both quantitative and qualitative) as to the evolution of the design effort. Using quantitative data such as how many applicants applied for positions, grade point average and Praxis test scores of those selected for interviews and other related data points, a

“story of numbers” is created and can be used by the team for future decision-making.

Qualitative data from the external participants continues to be relevant in this example as well as future work within the Collaborative. Upon completion of the study phase and the establishment of baseline data, the final stage of the improvement cycle is enacted.

The final element of the improvement cycle, *Act*, has a design concept intended to be fast iterative cycles encompassing design, engineering and development (Bryk, et al., 2010). “The idea is to test fast, fail fast and early, learn and improve” (p. 28). The preceding statement is brief, but the verbiage suggests a course of action counterintuitive to most educational change efforts. A hallmark of this phase is revision and refinement. Additionally, the lens remains focused on systems thinking in terms of the revision and refinement. Instead of examining behaviors of *people* in the system, the conversation returns to how the new intervention, tool or process will impact the current system and context. Taking pause to connect the revisions, tools developed, and status of interventions with successful hiring practices outside of the Rockland Area School District will increase the likelihood of efficacy at scale.

Two items deserve consideration as the Collaborative proposes the first “act-event” to attempt system improvement. First, expertise from participants external to the district could contribute transferrable strategies for interviewing protocols. Additionally, external data collectors/observers provide an important reflection of internal practices and a counter narrative of district processes. Information gleaned from the study phase supports selecting one facet of the interview process upon which to intervene. Determining the process on which to “act” could be based on a perceived importance (which part of this needs addressed first); likelihood of quickest improvement (will see immediate benefit); or long-term impact (where we see sustainable improvement) to name a few. It is within this learning opportunity where

participants will reference the common language, establish targets and previously negotiated aims of improvement. Once the *act* cycle is completed, participants will again convene and determine the effectiveness of the intervention using data. Given that not every attempt will yield results considered successful, educational leaders must prepare to acknowledge emotional components of change. For most educational leaders, they will also require support and mentorship as leading improvement science efforts is not part of traditional training programs. Ideally, even improvement cycles deemed unsuccessful yield rich information to spawn the next improvement cycle. In the converse, judiciously revising and refining in the post-act discussions will lead to determinations as to whether or not changing the system yielded actual improvement. As those decisions are laden with perspective and perception, the ability to access, interpret, internalize and operationalize empirical data will be critical to subsequent steps.

The aforementioned explanation of the plan-do-study-act cycle and potential model of implementation within the Rockland Learning and Leading Collaborative illustrates that assessment data generated test the claim of the designs. With subsequent iterations, additional claims will be tested, recalibrated, and reintroduced with measured systems improvement as the ultimate end. Concurrently, the Collaborative has imbedded processes by which data are rendered into evidence and evidence into accounts of the design. Captured through tools (i.e. checklists, interview protocols, established selection criteria, multiple interview cycles) that can be used with both internal and external stakeholders, the appreciation of evidence gathered involves not only empirical data surrounding the variability in the selection, placement and learning of teachers, but narratives surrounding the process. Although familiarity with mechanics of improvement efforts is important, practitioners desire workable information that speaks to the “behind the scenes” nuances of change. The methods by which data from the

improvement cycles are rendered into evidence and evidence into accounts can include impact on participants. One purpose of the designs for learning and action is to create what is assessed and measured based on the specific context. Specific examples of what will be assessed and measured are defined by those participating in the design. Stipulating how to operationalize these designs are shared as this work moves forward.

Operationalizing the Designs for Learning and Action

Formalized research projects are a means by which data from the Rockland Collaborative are rendered into evidence which leads to accounts of the design. In an effort to obtain contextually significant information to support the designs for learning and action and potential generative impacts, a small-scale qualitative study was conducted to determine the use of strengths-based theory in the selection and placement of teachers. Four currently-seated Superintendents of Schools participated in the study. The questionnaire used during the interview is located in the appendix section of this document. For this scholar-practitioner, engagement in the research served a dual purpose. First, the process of constructing and conducting a research effort based on Institutional Research Board (IRB) protocols provided a strong foundation for future research efforts. Secondly, collecting data from the field and making it useable in other contexts is important to progress for this professional agenda. The following results may not meet the standard of statistical significance; however they provide practical significance to those in the field.

Three important themes were generated from the research that I conducted. Each theme decidedly supports facets of the problem of practice, considerations for the designs for learning and action and proposed generative impacts. Initially, while not formally defining strengths-based theory within his/her practice of hiring, each Superintendent of Schools was able to

articulate the overarching concept and identify strengths or characteristics of good teachers. Interestingly, all participants displayed hesitance as to whether they were defining the theory correctly and noted a shared understanding of the term strengths-based would have been beneficial. Strengths noted, across all participants, included solid content knowledge, ability to relate to children and excellent communication skills. These findings support information provided by The Gallup Organization in relation to strengths, skills and talents of the most effective teachers. While responses surrounding strengths were consistent, absent was a quantifiable method for determining these skills in applicants or currently practicing teachers. No specific assessment measures were used; however there were several references to having a “gut feeling” about whether or not a candidate would be a good teacher. With the high-stakes connection to Educator Effectiveness within the Commonwealth of Pennsylvania, and across the nation, methods by which to determine these strengths in potential candidates and address with practicing teachers would be valuable to those in the field.

Next, the Superintendents unanimously connected the variability in teacher performance to the teacher preparation program in which they were enrolled. Certain programs received higher praise than others. Ancillary contributing factors included how teachers engaged in personal and professional development outside of the official school time, and whether or not they had family members who were educators. Development of a process for dialogue with higher education that would better define and measure elements of effective teacher preparation programs would be of value not only to Colleges of Education, but to school systems in more purposeful and intentional placement of pre-service teachers.

The final significant theme surrounded obstacles faced by Superintendents when selecting and placing teachers. This query yielded the greatest variety in answers, although

underlying tones were similar. Clearly, all Superintendents of Schools wanted the very best teachers hired and in classrooms. Elements such as politics, geographic locations of the districts and institutional structures (including collective bargaining agreements) were noted as barriers. Shared responsibility for selecting teachers was imbedded within each district as Superintendent's spoke to the use of hiring teams which included teachers and administrators. Of particular note was the importance of input from the building level administrator. All felt the building principal should have a significant role in teacher selection. Given those stated obstacles, employing concepts of system disruption espoused by Christensen et al., (2006, 2008) or cage busting efforts noted by Hess (2013) may empower leaders to mitigate the obstacles for the betterment of teacher selection and placement. The qualitative data collected will inform the work of this scholar-practitioner and provide a real-world context to the Rockland design for consideration in forming additional designs for learning and action. The program of study encourages usability of designs for learning and action across contexts. Illustrations of how these designs serve leaders, learners and communities are captured in the next section.

Designs that Serve Leaders, Learners and Communities

Transforming educational leadership as a matter of social justice undergirds the work of the ProDEL program. Within the construct of designs for learning and action, care is taken to ensure that process, product and content from the resulting designs places value ethically and in service to learners and marginalized communities as well as act a basis for effective advocacy for educational equity and excellence.

Greater understanding of strengths-based theory and the system of selecting, training and placing teachers will yield opportunities to initiate networked improvement communities. The Rockland Learning and Leading Collaborative originated from an acknowledgment of high-

leverage systems issues surrounding the selection, placement and learning of practicing and aspiring teachers and the resulting inequitable learning opportunities for students. Understanding that students are the primary benefactors of systems-improvement in this learning space, stakeholders in the Rockland Collaborative recognize the guiding premise is placing quality teachers in all classrooms. If successful, collateral benefits may include cost savings or increased efficiency of systems, but caution is taken as to avoid those outcomes as the primary driver of improvement. Learners within this process also include adults engaging in the work of the design. Ensuring representation from historically marginalized communities provides a voice for the students and families as well as opportunities to gain understanding of the social and cultural workings of the system. Involvement of stakeholders from marginalized communities also provides a reflective mirror to the dangers of imposing privileged solutions and creates a dialogue of understanding, shared responsibility and empowerment.

A hallmark of the design for learning and action is the creation of Networked Improvement Communities (NIC) as the vehicle by which contemporary problems are addressed; interventions are identified, tested and refined with the intention of improvement to scale. Specific interventions are generated based on the work and focus of a particular NIC. One example of an intervention would be a formalized plan for establishing differentiated professional development based on strengths and talents of a grade level team or department. A unique characteristic of the networked improvement community is the importance the social structure plays in the implementation of systems improvement (Dolle, Gomez, Russell & Bryk, 2013). “NICs are a social mechanism through which the collaborative designs and practical theories produced by designed-based implementation research (DBIR) can become live resources for the improvement of systems” (Dolle, et al., 2013, p. 444). Although referred to in the

literature as a *professional* network, within the Rockland design, stakeholders who have an investment in teacher selection and placement are considered professionals.

Education systems rarely offer opportunities in this capacity for parents to leverage their influence. Parents and community members possess knowledge, skills, and expertise when it comes to the interests and education of their children. While some lack occupations or formal education that would traditionally define them as “professionals,” within this context they are considered peers among those with a formal education and occupations. Acknowledgement and engagement of parents, consideration of his/her interest and practical skill sets, and intentionally including those from marginalized communities addresses equity issues. Ladson-Billings (2006) and Delpit (1998) reference the importance of cultural context when educating pre-service teachers as well as including cultural competence within classrooms. It is my hope that the work of this professional agenda creates opportunities for more involvement of parents in this arena.

The racial composition of many rural school districts in Pennsylvania is predominantly Caucasian. As such, equity issues surrounding race are less prevalent within the system. With the aim of improvement science to be interventions developed to scale, with reliability for use in a variety of contexts, schools systems where marginalized communities are defined by race could implement this design process to address equity issues. In this educational and community context, marginalized communities are defined as those with less money, power, social and cultural capital. The subtle nuances of accessing the system are not within the lexicon of those from marginalized communities. The Collaborative not only seeks to examine selection and learning of teachers but the conditions and criteria by which teachers are placed within buildings and classrooms. Understanding, assessing and addressing the variability via the constructs of the designs for learning and action places value ethically and in service to learners.

The work of Ladson-Billings (1999), Darling-Hammond (2006, 2010), and Resta (2001) supports teacher effectiveness and the direct impact on student achievement. Educational practice for decades notes the repetition of the least experienced teachers placed with the most educationally needy students. Determining the strengths and skill sets of aspiring and practicing teachers, understanding the systems issues that impact how teachers are selected and placed and using that information to make sound decisions regarding human capital management are done with the end of equalizing educational opportunities for students. As the design is implemented, placing value on deliverables from the improvement cycles via the lens of equity for students is central.

The designs for learning and action not only places value in service of the learners within the design, but the students who will ultimately benefit from the system improvement. If we understand the system and the places where we can leverage change, it will allow for increased efficiency, effectiveness, engagement and educational excellence. To better illustrate this argument, let's refer to the example discussed earlier in this section.

The Rockland Learning and Leading Collaborative looks to examine the methods by which candidates are selected for an interview. Internal and external stakeholders have come to learn about the interview process via the designs. Multiple discoveries have been made about the current system that allows various pathways to the interview. Inefficiencies within the process are noted. Via improvement cycles, strategically designed interventions were implemented at a point in the process where impact was predicted. As a result of the series of improvement cycles, changes are made within the designs and subsequent cycles are launched ultimately leading to more efficient systems, hiring and placing of effective teachers and engagement of students within the learning environment. Taking this improvement cycle to reliability at scale across

contexts is the basis for equity and excellence. Advocacy is born from the narrative of the design experience and the lessons learned through the implementation of the improvement cycles.

Unlike previous educational reform efforts, the advocacy stemming from this framework not only resonates from educators, but is also shared by non-education stakeholders involved in the networked improvement community. With the equity, advocacy and considerations for marginalized communities addressed, the discourse moves to the continuous cycles of improvement within the Rockland Collaborative.

Engagement in the Collaborative is done with a new group or the same group with a different understanding/perspective. The development of the Collaborative included purposeful selection of participants. The intent was two-fold. First, multiple perspectives and expertise are needed within the improvement community in order to achieve any substantive systems change. Second, representation included those often absent from the discussion of teaching, learning and equitable outcomes for students. Selection of the initial group of stakeholders does not indicate mutual exclusivity for members within the Rockland Collaborative or specific improvement cycles. Given the Rockland Collaborative consists of four components, concurrent improvement cycles could be occurring which would afford the chance for continuous cycles of improvement and varying participants.

A design feature of the networked improvement communities is the creation of a structured network of education professionals, collaborating with researchers and channeling the innovative capacities of those on the front lines (Dolle, et al., 2013, p. 445). The professional leadership of the improvement community is critical to both facets of the teams working on the process; those engaging in the research aspects as well as those implementing in the field. The professional leadership is also fundamental to operationalizing and normalizing the conceptual

framework of measuring improvement at speed. Despite the fact that teachers engage in changing instructional practice in vivo based on the learning created in a particular lesson, the concept of test fast, fail fast and early, learn and improve (Bryk, et al., 2010 p. 28) is not typically reflected upon in his/her professional practice. Analysis of interventions is usually measured over periods of months/years not days/weeks as is advocated by improvement science. The ability to identify one, small measurable idea of change; implement the change over a brief period of time; collect data; and reflect on the results as an integral part of professional practice would be a system change to current practices in the Rockland as well as most other educational settings. The professional leadership within the networked improvement community remains the constant, regardless of the other participants, and provides a cumulative narrative (past, present and future) of the processes engaged; outcomes achieved, and structures discussions surrounding future work. The investment of time, talent and energy in this process should not remain in isolation. Designs as continuous learning opportunities are important and relevant to the legacy of the work.

Designs as Continuous Learning Opportunities

The structure of the design for learning and action allows for continuous improvement based on predetermined targets, methods of implementation and data collection methods. This scholar-practitioner would argue the most salient measure of continuous improvement rests with the discourse and problem-disciplined inquiry as a part of professional practice resulting from the improvement cycle. Education is replete with improvement efforts but has lacked the structured reflective practices that assist networks of learners achieve the aim of the intervention. Teachers and educational leaders have readily accepted the reviews of *outsiders* when rating programs or interventions as successful and failed to consider whether the context of the

particular school/district would allow for sustainability. When the focus shifts from accepting the promises of outside interventions to creating improvements that directly relate to practice within a classroom, school, or district, the stakes immediately increase. The Rockland Learning and Leading Collaborative intentionally focuses on making efforts and activities “public and coordinated” (Dolle, et al., 2013, p. 447) to allow for the greatest potential of reliability to scale and applicability across contexts. Given a structured plan for the implementation, data collection and review of the data generated, the intended goal is “getting better at getting better” (Englebart, 2003). With the platform for continuous cycles of improvement within the designs established, the next phase of work turns to examining the use of the designs within the field.

Adults will engage and invest in activities when they see connections to their daily practice. The pervasive skepticism of education reform by those within the system is warranted. Annual debuts of new programs guaranteed to improve the latest deficiency within education result in countless hours of work for teachers and administrators with little to show for the investment and few (if any) substantive benefits for students. Upon initial glance, the Rockland Collaborative may well appear yet another new and passing initiative. Demonstrating the usability within the field is foundational to successful implementation and future efforts toward engaging improvement science frameworks. The Rockland design is structured to maximize the usability within the field by connecting practical theory to real-world practice.

The incrementally designed Collaborative allows entry into the work with minimal risk or time commitment for the stakeholder and produces usable information at each level of action designed to increase capacity and improve the problem of practice. A continuous feedback loop is created using data, discussion, reflection and implementation frameworks and supports. The purpose is dual in nature. First, to create a culture within the learning environment that allows

the expertise of all participants to be used to fullest extent possible. The design as a learning opportunity about all facets of improvement science, and its application, is in and of itself, usable in the field. Once participants gain a conceptual understanding of improvement science, engagement in that type of learning can potentially occur in other educational contexts. With each intervention proposed and implemented, real time data will be collected, analyzed and discussed. Direct applications to the systems in which the educators work will occur as both experiential and operational information will be realized. Additionally, an expectation of the Rockland design is engagement in significant learning where assumptions are challenged and work is made public. The charge for stakeholders to discuss the designs process and its results with colleagues will solidify the usability in the field for both the participants and those with whom the information is shared.

The second purpose for continuous feedback allows for intentional decision-making about future improvement cycles and determining if the change is actually an *improvement*. Whether the leverage point is in the interview/hiring process; placing teachers once hired; creating instructional teams/departments; or creating meaningful professional development, the interventions selected will have relevance for the participants. Regardless of perceived success of any or all improvement cycles, data will be used to inform practice, examine systems, and make decisions about how educational opportunities for students are impacted by the methods by teachers are placed in classrooms. By selecting small, measurable interventions the potential to replicate across contexts with reliability, at scale, will demonstrate the usability in the field.

The work of the Rockland Learning and Leading Collaborative constitutes more than just quantifiable data points. The statistics are enlivened by a rich narrative of the change process within a multifaceted system represented by stakeholders both internal and external to the

district. The development of a common language, determining targets representative of the whole versus an individual, and accountability to the group creates a professional network situated to support the profoundly challenging work of systems change. The ability to chronicle the journey of that change and share across contexts provides a substantive benefit to those within the Rockland Area School District system as well as other education institutions. Oftentimes, educational leaders want to know the affective processes that occurred concurrently with the mechanics of systems change. A view of the unintended consequences (both positive and negative) allows leaders to anticipate potential barriers to success when implementing designs within their context. Dolle, et al., (2013) posit “this profound shift in organizational culture and professional identity, from largely private and uncoordinated efforts to more public and highly coordinated activity is the single biggest challenge to forming a mature and sustainable NIC” (pp. 47-48).

In all school districts, there are contemporary situations where the use of strengths-based theoretical frameworks could provide a lever for system change benefitting students and teachers. Many educational leaders within Pennsylvania were recently faced with the closing of schools and the need to reassign staff to the remaining district buildings. These closures result in teachers being relocated to several other schools within the district (based on certification and need) and the formation of new teaching teams. In situations like these, not only do teachers from other buildings join established teaching teams, but within the building, new teaching teams emerged due to the internal reassignment of teachers. These newly created teams spawned a variety of dynamics and situations which directly influenced productivity, job satisfaction, and culture. Student achievement was likely impacted to some degree. Although individuals had a sense of his/her strengths, and the leadership team discussed possible placement scenarios, the

driving systems influence of the staff reassignment in most systems is the collective bargaining agreement. Often absent from the conversation are ways to maximize effective teaching teams, potential side effects of teaching teams that might not form productive relationships and impact on student outcomes.

The lack of this discourse is not reflective of poor leadership or indifference for the needs of staff, students or the community. Perhaps it is the lack of a structure that allowed analysis of options to address this situation in ways counter to past practice. Given that shifts within teaching teams happen with regularity in districts across the board, taking pause to assess the strengths of the teachers and teams may assist in making placement decisions that not only maximize the learning of the students, but place teachers in situations where his/her strengths can be best actualized. When system change occurs, and paradigms shift, it is hoped that the legacy provides structures that support decision-making that is best for students and outlast the people who created the structures. Outcomes from these designs possess the potential for applicability across other contexts and usability in the field.

In summation, this segment of the dissertation in practice established the synthesis of theory and practical application. Examples of root causes, plan-do-study-act cycles and stakeholder engagement were offered as possible means by which to spark the improvement process. The progression of significant learning requires an investment of time and talent with the hope of a deeper understanding of the journey that lies ahead. With an established structure for the improvement efforts, our discussion continues to proposed generative impacts.

Part V: Testing the Plan

“We all have a choice to make: to accept passively the changes that are thrown at us or to use our resources to create our own changes resulting in improvement” (Langley, et al. p. xv).

As stakeholders in the work, being empowered to effect change is critical. In Part V, the focus shifts to what is termed generative impacts. At the onset, Part V sets the stage for the generative impacts and provides definitions. Improvement science is offered as the platform for the generative impacts that aim to benefit individuals, systems and leaders associated with the problem of practice. The three proposed generative impacts are then introduced and provide a 360-degree view of stakeholders, processes and systems impacted. The discourse defines and contextually measures impacts of the GI’s; demonstrates changes in the practices of educational leadership; and provides operationalized scenarios addressing the aims of educational improvement that can be transferred to other contexts. The generative impacts and their relationship to social justice and improvement are discussed in the final two sections. With anticipated generative impacts providing multiple opportunities to system improvement, input from various perspectives within the school-academy-community partnership will bring a multidisciplinary investment.

Generative Impacts and Setting the Stage

The professional and intellectual traverse captured by this document illustrates a high-leverage contemporary problem of practice impacting schools and students on a local, state and national level. The designs for learning, known as the Rockland Learning and Leading Collaborative, contributes to the framework by which this problem has been unpacked allowing root causes and drivers to be the catapult for system interventions intended to produce change resulting in improvement. The intention of the final learning platform, offered as generative

impacts, are deliverables evidenced as operational, measurable components used to create cultures, systems and structures where the problem is continuously addressed.

Realizing this problem of practice has long been embedded in education, the professional agenda and vision of this scholar practitioner combines a sense of focus and priority to make *improvements* to the condition rather than *solving* the problem. The act of solving suggests a permanent, finite and corrective response to a situation. Solving a problem implies the situation is *over* and the result is *better*. “At base here is a natural human tendency to grasp for promising solutions or best practices without fully understanding how such ‘solutions’ must be integrated with others solutions and pre-existing organizational conditions” (Bryk, et al., 2010, p. 14). For this work, the challenge of improving the condition brings to bear a longer and more intense commitment with the need for sustainability at scale across contexts. Integral to each consideration within generative impacts is the means by which stakeholders will be engaged to determine the evidence necessary to demonstrate improvement. This scholar practitioner proposes the likelihood of all students having equitable learning opportunities increases if stakeholders are purposeful, intentional and committed to the selection, placement and learning of practicing and aspiring teachers. In the next section, improvement science is introduced as the platform for the generative impacts.

Improvement Science as a Platform

Research efforts of the education community have generally taken one of two tracks. According to Bryk, et al. (2010), the traditional format typically provides a university based researcher using a discipline theory to develop an intervention which is then piloted in a school or district, and ultimately put through the paces of randomized control trials to assist in creating a product or process that can be used across the board. Educational resources often reference this

type of research format as an affirmation for an increased likelihood of success if applied. A key provision is the implementation of the process or product with fidelity. The second research format is described as action-research and differs from traditional in that it is practitioner specific and intended to have a highly localized context both for the research and the application. Bryk, et al. (2010) note that while based in theory and practice, the structures governing protocols for evidence collection are less formalized. The real-time benefit of this type of research for practitioners is the high level of interest to the participants and the contextual impact and specificity. Transferability across contexts is unlikely and generally unsuccessful.

Attempting to bridge the divide between established research practices and the realities of practice in the field, the Carnegie Foundation via the work of Bryk, et al., (2010) have focused efforts toward the intentional combining of the strengths of both methodologies to create a research endeavor known as Improvement Science. Honoring the conceptual strength and methodology of traditional research while including the context specific information and practitioner insight, Improvement Science intends to facilitate continuous cycles of learning, collect data and measure effects across contexts. The proposed generative impacts for this professional agenda are spawned from improvement science designs and will, in turn, produce information to support cross-contextual applicability. This framework provides evidence for improving conditions of a problem versus problem-solving.

The identification of generative impacts was purposeful, intentional and considered the context in which implementation would occur. All school systems have departments and processes that operate with varying degrees of efficiency. Of importance to note is although the problem of practice has applicability, inherent strengths existing within this system deserve acknowledgement. Human capital, capacity for change and community investment provides

important staging for improvement. As a result of those important cornerstones, the author's professional agenda addresses impacts that touch not only the school, academy and community partnership but individual stakeholders as well.

Generative Impacts for Individuals, Systems and Leaders

The generative impacts described below are organized into three separate scenarios stemming from the designs for learning and action. They address individual, leadership and systemic processes. With anticipated generative impacts providing multiple opportunities to system improvement, input from various perspectives within the school-community-academy partnership will add to a multidisciplinary investment.

Generative Impact #1: Multiple measures of strengths, talents and skills of effective teaching as a strategic tool for teacher placement and professional development. The premise of the problem of practice and work of the Rockland Collaborative strongly supports the connection between identified talents and skills sets and evidence of effective teaching. Intuitively people sense when they are performing at maximum levels, when they are most effective and are in synchronicity with inherent talents and strengths. Parents, students and educational leaders can also identify this with teaching and those involved in the profession. When these conditions are present within a learning environment, one cannot help but be drawn in to the moment. Conversely, when the skill set of the instructor is incongruent with commonly accepted talents and skills of effective teaching, it is glaringly apparent and generally results in the artificial construction of talents and skills that are underdeveloped or absent. Not only is disruption created for the teacher, but students are robbed of an opportunity to experience a teacher who instructs from a truly developed strengths base. This GI seeks to intentionally

acknowledge those strengths, honor the gut instincts of recognizing good teaching while incorporating a metric that can be applied to other contexts.

Quantitative and qualitative research supports the measurement of this impact. As previously discussed, Gordon (2002) posits that within the scope of Gallup research, using student and principal ratings, the best teachers had measurable talents in the areas of Motivation, Relationships and Student Learning. Defining and operationalizing the aforementioned three themes for the Rockland Area School District involves discourse and engagement from all stakeholders. Given the variety of student learning needs, the themes/talents would likely operationalize differently, however the core beliefs or components remain constant. Multiple instruments, with varying degrees of specificity, can be used to capture this information. Once defined and collected, this information can then be benchmarked against student data points to explore connections between “measurable talents of the best teachers” and achievement on standardized measures.

The data rich environment of contemporary educational systems provides multiple statistical points to analyze and triangulate leading to correlations, inferences and discussions connecting student growth and achievement. Beginning in 2014, data from Pennsylvania System of Student Assessment (PSSA), Pennsylvania Value Added Assessment System (PVAAS) and Pennsylvania Value Added Assessment System Teacher Specific Reporting will be incorporated as part of the overall rating for teachers in the Commonwealth of PA ([Pennsylvania], 2013). Additionally, the Teacher Effectiveness Framework requires ratings which could support evidence of the teaching strengths in Motivation of Students, Relationship Building and Student Learning. While the intent of Act 82 is evaluative, this framework provides rich opportunities for discussions of what effective teaching practices look like. Using existing data from the work of

educational researchers, and benchmarking against the qualities defined by the Collaborative stakeholders, discussions can occur surrounding what educators appear to be impacting student achievement and success and if that supports strengths-based approach. Data points used to measure student achievement include Pennsylvania System of School Assessment data, Pennsylvania Value Added Assessment System data, attendance rates, graduation rates and any other achievement measures determined by the stakeholders. A long-term legacy of the generative impact will be to capture and align the data points of what successful educators are doing and replicate within departments, teaching teams, schools and districts.

Quantitative research provides a pragmatic lens to the work, whereas the power of the narrative as demonstrated through qualitative research is equally as compelling. As evidenced by Ladson-Billings (2009) in the text *The Dreamkeepers~ Successful Teachers of African American Children*, accounts illustrate what happens when schools and teachers get it right. Ladson-Billings studied teachers of different demographics and teaching assignments and curiously noted they had few obvious similarities, but two qualities that explained success. She identified those as experience and a transformative moment in their lives as teachers that forced them to reassess why they did their work. Ladson-Billings (2009) suggests three concurrent themes also present were a teacher's strong-identification with the profession of teaching; capitalizing on social relationships within the classroom to create communities of learners; and conceiving of knowledge different from their colleagues. Ladson-Billings (2009) suggests "thus successful teachers, like the wise men of the Bible, travel a different route to ensure the growth and development of their students" (p. 17). Not only did teachers possess a pedagogical competence, but a cultural competence as well. Measuring the impact via qualitative means

would include self-reflection; discussion with peers; and conferencing with principals within the context of observations, professional development and goal-setting.

This generative impact supports the development of NICs surrounding the notion of strengths-based theory and effective teaching practices both organically and purposefully. Informally, discussion about strengths and professional practice will quickly occur. As the comfort level with self-disclosure increases and is combined with structured frameworks to illustrate evidence that supports effective teaching, strengths (as a metric) will be legitimized. Given the importance of the social organization of networked improvement community, a critical element to the sustainability of this impact will be the creation of a safe forum in which to discuss strengths in relation to teaching and student achievement. Additionally, the collection of perceptual data from students, parents and community members about the strengths, skills and talents of effective teachers serves as both reflection and reference for courageous conversations about teachers and educational leaders. The networked improvement community remains ongoing and sustainable in that context of schools and districts is fluid and requires ongoing evaluation of needs.

Next to the teacher in the classroom, the most important driver of educational improvement is the principal. From pedagogy to school culture, the tone set by the principal has a significant impact. The unique vantage point of the principal offers the opportunity to determine the most effective ways to maximize the human capital within his/her building. The generative impact leverages change in the practice of educational leadership in two meaningful ways. First, it affords leaders the opportunity to consider a metric other than grades and PRAXIS testing when hiring and placing teachers. When student and parent voices are considered in terms of this metric, it permits the definition of effective teachers to include a

community context. In addition, as new teacher evaluation systems are mandated by state Departments of Education, principals can use them not only in an evaluative manner, but to explore strengths and talents of teachers and other instructional staff. Effective educational leaders have always recognized and leveraged the strengths of the teams in which they lead. Making it a purposeful part of the educational leadership framework in all schools works toward improving the condition of variability of teacher effectiveness. Isolating and understanding precipitating factors to the variability in teacher performance is a critical part of the work done in the root cause analyses conducted when the designs for learning and action are formulated. An ultimate use of this information would be to backward map reasons for the variability and determine the source of the variation. Given that strong content knowledge, well-developed pedagogical skill and relationship building are skills linked to effective teachers, making determinations about where variability occurs become relevant. Variability itself is naturally occurring. Variability within excellence is the standard to be met.

The second outcome this generative impact provides to the practice of educational leadership is the ability to craft ongoing and meaningful professional development using strengths-based theory as a foundation. Continuous learning for teachers supports improved student outcomes as well as enhancing job satisfaction. Creating individual and larger group learning opportunities that are job-embedded and impact student outcomes increase the likelihood of higher levels of professional engagement. With an established generative impact that illuminates strengths via multiple measures, expanding in scope and impact is possible. When educational leaders have a deep understanding of the strengths of their faculty, that information can be used to best leverage success for students. For teachers who do not display strength in content area knowledge, pedagogy and/or relationship building with students, the

burden falls to educational leaders to provide the supports necessary to improve performance in one or all of the areas. By recognizing and realizing the importance of educational leaders, the next generative impact reveals the pivotal role educational leaders play in selecting and placing teachers.

Generative impact #2: Educational leaders as change agents in hiring, placing and developing aspiring and practicing teachers. Second to the teacher in the classroom, the most influential driver of student achievement is the building leader. The culture established by the principal represents expectations for teaching, learning and developing for all members of the school community. Additionally, the relationship developed between teachers and principals set the stage for mentoring new teachers to the field as well as enriching experienced teachers who have invested in the profession. Daily demands placed on building principals often shift precious resources and efforts to address tasks considered more *management-driven* versus *leadership-driven*. Equipping educational leaders with the skills necessary to see themselves as integral in human capital management is connected to this generative impact.

Creation of this impact is timely given the Pennsylvania Department of Education establishment of a Principal Effectiveness Rubric with a projected implementation beginning in the 2014-15 school year (Measuring, 2010). Four domains included in the rubric evaluate Strategic and Cultural Leadership; Systems Leadership; Leadership for Learning; and Professional and Community Leadership. This rubric generates a numerical score and provides a quantitative piece of data. This rubric affords a measurement opportunity for this impact within the area of Systems Leadership 2a. Leverages human and financial resources (Measuring, 2010). While specific language determines the quantitative rating received by a principal, a capacity-building dialogue can develop between principals and central office administrative supervisors

and lead to qualitative measures including self-reflection and narratives as to the role of principals as human capital managers.

Another proposed measure of this generative impact connects to mentoring frameworks developed for newly hired teachers. The Carnegie Foundation for the Advancement of Teaching (Building, n.d.) is investing in efforts intended for the “development and retention of effective teachers in our nation’s schools” known as Building a Teaching Effectiveness Network-BTEN (Building, n.d.). One component of the Building Teacher Effectiveness Network platform works to “improve the districts systems and processes that support new teacher development” (Section #1). While most new teacher induction programs include the assignment of a mentor-teacher, they fall short of structuring supports provided by regular and meaningful contact with administrators. Although principals are responsible for observation of teachers within the classroom, new teachers note that developing a rapport with principals is important to their development and continuation within the profession.

My experience as a building leader confirms the need for investing in new teachers not only from a pedagogical standpoint but from an affective one as well. The pressure for new teachers to appear all-knowing creates barriers to asking for assistance. An established rapport between new teacher and principal increases the likelihood of the teacher asking for help, as well as the principal noticing a struggling teacher. Development of trusting relationships creates forums for courageous conversations surrounding teaching and learning. Measuring impact on this level could be captured via self-reporting and/or the creation of discussion frameworks for teacher/principal conferences. Staratt (2004) offers, “in the moral act of knowing, the knower accepts the responsibility of coming to know the known *carefully*- that is, full care for the integrity of the known” (p. 77).

A final measurement of this generative impact is illustrated in the qualitative research conducted for this work and could be continued within the professional agenda. As previously noted by Superintendents who participated in the research study, the input of building principals was a key factor in their decision-making regarding the hiring of new teachers. Further exploration at this level would be to obtain specific information from the principals as to what types of observable behaviors, actions or data points were used to make recommendations about which teachers to hire. This would help to isolate whether it was data or gut feelings that were used to make the recommendations. For future research efforts, another layer of questioning could be added to allow for interviewing principals. Given the reported influence of the principal in hiring decisions for teaching staff, great care should be taken when selecting quality leaders. Reliable measures of leadership skills must replace feelings or instincts when selecting candidates for these positions. Questions for consideration include: Are leaders equipped with the skills necessary to engage in hiring processes that support quality teachers in every classroom? Do principal training programs include coursework in human capital management and strategic use of human resources? What is the forum for discussions surrounding hiring systems that are in place? Significant learning often begins by engaging with those who have walked the path before us. Capturing data on those hires thought to be successful can shed light on systems issues that allow for replication at scale. While it is hoped that common measures of teachers who are successful would include those who possess strong content knowledge, pedagogical skills and develop positive and motivational relationships with students, additional measures of success would be determined by the context and needs of the district. That information can then be taken back to the Rockland Learning and Leading Collaborative for use in developing additional improvement cycles.

This generative impact leverages change in the practice of educational leadership and the establishment of network improvement communities concurrently. Those in leadership roles are often isolated and struggle with support from central office administrators. As this impact seeks to disrupt leadership paradigms, an imperative exists to provide support to those leaders willing to challenge age-old practices and accept increased levels of risk. Perhaps the first consideration for both of these is the sense of presence in the change process and networked improvement community. Staratt (2009) suggests the virtue of *presence* is the link we are seeking which connects the virtues of authenticity and responsibility. Staratt (2009) posits three ways of being present which undergirds an ethical dynamic for educational leaders. Those include *affirming* presence, *critical* presence and *enabling* presence. Affirming presence is defined as “unconditional positive regard”; critical presence is defined as “an encounter with the other resulting in either a block to authentic communication on our part or the part of another. It calls on us to name the problem that stands between us and the other” and finally, enabling presence is best described as “I can’t do it alone, you can’t do it alone, only we can do it” (Staratt, 2009, p. 97).

Recognizing change in the practice of educational leadership as an intended outcome, individual leaders making connections to the three degrees of presence supports the creation of leadership networked improvement communities versus working in isolation. Systems improvement affords opportunities for good people to do good work versus a hero/heroine saving the day. An improvement community centered on supporting leadership practices that leverage change on the system allows for individual skill development; sharing and supporting of best practices; authentic communication and capacity building. “Capacity building is not simply a matter of policy implementation. It is also a matter of deep conviction about the ways in which

human beings ought to be present to one another and bringing that conviction into the institutional setting of the school” (Staratt, 2009, p. 100).

With the creation of successful leadership networked improvement communities and the subsequent impacts on student achievement and teacher placement, inclusion of leaders from other disciplines provides a 360-degree view on the most strategic areas to leverage change. This networked improvement community challenges educational leaders to build capacity as systems-thinkers and policy drivers. Repurposing time, talent and financial resources from improving individuals toward improving systems and policies supports increased potential for larger scale reform efforts. Authors with roots in education view systems theory differently from the ethos of Hess (2013) and Christensen, et al., (2006, 2008) who argue that more internal and external disruption is required to effect substantive change. The networked improvement community works to synthesize the best from these visionaries while exercising caution as to avoid repetitious behaviors of the past.

The image of educational leaders as policy drivers is not often discussed. This author argues the lack of engagement of educational leader as policy driver is two-fold. First, educational leaders depth of knowledge in the area of policy is limited. Often centered on policy implementation versus historical context or genesis of new policy, educational leaders may perceive policy as something that happens to them rather than a process in which they can become an active participant. Next, examples of educational leaders as policy drivers are limited. One from which to build is that of former Superintendent of Schools for Montgomery County Maryland, Dr. Jerry Weast (1998-2010). When faced with academic concerns and disparities with achievement of minority students, his focus was systems-based and policy driven. Moving from the efforts of individuals to system change resulted in substantial impact

on improving student outcomes (Weast, 2009). To achieve better outcomes, Dr. Weast empowered his teachers and staff, reframed the problem of low achievement as not only impacting low income students/families but the affluent communities as well, and considered alternate ways to interpret collective bargaining agreements (Weast, 2009). As this generative impact leadership focused networked improvement community develops, efforts to empower leaders to be systems thinkers and policy drivers becomes a priority. The final generative impact turns attention toward both individual and group self-efficacy for teachers and how that impacts the problem of practice.

Generative Impact #3: Teacher efficacy and the impact on professional growth and student outcomes. The generative impacts for this professional agenda demonstrate a progression from a macro perspective (identification of strengths, skills and talents), to capacity building for educational leaders, and finally to impacts with the greatest potential to reach students in the classroom. Considering teacher efficacy in the context of both individual professional growth and impact on student outcomes offers a robust opportunity for improvement. Since an in-depth discussion regarding the concept of self-efficacy is provided in the theoretical frameworks section of this paper, this section will focus on the potential outcomes of the increased efficacious behavior.

A keystone of the agenda is engagement of the school, academy and community partnership in significant learning. Attracting stakeholders to the work of addressing the problem of practice includes providing opportunities to become invested and develop belief systems and evidence structures demonstrating the investment produces improvement. Supposing the creation of this type of learning environment via the Rockland Collaborative, or other designs for

learning and action, does in fact create this dynamic learning environment, it automatically sets the stage for a sense of self-efficacy for those involved.

Measurement of concepts such as self-efficacy requires a level of open-mindedness given self-efficacy is subjective in nature. For this impact, teacher self-reporting through both structured means and narratives would be considered. Attention should be given to explore reports of low self-efficacy in relation to involvement in the Collaborative. Given that improving capacities of teaching teams and departments is an intended outcome of improving the condition of the problem of practice, data is collected to track teacher transfers between or within buildings. Examining patterns of transfer or stability is documented. Measuring the experiences of students within the classroom could be used to provide feedback as to self-efficacious behavior displayed by teachers. Again, examining student input across teaching teams or grade levels could potentially illuminate patterns of engaged teachers. The ultimate measure of teacher self-efficacy will be evidenced with continued work in the Collaborative design and resulting improvement efforts.

Ideally, increased levels of teacher self-efficacy will leverage change in the practice of educational leadership. In my work as an educational leader, the faculty with whom I worked that reported higher levels of self-efficacy demonstrated increased levels of engagement in both his/her own professional growth as well as the achievement of students. For leaders, having teachers who are engaged are willing to become involved in change efforts have a higher level of resiliency when met with roadblocks during implementation periods. The opportunities for educational leaders to engage in distributive leadership frameworks also increase given the belief-systems of the teachers. Educational leaders can leverage and empower teachers to be the messengers of the change process based on personal experiences and grass roots efforts.

The ability for leaders to capitalize on the strengths of the human capital within the system provides opportunity for replication of effective selection, learning and placement processes. As an educational leader, the situations where teachers demonstrated the most engagement centered on projects or activities in which they believed the work and investment of their time impacted students and learning. It is within those environments that they come to know themselves most authentically and realize the strengths of the collective efforts of the group. Goddard, Hoy and Hoy (2000) offer a glimpse into the impact of collective teacher efficacy on student achievement. The authors characterize collective self-efficacy as “the perceptions of teachers in a school that the efforts of the faculty can have a positive effect on students” (p.480). Goddard, et al. (2000) stipulates that collective efficacy results as a group level event and occurs from the level of dynamics forming within the group. This research reinforces what educational practitioners have known and experienced. There is a contagion effect among teachers. If that can be harnessed for positive means, the chances of better student outcomes increase. On those occasions, the principal as leader became secondary to the collective leadership displayed from the work and investment of the group.

This generative impact supports the establishment of networked improvement communities in both an organic and structured manner. Much like framework cultivated within the leadership improvement community, the social context of the learning created within networked improvement community is specific to teachers as participants who realize efficacious behaviors both individually and collectively. The social and emotional connections that form within networked improvement communities support the emotional components of teaching shared by those in the field. From those discoveries, informal conversations and information sharing are occurring between members of the improvement community. The contagion effect

of positive experiences creates opportunities for others to enter the work and engage in risk-taking. Additionally, the new improvement structure and those stakeholders who are involved can challenge repetitious patterns that exist within educational reform efforts and teacher engagement. The ability to insert student/parent voices into this discussion would offer a level of risk taking as these have not traditionally been considered. The aforementioned generative impacts offer hope for systems change and improvement. With that change and improvement comes an impact on social justice.

Generative Impacts and Social Justice Implications

From a structured standpoint, the effectiveness of the generative impact and supporting networked improvement community can be captured and shared with teachers within the district as well as across other districts. With the wide acceptance of technology platforms to share information, dissemination of outcomes from this generative impact offers distribution in multiple mediums with ease and accessibility. The transferability to Colleges of Education with the creation of parallel networked improvement communities addressing self-efficacy of preservice teachers provides opportunities for those entering into the profession to explore the problem of practice.

As three potential impacts have been established, the next section of the work explicates two social justice considerations. First, how the generative impacts collectively address a moral, ethical and political vision for a socially just school. Second, how the products of the work serve educational leaders and marginalized communities or advance significantly our conception of leadership practices for marginalized communities.

The aforementioned generative impacts create a space for examining not only individual but systemic issues related to the problem of practice. As a scholar-practitioner invested in this

work, my vision of a socially just educational system naturally lends itself to the framework of the Rockland Collaborative and the subsequent generative impacts produced. The following thoughts are offered as components of a socially-just learning environment or system.

Initially, our thoughts must focus on the mindset of teaching and learning. We work to create the reality that educational opportunities for students will increase when authentic conversations around student learning and achievement occur as a part of regular practice and not isolated conversations to address concerns displayed by test scores or parent complaints. In order to facilitate in-depth of dialogue, systems must exist to allow both horizontal and vertical conversations and include the voices of all stakeholders. Participants receive instruction on how to successfully engage in this type of discourse so that differences and emotionally charged topics can be navigated. It is dangerous to assume that safe environments are spontaneously created. As risk-taking is a key to growth, care must be exercised to support risk taking as a means to awareness, equity and positive outcomes.

Next, the structures of teaching and learning must be considered. To the degree possible, the structures for learning, leading and improvement within socially just schools are created in a participatory manner. While the regulatory nature of public education cannot be ignored, a socially just school and learning environment maximizes the opportunity to consider the culture and context of the community and make local decisions that best meet the needs of the students and families. The existence of designs for learning and action as well as networked improvement communities eloquently speak to how the root cause analyses, proposals for intervention and measurement instruments are conceived in a participatory and collaborative manner.

Finally, socially-just school systems work to abandon the tendency toward privileged solutions. Engaging the voices of those whose lived experience in education differs from the

dominant narrative encourages discovery and improvement versus absolute solutions. If structured correctly, these systems employ safeguards which redirect interventions which could be considered privileged solutions to shared processes for exploring root causes, potential interventions and measurements of improvement. With that shared construction of reality, comes the shared responsibility for outcomes of the group. Often participants in any project want a voice in the process but are less than eager to respond to criticisms when efforts are unsuccessful. It has not been the normative practice to include those outside the system in this type of exploration and decision-making. As this work is a new way of approaching systems improvement, I believe the space exists for work like this to be attempted.

With an understanding of my framework for a socially-just school, the generative impacts work to support systems, leaders and individual teachers to maximize the way that we bring the best people into the profession of teaching; create structures to hire and place them most effectively based on inherent skill sets; and increase levels of investment in both professional growth and student outcomes. If progress is made toward improving these conditions, we come closer to creating socially just learning environments. Staratt (2004) reminds us of a moral imperative to advance the work of education. “For schools to deepen and amplify the way they promote learning as a moral enterprise, they need leaders—both administrators and teachers—who themselves understand learning as a moral enterprise” (p.3). Within this framework of a socially just school, all marginalized groups are considered as benefactors of systems improvements. Consideration would be afforded to the needs of the group and interventions/strategies would be contextually appropriate.

The generative impacts in this scholarly work include products that serve educational leaders, marginalized communities or advance significantly our conception of leadership

practices for marginalized communities. Structural barriers may be slightly easier to address with specific intervention tools. Barriers such as political forces are more difficult to navigate. One interview protocol was developed to add to the overall work of this professional agenda and is offered for use by other practitioners. It is a questionnaire that was developed by and used during the qualitative research study as a framework with which to engage Superintendents or other Chief Executive Officers regarding hiring practices. While questions posed to these constituencies may vary given the context of the school, the initial format provides a launch pad for those looking to engage others in discussions about contemporary educational problems of practice.

From a structural standpoint, the Rockland Learning and Leading Collaborative, tools used for root cause analysis and data collection would be tangible products available for use in different contexts. As these instruments specifically focused on systems barriers to getting the most qualified applicants into the interview process, there is relevance to districts that serve marginalized communities. The collection of qualitative or experiential data from participants in this process is part of each of the aforementioned impacts. As such, two products are worth considering. One is the format in which individuals document their perceptions of the process. The second is the narrative that is crafted from the experience. The dissemination of that narrative can be via professional presentation, journal article or dialogue with others. The gift of sharing the story of one's experience within this type of leadership change is perhaps the most compelling of all. Skillful leaders will be keenly aware of who within the stakeholder group is best positioned to deliver that message.

Regardless of the discipline or organization, conversation surrounding effective leadership skills permeates any proposal of change and improvement. Numerous books and

articles have been written outlining successful steps for leadership through the change process. The identification of successful leadership practices as a product to serve marginalized communities is a consideration within this professional agenda, but this scholar practitioner offers some non-traditional thoughts about leadership as a product of this work.

First, the term effective leader could be considered subjective. While various measures define an effective leader, within this work, an effective leader is created with certain quantitative standards while considering the context and the needs of the stakeholders. One leader will likely display different leadership prowess depending on the group. A skillful leader is wise to recognize the leadership needs of those he/she serves and embrace a chameleon-like nature as a one-size fits all approach is rarely successful and serves the leader versus those looking to be led.

Although context defines the parameters of leadership, successful leadership in marginalized communities will be crafted strategically, emotionally and morally. This is evidenced by the leader intimately knowing the context and issues and leveraging that information to *strategically* garner support. *Emotionally* leading the work results in modeling where the leader risks revealing emotions and vulnerability knowing that releasing control is far more courageous than maintaining it. *Morally* engaging in the leadership role confers the responsibility of insisting issues of justice and equity is central to decision making for systems, communities and students. Both the narrative of the leaders, who can successfully articulate this three-pronged approach, and the legacy left by their work, is a powerful product.

Other products could certainly result from the generative impacts associated with this work. The ability to structure the educational change process via designs for learning and action and generative impacts in ways that consider marginalized communities directly impacts the

likelihood for a wider variety of products or processes to access when considering improvement efforts. As work toward educational improvement continues, all communities are better served when equity issues are named and framed. Unless this work is connected to improvement in other contexts, opportunities to impact additional learning environments is lost. The next section offers a look at generative impacts as linkages to improvement.

Generative Impacts as Linkages to Improvement

At this juncture, pause is taken to consider the impacts as an accounting of the triple aims of educational improvement as advocated by the Carnegie Foundation for the Advancement of Teaching (Networked, 2012). *Engagement* is defined as “active, engaging environments for student learning and personal growth” (Networked, 2012, p. 1). *Effectiveness* refers to “overall advancing student learning” and *Efficiency* is related to “the use of educational resources” (Networked, 2012, p. 1). These triple aims as identified by the Carnegie Foundation for the Advancement of Teaching fuel the work done by scholar practitioners in the my program of study as well as the Dissertation in Practice document. As a benchmark for professional practice and scholarly work, the generative impacts were conceived with these tenets in mind.

The generative impacts promote *engagement* within the school, academy and community partnership. Discovering, understanding and leveraging strengths-based theory in the context of the Rockland Learning and Leading Collaborative, professional development structures and classrooms results in not only engaging environments to explore the problem of practice, but for professional/personal growth for all members of the system. A realization of one’s own strengths, and the contribution to the collective strengths of the partnership, naturally increases engagement within the process. When teachers and leaders have an increased level of engagement in the work, actively engaging learning environments for students are a natural

outcome. Engagement is evident when educational leaders are informed and empowered change agents who strategically hire, place and develop aspiring and practicing teachers. Engagement is noted within the partnership as increased teacher efficacy not only benefits the individual and the work within the system, but the educational learning opportunities and outcomes of students.

The generative impacts promote *effectiveness* with the system under review. The work within this professional agenda makes a purposeful shift in focus from individuals to systems. Recognizing that people are parts of systems informs how discussions, interventions and outcomes can work to make improvements. The first impact explicates traits known to be connected to high performing educators. If school districts can define the skill sets needed, relevant changes can be made to the methods by which those skills are identified when teachers enter the system. If we hire, place and professionally develop teachers effectively, the likelihood of transference into the overall advancement of student learning increases. Leveraging the efficiency of leaders in the process of hiring, placing and developing teachers is critical to advancing the learning of all students. The depth to which leaders know the skill sets of his/her staff affords the most strategic deployment of human capital for the benefit of student learning and equity. Additionally, increased teacher efficacy impacts effectiveness of overall student achievement through both pedagogical competence and the learning environment created in the classroom. Increased investment by teachers generally results in the creation of the best opportunities for all students within the system.

The generative impacts promote *efficiency* in entering and maintaining people within the system. The current reality in all systems is the charge to “do more with less.” The urgency to address hiring, placing and developing teachers in the most efficient manner is not only relevant for those who are entering the system as teachers, but the human resource professionals who

facilitate the process. The impacts support the aim of efficiency beginning with foundational premises in strengths-based theory, to leadership development and teacher efficacy. As these generative impacts operate concurrently, and include the critical input and reflection of partners from communities and the academy, the ultimate expectation is an increase in systems efficiency. When the system performs at an increased level of efficiency, focus can shift from responding to shortfalls to maximizing the opportunities for student achievement and equity.

The conceptual framework of the generative impacts section leaves me and other educational leaders with potential outcomes and a sense of hope surrounding future improvement efforts. In any paradigm shift, the tendency to consider every possible permutation of failure often halts the process before it begins as the risk of failure is paralyzing. For me and other educators, risk taking has rarely been lauded. The try fast- fail fast premise of Improvement Science is an approach encouraging those in the field to attempt strategic, targeted interventions with the goal of improvement, not perfection. While there are many ways to approach this problem of practice and leverage change, these generative impacts are presented as one narrative of change intended to create a condition where all students have access to excellent teachers who challenge and inspire. With Parts I through V of the Dissertation in Practice completed, the investigation draws to a close with the next steps for this professional agenda.

Part VI: Epilogue

“Let us not be content to wait and see what will happen, but give us the determination to make the right things happen” Peter Marshall (1948)

Much work has been done, but more work remains to be done: an agenda of leading and learning must be pursued. It is not enough to know what the underlying problem is. It is not enough to know that the problem exists. It is not enough to *know what* and to *know that*. We must *know how*: how to address the problem, how to engage stakeholders across the boundaries of school, academy, and community, and because this problem of practice will not be solved by a single initiative that will work in all contexts, we must show how to persist over the long term.

The work will continue, but it will be informed by what has been learned to date and what will be learned as actions are designed, tested, and developed in practice. What follows are concluding reflections about what has been learned and what still needs to be learned in order to improve the practice of selecting, placing and facilitating the learning of aspiring and practicing teachers. The reflections focus on the investigator, the investigation, and the evidence before turning to next steps in an agenda that is a matter of social justice.

The Investigator

The work within my program of study and the dissertation in practice began as a purposeful and intentional inquiry into how we recruit, train, place, develop and lead teachers. Over the course of three years, that inquiry deepened in context and content resulting in an in-depth investigation yielding far-reaching impacts for schools, community, higher education, and most critically for students in classrooms throughout this country. These findings include several important impacts and intersections.

First, the problem of practice has been studied over a sustained period of time by scholars in education as well as other disciplines. Not only are educational impacts demonstrated within the work, but impacts on economics, human capital management and politics are realized. Inequitable opportunities for students are not just felt within the realm of education. A ripple effect is produced. Second, this investigation supported the argument that systems theory is an important consideration and simply changing individual behavior in isolation will not create a lasting impact. Appreciating systems illuminates barriers that exist for some groups. Third, an understanding of variability helped to create a space to learn about the problem as well as create new ways to test solutions. Finally, the evidence is clear in relation to the social justice implications. All students are not blessed with good teachers.

The journey captured in this dissertation in practice illustrates many aspects and episodes of learning and leading. From naming a problem of practice that proved relevant to my work at every point in my professional career, to challenging and unpacking long standing beliefs about structures and systems of education, I am a profoundly different person than I was at the beginning of this process.

The following summation serves two purposes. First, it will highlight key pieces of evidence in this investigation, arguments for consideration, and implications of the learning. Second, the professional agenda is defined including next steps that will be required to sustain a collaborative effort resulting in continuous improvement toward the goal of enhancing the quality of teaching and learning in classrooms. With an intention of closing the knowing-doing gap, the *Zone of Generativity* “that can assist us in moving from our current level of knowing to a potential level of knowing that is powerful” has become an important frame (Ball, 2012, p. 287).

The Investigation

The investigation begins in **Part II** as the problem of practice was purposefully and intentionally named: *variability in the selection, placement and learning of aspiring and practicing teachers leads to inequitable learning opportunities for students*. Two main arguments situate the problem of practice. The first argument focuses on the avenues by which teachers enter the profession and how that leads to variability in teacher preparedness and potential inequitable outcomes for students. The second argument examines the connection between teacher learning and student achievement. Present in both arguments is the focus on how the systems at play support the conditions that disadvantage some groups of students.

The problem of practice is further situated by history of this problem, a review of the role of teacher preparation programs, discussions on standards of practice as well as professional development for teachers. Policy and political implications are also considered. Of equal importance are the narratives of teachers, students and stakeholders. Part II concludes with a paradigm shift to systems thinking in terms of a “system of profound knowledge” (Langley, et al., 2009, p. 25).

Applying a lens of social justice to the problem of practice debuted in **Part III** where Opportunity theory (Darling-Hammond, 2009) was explicated in tandem with Ladson-Billings (2006) *poverty of culture* framework. Recent research by Tough (2011, 2013) engages a new dialogue arguing that it is not poverty itself, but rather the stressors associated with poverty, that result in students having educational deficits. The attempts to quantify these stressors via actual physical symptomology are groundbreaking and illustrates that if protective factors are present in economically disadvantaged households that students can be successful (Tough, 2011, 2013). These social justice theories are present within the designs for learning and action and generative

impacts sections that follow. **Part III** connects the investigation of the problem and the agenda for addressing the problem to the mission of ProDEL: *To transform the practice of educational leadership to improve schools and to do so as a matter of social justice* (ProDEL, 2012).

Part IV set an agenda for action and created the first formal opportunity for members of the school, academy and community partnership to join in understanding and addressing the problem (Dostillio, Perry & McCown, 2012). The designs for learning and action are considered as the gateway for the SAC partnership stakeholders to construct a space in which the problem of practice can be understood and how to leverage the designs for learning and action to challenge and transform age-old practices in teacher preparation, professional development and placement within our school system.

The strengths-based theory work of Hodges and Clifton (2004) provided a low-risk entry to the work as stakeholders develop a level of awareness about their individual strengths and how it supports the collective. The context of rural school districts unfolded as stakeholders examined the problem in relation to the needs of the community. Considering the argument posed by Bryk, et al. (2010) “that complex problem of practice improvement demand that a diverse mix of skills be brought to bear and require reconsideration of when and how in the arc of problem solving this diversity of expertise is best exploited” (p. 2), the imperative for all levels of expertise to be involved in the work was authenticated. The work spanned interrogating root causes and ways to address the problem, to data collection and the creation of frameworks useable in the field and in service to learners and leaders particularly from marginalized communities. A deeper understanding of the concept of variation (Langley, et al, 2009) led to purposefully designed improvement cycles. New frameworks for engaging in root cause analysis via designs for learning and action provide a much-needed energy for those educational

leaders who feel constrained by a system constantly under scrutiny to produce rapid and large-scale improvement.

The generative impacts predicted in **Part V** offered the first glimpse into how these improvement efforts could be operationalized. Using a lens of improvement science (Langley, et al., 2009) and a new social organization for collaboration called “networked improvement communities” (Bryk, et al., 2010; Dolle, et al., 2013); the generative impacts resulting from designs for learning and action were considered. The generative impacts targeted three outcomes. First, to benefit individuals through the leveraging of strengths, talents and skills as teachers are selected and placed within school systems. Second, to focus on educational leaders as change agents in hiring, placing and developing aspiring and practicing teachers. Third, to connect increased levels of teacher efficacy and the impact on professional growth with student achievement. The sense of anticipation and creativity produced by generative impacts, which intend to improve the condition rather than solve the problem, empowers all stakeholders vested in education reform.

The Evidence

The dissertation in practice explicates an investigation of a problem of practice named: *variation in the selection, placement and learning of practicing and aspiring teachers leads to inequitable learning opportunities for students*. Countless factors outlined in this scholarly work have perpetuated the condition that supports inequities in the quality of teachers that fill our nation’s classrooms. While no one factor, event, individual or group bears the sole responsibility for these inequities, the investigation reveals that as stakeholders in this work, we are all complicit in reinforcing the normative practices of the system.

Through this work we engaged in significant learning defined as “learning which reveals and challenges one’s beliefs and assumptions to such an extent that the learner commits to arguments that she or he was not willing to make earlier” (ProDEL, 2012, p. 4). As participants, we developed a deeper knowledge of the problem and how it is situated; the social justice frameworks; the designs for learning and action; and the generative impacts intended to be used across various contexts. We are aware. We can claim indifference; however we can no longer plead ignorance. “Failures of ignorance we can forgive. If the knowledge of the best thing to do in a given situation does not exist, we are happy to have people simply make their best effort. But if the knowledge exists and is not applied correctly, it is difficult not to be infuriated (Gawande, 2009, p. 11).

The Agenda and Next Steps

The disparities between normative practice in contemporary educational systems and the realities for many consumers of education have deepened my conviction that substantive and systemic change must occur. As an educational leader, I am called to action by challenging the repetitious behaviors present within individuals and systems that perpetuate inequitable outcomes for students (Kumashiro, 2002). This investigation is a beginning not an ending. My leadership agenda focuses on two main areas. First, I will leverage this work within my sphere of influence to facilitate opportunities where the interrogation of this problem of practice can continue, where root causes can be discovered and interventions tested. Second, I will actively engage stakeholders in the school, academy and community partnership with a focus on systems improvement. Engaging members of schools, higher education and the community in new ways increases the likelihood that change will be meaningful, long-lasting and beneficial for all.

What will be the legacy of this work? Improvements in the K-12 education system are an intended outcome given the context in which this problem of practice was situated. As the investigation unfolded, it became clear that implications for teacher training programs were closely connected to this work. Presenting as a logical next step is inviting colleagues from institutions of higher education to enter a discourse surrounding this problem of practice. Leveraging change at this level affords the potential of significant educational benefits in classrooms across this country. Through this agenda and next steps, I have provided a blueprint to sustain a collaborative effort resulting in continuous improvement toward the goal of enhancing the quality of teaching and learning in all classrooms and for all children.

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Appendix

Variability in the Selection and Placement of Practicing And Aspiring Teachers

Semi-Structured Interview Questions

James Henderson, Ed.D., Francine Endler, M.A.

Opening Comments:

Thank you very much for participating in this interview process. The job responsibilities and time constraints of a Superintendent of Schools are very demanding, and I appreciate you sharing your time and insights. This interview will last approximately 60-75 minutes and the questions will relate to your thoughts on strengths-based theory and teacher performance, variability in teacher quality and obstacles faced by Superintendents when hiring and placing teachers. Please feel comfortable to stop me at any time. Additionally, you are free to refrain from answering any question.

1. What is your understanding of strengths-based theory and its connection to teacher performance?
2. What, if any, strengths are commonly exhibited across those hired for teaching positions within your district?
3. What are your perceptions of the reasons for variability in teacher quality?
4. What obstacles do superintendents face when selecting teachers for positions within the district?
5. In closing, is there anything else you wish to share related to your work experiences or experiences in education related to strengths-based theory and the selection and placement of teachers?