

**Embracing Ambiguity: A Case Study of One Teacher Education Program's Collaborative
Inquiry into the Teacher Dispositions Construct**

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In teacher education, the teacher dispositions (TD) construct has elicited debate for over three decades. Although some minimize its importance, many have argued for continued examination of this significant yet ambiguous construct due to its link to teacher quality and the quality of student learning and outcomes (e.g., Darling-Hammond, 2000; Diez, 2007). Now more than ever, teacher educators must not only prepare candidates with content knowledge and pedagogical skills, but also help them to cultivate their inner landscapes.

Bryn Athyn College's teacher education program (TEP) is founded on a faith-based mission that emphasizes the moral, ethical, and spiritual dimensions of teacher candidates. Thus, it is fitting that we provide ample opportunities for dispositional development and support candidates' ability to sustain a vibrant tenure in the profession, while staying grounded in their values and commitments. Yet, the TEP at Bryn Athyn College does not have a shared understanding of the TD construct or a vision for its programmatic integration. This results in teacher candidates lacking intentionally sequenced opportunities for cultivating dispositional pillars to guide their professional practice. This problem of practice is reflected in the literature, which shows a dearth of research on *how* a TEP should address such a problem.

The purpose of this study was to explore how one group of teacher educators sought to conceptualize the TD construct for its utility in its programming. Using the improvement science

approach and qualitative case study methodology, this study utilized a series of human-centered and user-focused change ideas called Collaborative Inquiry Process. Data analysis revealed that faculty participants solidified a shared understanding of this critical construct and articulated a core disposition resonant of the TEP's mission and ethos. This outcome provided shared language with which to envision its programmatic integration. Participants grew to recognize TD as humanizing the work of teacher educators, who strive for their dispositional development with candidates as co-inquirers (Nelson, 2015), within a supportive community.

Ultimately, this study provided the foundation for integrating this vital construct into the fabric of this TEP, which intends to maintain a human-centered program that ushers deeply caring educators into the field.

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Dedication

For all the dedicated teacher educators who strive to care for the heads, hands, and hearts of
future educators.

For all past, present and future teacher candidates who answer their calling to serve, protect and
nurture our future generations.

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1.0 Introduction

1.1 Framing the Problem of Practice

It is widely accepted that the fundamental aim of teacher educators and teacher education programs (TEPs) is to prepare highly competent and effective teacher candidates who will positively impact the learning and lives of *all* their future students. Yet this aspiration is increasingly challenged in a climate in which diverse student needs only continue to increase, and complex, persistent issues such as ever-widening opportunity gaps, insidious educational inequality, and alarming rates of teacher attrition and shortages are pervasive (Darling-Hammond, 1999, 2000). Educators are often left to shoulder much of the blame for these systemic issues (Darling-Hammond, 1996). Beginning teachers enter this demanding and complex arena in which they must make intellectual, cultural, and moral judgments, choices, and decisions with little experience (Carroll, 2012). Rather than collectively boosting those who are doing the work, leaders and policymakers, often in the name of educational reform, barrage the system by urging accountability through standards-driven and assessment-focused mandates. These speedy and innumerable solution-centered demands illustrate what Bryk (2015) calls “solutionitis,” which is education’s habitual modus operandi (p. 468). Teacher educators, as a sub-group of those who shoulder the blame, have to then answer to accrediting bodies, both at the state and national levels, by incorporating numerous standards and criteria that come with the demand for improving the teacher pipeline.

Unfortunately, mandates often come with ambiguous guidance that leave uncertainty and variations in interpretation. For example, the Council for the Accreditation of Education Programs (CAEP), currently the sole accrediting body for TEPs in the U.S., posits that effective teachers must possess and exhibit a combination of essential content knowledge, effective pedagogical skills, and “critical dispositions” (Council of Chief State School Officers [CCSSO], 2011, p. 6). The National Council for Accreditation of Teacher Education (NCATE), CAEP’s predecessor whose definition of teacher dispositions (TD) CAEP adopted, defined the TD construct as “the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities that affect student learning, motivation, and development as well as the educator’s own professional growth” (2002, p. 89-90). Unfortunately, this vague definition for a complex, multifaceted construct left TEPs unsure how to understand, operationalize, and implement it.

Although much of the research has focused on preparing candidates with sufficient content knowledge and pedagogical skills, there has been perhaps a quieter, consistent, and substantial dialogue about this third pillar of teacher education for over three decades. Researchers have substantiated this dialogue by directly linking the construct of TD to the quality of teachers’ instructional practice (Diez, 2007; Dottin, 2010; Schussler, 2006). Others have furthered its value by suggesting a strong relationship between quality of student learning and teachers’ dispositional characteristics (Notar, Riley, Taylor, Thornburg, & Cargill, 2009; Singh & Stolloff, 2008; Taylor & Wasicsko, 2000). For example, openness, flexibility, and the ability to accommodate to meet the needs of various students, exemplify just some of the dispositional characteristics that increase positive student learning and outcomes (Darling-Hammond, 2000). Some even argue that good teachers have knowledge and skills, but great teachers have dispositional qualities that elevate

them to the next level (Phelps, 2006). Furthermore, researchers have examined constructs such as relational trust between students and teachers (Bryk & Schneider, 2002) and student perceptions of teachers who care as having significant impact, even to the extent of predicting student performance (Dweck et al., 2011).

Now perhaps more than ever, teacher educators and TEPs urgently need to attend not only to the seemingly impossible work of preparing teacher candidates (herein termed as candidates) with sufficient content knowledge and pedagogical skills to meet the demands of the 21st century classroom, but also to supporting candidates in developing, cultivating, and fortifying their inner landscapes (Palmer, 2007; Wake & Bunn, 2016). We need future teachers who can meet the challenges of the field by being able to draw deep within themselves and stand tall with foundational values, beliefs, and commitments as the guideposts for their professional practice.

As a TEP whose faith-based mission elevates the development of moral, ethical, and spiritual dimensions of our candidates, it is fitting for us to provide ample opportunities to examine and foster TDs that enable candidates to become competent educators who stay vibrant in their profession. Yet, upon closer initial examination of our TEP, coupled with my colleagues' affirmations, this opportunity gap became evident and prompted this dissertation work. With the ultimate aim to strengthen this component of our program for our candidates, the dedicated faculty of Bryn Athyn College's (BAC) Education Department and I set out to investigate and establish the foundation for more robust programming on TD. Using intentionally created space for collective reflection and sustained dialogue to conceptualize this important construct, this dissertation work sought to better position our TEP to enact its mission of preparing candidates who truly are competent and ready to "serve, protect and nurture the children in their care" (BAC Education Department Mission, 2018).

1.2 Organizational System & Context

Nestled among the beliefs and values that stem from the New Church (aka Swedenborgianism), a Christian denomination, BAC is a private liberal arts institution of higher education whose mission rests on its tenets of faith traditions. Its deeply rooted ethos can be traced back to its founding members' vision and beliefs, and is entrenched within its cultural fabric and mission, which reads:

Bryn Athyn College of the New Church serves as an intellectual center for all who desire to engage in higher education enriched, guided, and structured by the study of the Old Testament, New Testament, and theological writings of Emanuel Swedenborg. This education challenges students to develop spiritual purpose, to think broadly and critically from a variety of perspectives, and to build intellectual and practical skills. The ultimate purpose is to enhance students' civil, moral, and spiritual lives, and to contribute to human spiritual welfare (Bryn Athyn College, 2020)

This institution-wide mission is then reflected in the BAC Education Department's mission:

The mission of the Dual Certification in Early Childhood Education and Special Education Program at Bryn Athyn College is to help pre-service teachers develop the skills, understandings and attitudes that will serve, protect and nurture the children in their care. In so doing, we support the mission of the College to contribute to human spiritual welfare (BAC Education Department Assessment & Metrics Plan, 2018-2019)

The word "attitude" can be likened to the TD construct, which is the more commonly used term in the field of teacher education and refers to the way we programmatically emphasize the importance of a teacher's inner work. We believe that a teacher's attitude is not only displayed in the daily tasks of ensuring effective curriculum delivery and engaging students in the learning process, but is perhaps more poignantly portrayed in the quality of interactions and the relationship that the teacher builds with each student. To truly meet individual students where they are in their development, we believe that teachers must continuously engage in deep reflection of their environments, both outside and inside themselves. Based on Dewey (1933) and other researchers'

(Schon, 1987) work on reflection, we know teachers must work to cultivate and raise their awareness through reflective practice. We believe that this essential practice of reflection is what allows teachers to truly *see* and engage each child in learning that is more authentic and meaningful. Therefore, it is appropriate that we specifically attend to the cultivation of these mission- and values-aligned dispositions in our candidates.

Institutional archives, documents, and dialogue with those who hold institutional knowledge show that in much of its 140-year history, BAC's Education Department primarily trained pre-service teacher candidates for its small set of religious K-12 private schools. Only in the last decade or so, the department, along with the institution, began to extend its reach to welcome, educate, and serve members of the surrounding communities. Although some stakeholders viewed this shift towards growth as neither necessary nor valuable, and voiced that it was perhaps veering us away from our core mission and faith-based values, others expressed that growth was necessary for sustainability and, in fact, growth was mission-centric.

As part of the strategic growth plan five years ago, the College administration tasked the Education Department and its team of three faculty members with the hefty task of re-designing and aligning the entire early childhood education curriculum to become a Pennsylvania Department of Education (PDE) approved, dual-certification TEP in Early Childhood Education (PreK-4) and Special Education (PreK-8). While working under a tight timeline with limited human and financial capital, our central goal became completing a strong application for the state's approval. Unfortunately, we were given limited time and space to dedicate energy towards creating a tightly cohesive TEP, with an explicitly articulated vision and a curricular framework as the foundation for building all components of the program. Within two 10-week academic terms, our then team of three put our heads together and chipped away at meeting the overwhelming number

of competency requirements and often vague, multi-layered standards within our curriculum, to submit two strong applications. Although we received PDE's approval in record time, one may hypothesize that the pressurized system in which our curriculum re-design occurred may have contributed to the problem of practice addressed in this dissertation.

An initial examination of the organizational data, documents, and artifacts produced by our system illuminated the nuanced, and sometimes blatant indicators of our problem of practice. To provide just one example, in our departmental assessment, we assess for the dispositions or "attitude" component of our mission through "reflective practice" as stated in the learning outcome, "LO 5: Demonstrate the ability to engage in reflective practice" (BAC Education Department Assessment & Metrics Plan, 2018-2019). We evaluate candidates' reflective practice using a rubric that measures outcomes in our field experience courses as well as in our classroom management course. Over the last two years (2017-2019), data indicated that we have successfully met this outcome, as 85 percent or more of our students earned a grade of 80 percent or above in the reflection assignments embedded within these courses. Unfortunately, during the curriculum re-design process, we were unable to spend much time examining or defining what we meant by "attitude" in our mission, how "reflective practice" is operationalized, criteria with which we would measure those learning outcomes, or exactly how those reflection assignments aligned with those criteria. Additionally, we did not have the opportunity to articulate the process through which we would foster and cultivate these attitudes or dispositions, thereby providing our candidates with intentionally sequenced curriculum to cultivate said dispositions or "attitudes." It is important to add that the subjective nature of these assessments make this work especially challenging as well.

To investigate this problem further, I conducted an informal needs assessment two summers ago. In an email with follow-up conversations, I asked a set of questions regarding the

TD construct and inquired whether my colleagues in the department also perceived a need to examine and reflect on the way we address this construct in our program. With 100 percent of my fellow faculty members in agreement, this needs assessment provided clear, organizational evidence and confirmation that as a TEP, we had the desire to do better in this area. Several months later, I followed up with empathy interviews with two faculty members and two candidates in the program. A reflection on these interviews, coupled with the examination of artifacts, illustrated how our TEP (or system) is unclear, ambiguous, and perhaps even disjointed at various junctures in its handling of the TD construct; this validated not just the existence of the problem but also surfaced some of the potential factors that may have contributed to this problem of practice.

1.2.1 Fishbone: Root Cause Analysis

To further examine the potential systemic root causes of our contextualized problem of practice, a fishbone diagram (see Figure 1) was used to closely examine the nature of the problem. As illustrated by numerous artifacts and evidence on-site and as reflected in the teacher education literature, the specific inter-connected main components of our problem of practice include: 1) lack of clear definition and identified/articulated dispositions that are aligned with the mission, and 2) absence of a vision and a curricular framework that proposes a systematic and intentional integration of dispositions into our TEP.

While some of the root causes may lie outside our sphere of influence, many do lie within the sphere of influence of the faculty members at BAC's Education Department. For example, we could realistically address the lack of definition by developing an operationalized definition of the construct and identify a set of manageable, relevant, and meaningful dispositions that reflect the

mission and, therefore, the ethos of our TEP and even the institution at large. As Wasicsko (2007) suggested, programs must produce their own “optimal operational definition of dispositions [that] flows from the program mission or value statements and is based on a strong theoretical and research foundations” (p. 56). Moreover, the root causes point to the need for a holistic, context-rich curricular framework that guides a thoughtful and intentional approach to programmatic and curricular integration of the construct. A framework would provide a guide that allows the department to offer our candidates iterative and purposeful opportunities to self-examine, analyze, and increase their awareness and consciousness so that they can better understand their own and, ultimately, their students’ cultures and value-systems (Schussler et al., 2008).

Our problem of practice is embedded within a complex system. The literature in the field, an initial examination of the complex system, and analysis of stakeholder conversations and organizational artifacts reveal the existence of inter-related factors that contribute to the problem.

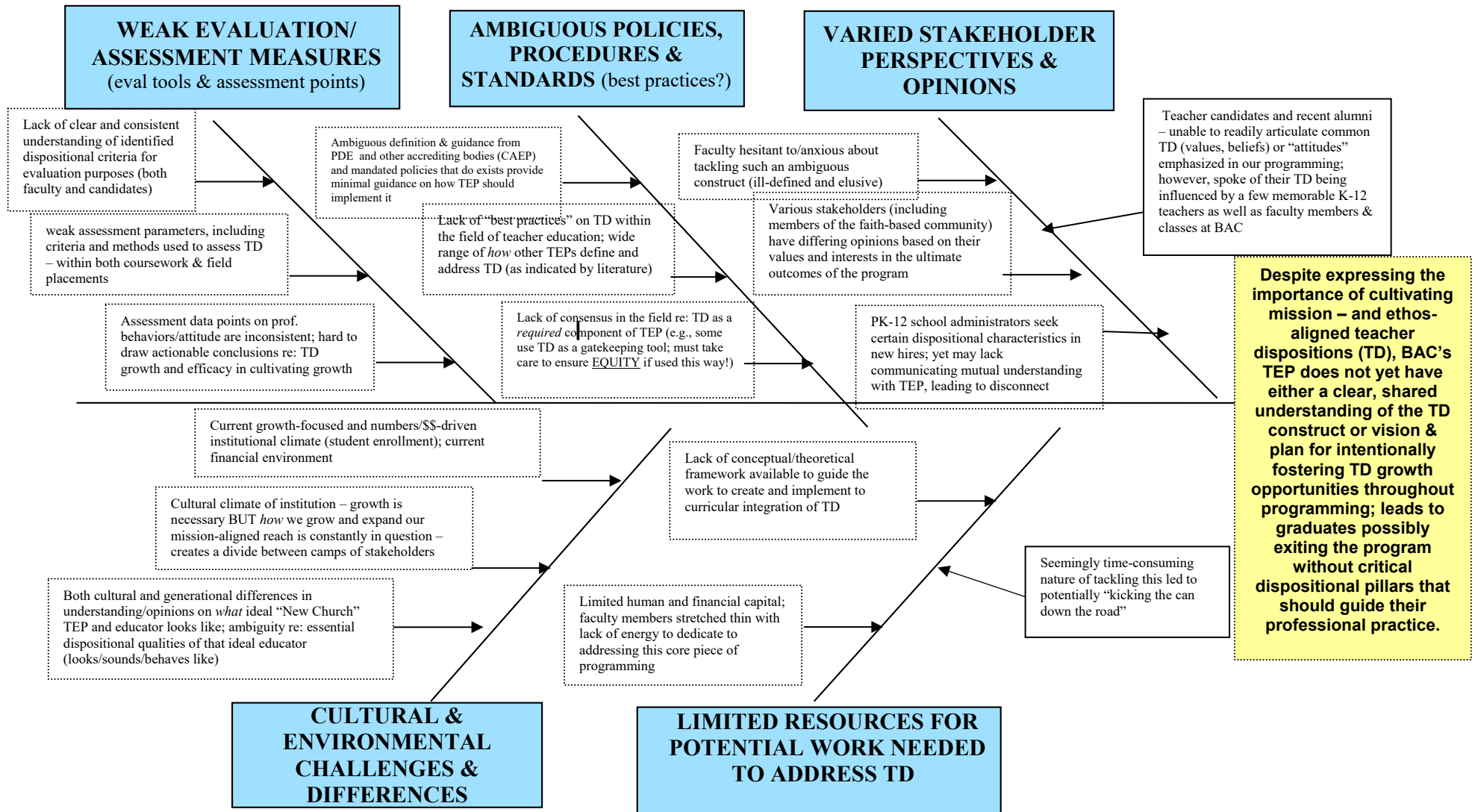


Figure 1. Fishbone Diagram – Root Cause Analysis

1.3 Researcher Positionality

While undertaking this study, I had to examine my prior and current experiences and identities that inform my beliefs, values, assumptions, and biases as a researcher. At the most personal level, I am a Korean American female, cisgender, married, middle-aged, and able-bodied. I am a daughter, sister, wife, and friend. I was born in South Korea and immigrated at the age of nine, growing up mostly in suburban neighborhoods while attending predominantly white, faith-based elementary, middle, and high schools. My worldview and perspectives broadened with my undergraduate and masters-level graduate school experiences, where I discovered the fields of early childhood and special education.

The seed for my passion for the field of education was planted during my undergraduate years at Smith College. Then, upon entering the teaching profession, my deep-seated desire to serve those who needed me most led me to discover special education, and I answered this calling during my graduate work at Teachers College, Columbia University, where I fell in love with the specific role of an early childhood special educator. After committing more than a decade to teaching, learning, and serving in the world of early intervention, I was invited to answer the call once again, this time serving by preparing pre-service teachers in the field of teacher education.

In choosing and newly committing to this work eight years ago, I quickly recognized the weight and significance of this work, and the potential impact I could have on new generation of teachers. In seeing this work as one of my life's purpose, I deepened my commitment by taking the necessary to steps to ensure my continued learning and to bolster my abilities to do the work

well. This led me to enroll in the Doctorate in Education (Ed.D.) program at the University of Pittsburgh and, ultimately, to this research topic.

While engaging in this research, it was critical for me to recognize, identify, and name my own privileges and biases, especially in my various roles. In facilitating this research, I also had to be cognizant of my own as well as our team's privileges and biases, especially in examining and exploring a component of the program that perhaps comes closest to one's inner self and identities. Moreover, I also needed to recognize my position as both a researcher-participant and how this dual role might influence ways in which my colleagues interact with me and respond to this study. The Collaborative Inquiry Process and the methods through which I would collect the data, as well as how I would analyze the data, would have to be vetted through both institutions' Institutional Review Boards (IRBs) and my dissertation committee, as well as organizational point persons, including the Chair of the Department, to provide multiple perspectives and to protect all participants. Moreover, it would be critical to receive my participants' informed consent regarding the research, while being careful not to persuade unethically. When possible, it was important to remind ourselves of the candidates who are at the *receiving end* of the education that we provide and to ensure consideration of their full humanity, by working towards including them in this conversation. As researchers (Borko et al., 2017) have warned, we must be watchful of indoctrination of dispositions but must also create opportunities for candidates to examine, discover, learn, and cultivate their own sets of dispositions that will serve and guide them in their professional practice.

1.4 Stakeholders

The organizational system of BAC's Education department is a small but complex one with various stakeholders and processes creating the relationships and dynamics. In stepping back and critically examining this system, I had the opportunity to reflect on this system at the *balcony* level and see the socio-political, cultural landscape with its complexities at work. An important idea gained through this program is to understand the perspectives of my stakeholders ("users"), who are needed to mobilize and engage in my change initiatives. If they can see "how supporting [our] program would enable [our] stakeholders to serve [their] values," success of the work is much more likely (Heifetz, Grashow, & Linsky, 2009, p. 92). Although this research, limited by time and availability of resources, would initially engage only one of the major stakeholder groups, it was necessary to understand who they are in order to set the context of problem of practice and research.

1.4.1 BAC Teacher Candidates (Current Students and Recent Graduates)

As one of the primary stakeholder groups of this research, our candidates are the direct consumers of the product (a.k.a. our TEP). This group can be further divided into currently enrolled candidates and those who recently graduated from our dual-certification program. I distinguish these two sub-groups of stakeholders because through my initial conversations with them, I realized the value of gaining their perspectives separately in order to create a more holistic picture of the program and its impact. As stakeholders who commit about four years of resources (e.g., money, time), they have high stakes in the quality of program delivery and how well it prepares

them for the profession. They seek an excellent experience that equips them with the knowledge, skills, and dispositions to secure teaching positions and thrive in their work as educators. They share with other stakeholders the desire for strong, transparent, and comprehensive programming that not only prepares them but helps them stand out in the job market upon graduation. Therefore, the outcomes of this research will impact their experiences in our TEP.

To seek out their voices in preparation for this work, I carried out three empathy interviews with two currently enrolled students and an alumna. In my reflection on these conversations, I uncovered two significant themes. One theme that surfaced in our conversations was the idea that candidates' values and beliefs about education can be traced back to their K-12 schooling. In listening to them, I was reminded of Lortie's (1975) seminal theory of "apprenticeship of observation," which, in the simplest terms, means that candidates learn much about teaching from their experiences in K-12 schooling. This is not surprising, as candidates spend four years (sometimes fewer) in TEPs, in contrast with their twelve or more years in K-12 schooling. In the interviews, they frequently spoke of their most impactful K-12 teachers. It was rather humbling to recognize again that our candidates have had a lengthy schooling journey, during which they have had teacher figures they may or may not want to emulate as they envision themselves as future educators.

At the same time, interviewees also drew my attention to evidence that the BAC faculty and their education in our TEP made an impact in shaping who they are and who they aspire to and have become. They spoke of valuable ideas and beliefs that they have learned about teaching, as well as the knowledge and skills that they have gained through the program. Villegas (2007) posited that a teacher candidate's thought patterns, values, and beliefs can indeed be enhanced, if not transformed, especially through developing a critical, self-reflective lens in their TEP. In this

way, my conversations with this group of critical stakeholders of our program supported my intuitive theory that we, as a TEP, can play a pivotal role during a short yet vitally formative period of time for candidates. Although this group of key stakeholders will not participate during this dissertation study, I fully intend to engage them in the process in the near future.

1.4.2 BAC Education Department Faculty

As the other primary stakeholders in the system, BAC's Education Department faculty share a high level of interest in and connection to the problem of practice. As teacher educators, the work we do is deeply personal to each of us, and we feel a great sense of ownership of our TEP. Our team is founded on a strong sense of respect, trust, collegiality, and friendship.

In line with our candidates, our ideal reality is to teach within and deliver a strong, cohesive program that prepares our future teachers. We want this goal to be reflected in both the way our currently enrolled candidates develop and function (both in our classrooms and in their clinical placements) as well as in how our graduates fare in their professional settings. This group of stakeholders is made up of a core group of four teacher educators, three who were raised in the faith and the other a welcomed addition to the institution and the faith. We share the deep commitment of ensuring that we, to the best of our abilities, serve all candidates who walk through our program's door. The potential losses of committing to address this problem of practice included giving up valuable time, experiencing discomfort in some novel ways of engaging, and potentially having to work through conflicting ideas and wants that might arise during the process. However, as a group that cares deeply about children and their rights to learn and thrive, it is of

utmost value to us that our TEP aims to prepare candidates who are willing and able to serve the needs of all children.

1.4.3 BAC Administration/Leadership

This group of stakeholders is interested in the college's growth, health, and sustainability, and see the value in continuing to refine the program to increase our TEP's quality, thereby also institutional quality. Their collective ideal is for us to become a thriving institution of higher education that also offers an excellent mission-centered TEP, while meeting the needs of all stakeholders. Specific to the problem of practice, they are seeking for our program to develop future educators who thrive in their profession and contribute back to the life of the college as alumna. Their potential losses, on the other hand, are that the performances and actions of our current candidates as well as our graduates might have negative impact in the larger community, and conflict with the mission-centered educators we aim to usher into the world. Furthermore, an underlying reality is also that there are constituents with competing interests and sometimes polarized views (e.g., degree of New Church emphasis in various academic programs at BAC and "new-church-ness" of the College's strategic directions). Their loyalties lie with the students and families whose opinions they must answer to, the faculty and staff who must be supported in their daily functioning in order to operate the college, and the board, donors, and other community stakeholders who want a say in how the institution "does" its work and enacts its mission. Given a national climate where overall college enrollment is down and all are facing multiple crises (COVID-19 pandemic, racial, social, and economic inequities and upheaval) to which their attention is needed, their direct voices were, for now, excluded from this iteration of the research.

1.4.4 Donors and Community Members

Somewhat removed from the direct impact of our problem of practice, this group of stakeholders maintains a level of influence in the broader reach of this study. While they vary in their views about the direction in which they want to see BAC as a New Church institution of higher education grow, they do share in the ideal that our TEP grows with our faith-based mission as its north star; additionally, they want for us to grow as an innovative program that can prepare candidates with robust abilities to teach in both its private church schools as well as the local PreK-12 schools. Optimistically, I believe that this research with its focus on TD will resonate with this stakeholder group's vision, as it closely aligns with the college's and the department's mission, ethos, and shared faith tradition.

1.4.5 Local Private and Public PreK-12 Schools

The local private and public PreK-12 schools have vested interest in BAC's TEP. For the New Church private schools specifically, we are the only New Church TEP that provides newly trained candidates into their teacher pipelines. Their ideal is to have a strong partnership in which their voices are heard and needs are met. Moreover, as stakeholders who often take an active part in our teacher education programming (e.g., by offering placement sites with cooperating teachers who volunteer time and mentorship), they do hold an influential position. Therefore, it is important for our department to hear their thoughts on this particular topic as we continue to collaborate with them. Regarding other PreK-12 schools in our neighboring communities, both public and private, we have recently widened our network of partnerships and have been actively engaged in learning

more about their ideals, realities, and potential areas of challenge as they relate to our problem of practice. One ideal that we share is certain; it is that we have strong collaborative relationships in which we can provide a robust, well-prepared crop of new teachers each year for their teacher pipeline. Therefore, it will be important to understand their needs and values when it comes to candidates' dispositional characteristics. In future iterations of this study and in the potential scaled-up work ahead, their voices will need to inform and shape the way we think about and tackle our problem of practice. Like other stakeholders, given their current state of dealing with multiple crises at once, their direct voices were also excluded from this iteration of the research, with a plan for future opportunities to listen and engage them in this dialogue.

1.5 Statement of the Problem of Practice

The field of education is in dire need of teachers who can gracefully handle the demands of the profession and remain deeply committed to serving the needs of all students in their care. In our aspiration to prepare high caliber teacher candidates, it is more important than ever to critically examine our TEP with an eye towards continuous improvement. As reflected in the literature, our teacher educator colleagues have been in dialogue for more than three decades regarding an important piece of the triumvirate of teacher education – teacher dispositions. Many have argued for continuous examination to better understand its implementation in teacher education, due to its link to teacher quality, quality of student learning, and student outcomes (Darling-Hammond, 2000; Diez, 2007; Dottin, 2010; Notar, Riley, Taylor, Thornburg, & Cargill, 2009; Schussler, 2006; Taylor & Wasicsko, 2000). Adding to this call are our institutional and program missions,

which direct us to attend to our candidates' "moral, ethical, and spiritual" dimensions (Bryn Athyn College, 2020). Therefore, carefully examining and thoughtfully constructing a path to more intentionally integrating TD development opportunities is one way to strengthen and vitalize our TEP and its impact.

Therefore, our problem of practice can be stated in this way: Despite acknowledging the importance of the TD construct in its TEP, BAC's Education faculty does not yet have a shared, clearly articulated understanding or a cohesive plan for integrating TD into the program's curriculum. This results in our candidates graduating without having had intentionally sequenced, formative opportunities for cultivating their own set of dispositional pillars that should guide their professional practice.

To address this problem with an eye towards strengthening and improving our system, we must start at the foundational level. First, we need a clearly articulated, mission-aligned, and values-driven understanding of TD. Getting stakeholders involved at this foundational stage will be crucial for buy-in and for community-building. Stakeholder involvement will lead us to create a clear, useful, and meaningful conceptualization that is understood by and relevant to all. Starting with an operationalized definition reflecting our conceptualization, we will build the foundation for our next step, which is to generate a vision and sketch a plan and framework to guide the path forward. Although this bigger step will only begin within the bounded timeframe and scope of this particular iteration of the research, these two steps will be critical in our effort to integrate a robust curriculum addressing the TD construct.

Borrowing from the constructivist-developmental lens, this curriculum would be strength-based and growth-minded, emphasizing that although candidates come into TEPs with a set of dispositional characteristics, it is through their experiences and opportunities in the program that

enhance and cultivate their self-awareness and self-reflective abilities. This, in turn, is intended to foster their openness to critically examine their deepest values and support their growth from their inner being. Moreover, candidates would collaborate with the faculty to address the various domains of dispositions including the intellectual, cultural, moral/ethical, and spiritual domains, at the intersection of which exemplary teaching and teacher lies. Part of this vision is that we, as teacher educators, would intentionally and systematically scaffold opportunities for our candidates to do the purposeful work necessary to build their foundational pillars that would eventually serve as guideposts for their work as educators. As teacher educators, we would also aim to document our successes as well as challenges, so that we can learn and share our work with our fellow teacher educators, contributing to the ongoing decades-long dialogue about this critical component of teacher education.

2.0 Review of Supporting Knowledge

The purpose of this literature review is to examine research that investigates the TD construct and the ways teacher educators have managed to understand and address it in their TEPs. The first section will trace the history and evolution of the construct in the field of teacher education. The next section will focus on how teacher educators have handled the construct, specifically in defining and understanding it, cultivating and assessing it in their TEPs, as well as the persistent tensions surrounding the construct. Finally, this literature review will conclude with frameworks and programmatic strategies that best align with the contextual setting of place of practice. We will begin with a chronological sequencing of the history and evolution of TD.

2.1 History and Evolution of Dispositions as a Construct

Throughout both the twentieth and twenty-first centuries, researchers have explored and attempted to better understand the inner workings of teachers (Schussler, 2006). John Dewey (1933), one of the most influential educators in the twentieth century, recognized the significance and malleability of dispositions in candidates, which he claimed are shaped by experiential learning and reflective practices. Using the term “habits of mind,” Dewey asserted that dispositions are the underlying motivator and organizer for intelligent behaviors (Altan, Lane, & Dottin, 2019). When applied to teachers, Dewey (1910) described the concept of TD, displayed through their intelligent behaviors, on the students in classroom: “everything the teacher does, as well as the

manner in which [s]he does it, incites the child to respond in some way or other, and each response tends to set the child's attitude in some way or other" (p. 47). In other words, Dewey believed that TD laid the groundwork for a teacher's actions and approach, which, in turn, directly impact the children in their care. Decades later, in the 1960s, the Florida Studies led by Combs (1969) explored dispositions of effective and ineffective educators and distilled them into three categories: dispositions towards self, dispositions toward students, and dispositions toward teaching. This laid the foundations for much of the research to come. Then, in the 1980s, the TD construct stepped into the collective consciousness of teacher educators.

As a way of providing the backdrop, we must note that the publication of *A Nation at Risk: The Imperative for Educational Reform* (1983) increased the push for accountability in the teaching profession and targeted the field of teacher education to produce more effective teachers. Although researchers had long been examining the relationship between TD and teacher efficacy under various constructs (attitudes, perceptions, beliefs, etc.), the publication spurred a new level of "greater interest" (Taylor & Wasicsko, 2000). In their seminal work, Katz and Rath (1985) offered an initial definition of TD as "an attributed characteristic... that summarizes the trend of a teacher's actions in particular context... with behaviors related to effective teaching" (p. 301). They argued for its importance in teacher education as part of its aim to train effective teachers and initiated the still on-going dialogue. They distinguished TD from other teacher attributes such as skills, attitudes, habits, and even traits, asserting its significance and role in teacher education (Katz & Rath, 1985). Mary Diez (2007), another prominent and an early voice in this conversation, contextualized the history of the TD construct by describing the late 1980s landmark project led by an interdisciplinary group of faculty members at Alverno College. They had gathered to evaluate their TEP and developed an ability-based framework, in which ability is

defined as “a complex integration of knowledge, behavior, skill, disposition, attitude, and self-perception... [that illustrate] sensitivity to learners as individuals, use of moral reasoning, and responsibility for meeting learning needs” (p. 389). Diez (2007) furthered the impact of this effort by serving on the Interstate New Teacher Assessment and Support Consortium (InTASC), where Alverno’s framework was then used to compose the 1992 Model Standards for Beginning Teacher Licensing and Development: A Resource for State Dialogue, firmly placing TD into the “fabric” of teacher education (p. 389). As a result, TEPs began to voluntarily incorporate TD into their programs, while some states even adopted the InTASC standards into state law and educational codes (Diez, 2007; Villegas, 2007).

In 2000, the National Council for Accreditation of Teacher Education (NCATE) adopted InTASC’s standards and brought the TD construct into more than 600 TEPs that it eventually accredited (NCATE, 2008). In an updated version, NCATE (2008) offered the following definition of TD: “the values, commitments, and professional ethics that influence behaviors toward students, families, colleagues, and communities that affect student learning, motivation, and development as well as the educator’s own professional growth” (p. 89-90). As part of the accreditation process, NCATE charged TEPs to identify, define, and operationalize and assess TD based on their individual mission and conceptual framework, at a minimum including the two mandated TDs of fairness and the belief that all students can learn. This definition and set of standards were then eventually adopted by the Council for Accreditation of Educator Preparation (CAEP), currently the sole national accrediting body for TEPs, maintaining the importance of addressing TD in any TEP. Despite the vague and ambiguous definitions and directives provided by these accrediting bodies, many teacher educators have made good faith efforts to define and clarify their own understanding of the TD construct in order to implement TD into their programming (Feiman-

Nemser & Schussler, 2010). Yet, as described in the following sections, a significant portion of the literature on TD is characterized by the struggle to grapple with an ambiguous construct, and, at the same time, many have continued to offer perspectives and have shared their productive work, illustrating its significance and the need for continued examination.

2.2 Teacher Education Programs and Their Handling of the Construct

The mandates that followed, particularly from accrediting bodies, left TEPs with the requirement to address the triumvirate of teacher education: knowledge, skills, and dispositions. Many agreed, and would still agree, that effective teaching lies at the intersection of these three pillars. As Taylor and Wasicsko (2000) described, “Being effective as a teacher means not only being proficient with teaching processes (methods, strategies, and behaviors) that lead to student products (knowledge, achievement, etc.), but also being a person who can facilitate positive change in people’s lives” (p. 9). They added to the call by saying that, while challenging, the onus was on teacher educators to “conduct, refine, and apply research on dispositions to improve the processes through which teachers are selected and educated” (p. 9).

As teacher educators responded and shared their many perspectives, tensions emerged as the field grappled with the TD construct. Many examined these tensions, but Mary Diez offered one of the earliest and clearest articulations about the tensions that surround TD. In her reflective essay, Diez (2007) discussed the various themes of the ongoing debate and delineated the juxtapositions, while organizing the discourse into three key tensions: entity vs. incremental, separate vs. holistic, and screening individuals vs. building a professional community (pp. 389-

395). These tensions thematically weave in and out throughout the history of the construct and continue to surface today, as illustrated in the sections below.

2.2.1 Defining and Understanding Dispositions

As alluded to in the history of the construct, teacher educators have long examined, grappled with, and still have courageously offered a myriad of definitions and theoretical frameworks to better understand the elusive TD construct. Following the standards mandated by NCATE in 2000, many teacher educators began to discuss and delineate how the field understood the construct. Additionally, researchers consistently asserted that before considering how to intentionally integrate and assess for TD, TEPs must first have a clear understanding and the ability to precisely define the construct (Edick, Danielson, & Edwards, 2007; Schussler, Bercaw, & Stooksberry, 2008).

There are two common psychological approaches, each with its distinct conceptual framework, that lay the foundation for understanding how researchers have examined TD. The perceptual approach sees TD as part of an entity, with stable, innate traits, whereas the constructivist-developmental approach sees TD as an incremental construct, developed over time, learned, or affected by experience and environment (Diez, 2007).

The perceptual approach, first introduced by Combs and Snygg (1959), identified perceptions as core attitudes, values, and belief systems. They asserted that individuals understand their environment by relating it to their perceptions. Perceptions, in turn, directly shape one's responses to their environments and behaviors. Dispositions are, therefore, viewed as stable, innate traits formed over a lifetime and resistant to change (Wasiesko, 2007). Aligned with this approach,

Wasickso (2007) offered a three-layered continuum to capture the construct. At the center lies teacher perceptions, which include core attitudes, values, and belief systems. In the middle layer are teacher characteristics, or persistent attributes and tendencies. The outermost layer, which is perhaps the most superficial, is concerned with teacher behaviors or their observable activities (pp.54-55). Using this perceptual framework, he defined TD as “core values, beliefs or perceptions that cause behaviors and allow some educators to affect student learning, growth and development more positively than others” (p. 78). He suggested that teacher educators can use perceptual rating scales as self-assessment tools to evaluate whether candidates are a good fit for the teaching profession. Damon (2007) echoed this predictive nature and defined TD as a “trait or characteristic that is embedded in temperament... [and that] it is a deep-seated component of personality...” (p. 367). However, he cautioned the field of the asymmetrical power dynamics that may be present when faculty can scrutinize a candidate’s “innermost beliefs and behavioral tendencies” (p. 368). As a solution, he called for a more behaviorist approach to avoid ambiguity and subjectivity. These varying definitions appear to point to the idea that TDs are the core attributes that lead to tendencies and behavioral patterns, many of which are fixated while few are more in flux. Those aligned with this line of thinking are often promoters of dispositional assessment as part of the TEP entry and selection process, and throughout programming, as discussed further below.

Conversely, the constructivist-developmental approach can be traced back to Dewey and his habits of mind. Oja and Reiman (2007) used a constructivist-developmental approach to define TD as “dominant and preferred trends in teachers’ interpretations, judgments, and actions” that develop and grow over time (p. 98). They found that TDs are best understood within the context of thoughtful and responsible teachers’ professional judgment, even within ill-structured contexts with no one right answer (p.92). They maintained that candidates’ TD development relies on their

growth and maturity as they interact with supporting but also challenging social environments. Similarly, Breese and Nawrocki-Chabin (2007) defined TD as intellectual and emotional investment in events, situations, and people, and are “manifest[ed] through intentional, practiced behaviors that can be challenged, developed, and enhanced even as they denote behavioral tendencies that endure over time” (p. 33). Adding a social justice angle, Villegas (2007) proposed that TDs are “[predictive] tendencies for individuals to act in a particular manner under particular circumstances, based on their beliefs” and urged TEPs to “create space in which candidates can critically inspect their beliefs about diverse students” so that they can begin to challenge their “deficit perspectives” and reinforce their true understanding of educability and ability of *all* children (pp. 373-374). Furthering the constructivist-developmental view with the social justice lens, Mills and Ballantyne (2010) added to Garmon’s (2004) work, utilizing autoethnography to arrive at the conclusion that there are three hierarchically developed dispositional characteristics: self-awareness/self-reflectiveness, openness, and commitment to social justice. Their study suggested that these characteristics develop sequentially and that teacher educators must commit to making time to support candidates’ development of these highly desired TDs in a deeper, more meaningful way. Given the appropriate environment and set of experiences, the constructivist-developmental approach maintains that TD can indeed be developed.

Furthermore, another variation on examining and understanding the TD construct included seeing TDs as moral virtues. Sockett (2009) described TDs under the three categories of character, intellect, and care, asserting that these virtues are “qualities achieved by the individual’s initiatives, in the face of obstacles, and are intrinsically motivated” (p. 291). Researchers added that if a teacher with appropriate knowledge and skills lacks what Hansen (2001) calls *moral sensibility*, which include “underlying outlook or orientation of moral behavior” (p. 39), they are unlikely to

teach effectively. They identified characteristics that reflect moral sensibility, including compassion, empathy, respect, patience, honesty, curiosity, responsiveness, equity, integrity, caring (Carroll, 2005; Villegas, 2007).

Although these approaches established the foundation for the variety of definitions that have surfaced over the years, researchers have also utilized components from these theoretical frameworks to shape new and innovative conceptual frameworks that continue to serve the field of teacher education. In 2006, Schussler offered a conceptual framework, at the center of which was a compelling metaphor that placed TD as points of both convergence and inception, together creating a filter through which teachers think and behave. She argued that through self-awareness, inclination, and reflection, teacher educators can better understand each candidate's filter (p. 261). Schussler, Bercaw, and Stooksberry (2008) then built on Schussler's earlier work, defining TD as a two-way internal filter that affects the way a teacher thinks and acts. They offered the ICM Framework, which identifies three domains of dispositions – intellectual, cultural, and moral – and posited that exemplary teaching lies at the intersection of these three domains. In a more recent study, a collaborative effort between a university in Turkey and another in the U.S. led to building on Dewey's habits of mind and creating a framework that supports and trains candidates whose conduct would be "more intelligent" (p. 169). Through a qualitative content analysis of the literature and using a deductive approach, Altan, Lane, and Dottin (2019) found that TDs could be clustered around Habits of Mind that were then directly related to foundational educational learning theories such as constructivism, incremental theory, self-regulated learning theory, mindfulness theory, and emotional intelligence. The resulting conceptual framework offers teacher educators a robust guide and resource for researching ways to develop a better understanding and integration of TD into their TEPs.

Other teacher educators around the world have added their perspectives to this conversation. Especially noteworthy is the emphasis on considering the community in which the definition of TD serves a purpose. Fonseca-Chacana (2019), a teacher educator in Chile, in attempting to counterbalance the accountability culture that emphasizes standardization and assessment, argued that it is more important than ever for TEPs to define and address TD in their programming. Her study, although limited in its generalizability and inherent selection bias, used a participatory paradigm with a sample of 47 participants. In this mixed-method study utilizing classic Delphi techniques, she gathered data with two rounds of surveys. Through the study, she produced the following context-based, values-aligned definition of TD: “cultivable set of intellectual, intrapersonal, and interpersonal attributes that enact teacher knowledge and skills to the service of a professional community, which includes students, student families, and other education professionals” (p. 274). She also categorized three domains (intellectual, interpersonal, and intrapersonal), under which she identified a set of 17 context-relevant and significant TDs.

Diez (2007) called for teacher educators to move beyond responding to mandates and, rather, thoughtfully integrate dispositions with the knowledge and the skills that are already emphasized in TEPs. She called attention to the need for teacher educators to build a community of professionals who are “capable of addressing the needs of all learners” (p. 395). Despite these sometimes controversial and contentious conversations regarding the construct, researchers seem to agree that any debate about TD is positive for the educational community and could eventually lead to consensus about dispositions most desirable for the teaching profession, as well as other positive outcomes for the field. As Feiman-Nemser and Schussler (2010) pointed out, “conceptualizing dispositions is as much about a process as it is about an end product” (p. 177).

2.3 Integrating Dispositions Into Teacher Education Programs

In regard to programmatic implementation of TD, Borko et al. (2007) discussed the tension arising from two camps of teacher educators. Proponents of including TD in teacher education argued that this will ensure licensed professionals who “will be committed to fostering growth and learning in all students,” while opponents argued that TD cannot be measured with reliability or with validity and, therefore, teacher educators run the risk of indoctrination (pp. 361-362). The tensions that existed in the field, as described by Diez and others in the early 2000s, have persisted and sometimes have created wide chasms of philosophical differences. Borko and colleagues (2007) characterized this chasm as “not so much quibbles over apples and oranges, but rather over apples and fishes” (p. 360). As a way to reach a sound middle ground, Nelson (2015), who framed his work on Diez’s (2007) three unresolved, persistent tensions, made the case for teacher educators to join candidates as “co-inquirers who reflect deeply on details like how the context inspires the very judgment of the students’ actions we are ourselves making” (p. 94). To do this, Nelson (2015) suggested that teacher educators create systematic, contextually rich programs that allow candidates’ *intelligent habits* to inform their *intelligent dispositions*. Despite the differences, many researchers have productively operationalized and thoughtfully integrated the TD construct into their programming, with hopes to cultivate and assess for them effectively. Teacher educators have heeded Stooksberry’s (2007) suggestion that it was not about determining who is right and who is wrong, but rather about having more productive, innovative discussions that move teacher educators to “design consistent programs that effectively facilitate the development of widely shared and expected dispositions of all teachers, while leaving room for individuality of programs” (p.221).

2.3.1 Implementation and Cultivation of Teacher Dispositions

Working under the assumptions that fostering TD growth and development in candidates is a valuable effort, and that TD can indeed be supported and cultivated through teacher education, many researchers have tirelessly put forth work that illustrates this important endeavor.

Based on the widely accepted idea that learners who receive explicit instruction, scaffolding, and support for acquiring and demonstrating those taught behaviors are more likely to adopt those behaviors into their everyday functioning, Beverly, Santos, and Kyger (2006) were among the first to systematically foster “teacher identity” throughout their entire curriculum. In their five-year TEP at James Madison University, they implemented specific programmatic strategies such as advising, teaching, and supervising in the field, as well as a behavior checklist called “Professional Dispositions Ratings Form” that they produced and utilized to encourage the development of specific TDs. Their work produced positive results that will inform future research. Similarly, others also modeled strategies and frameworks for programmatic integration of the TD construct. Oja and Reiman (2007), who created the Integrated Learning Framework (ILF) that aligned with their definition described above, used a constructivist-developmental approach to emphasize the importance of designing progressively more complex new experiences that encourage candidates to shape their TD as they teach and assist others in learning (p.92).

In line with the emphasis on progression and growth, Schussler, Bercaw, and Stooksberry (2008) suggested the use of case studies as an effective strategy to develop and nurture candidates’ awareness of their own values and beliefs as they relate to their TDs. They advocated that candidates must be provided these case studies via multiple scaffolded opportunities in conjunction with other kinds of assignments and learning opportunities, requiring them to continuously self-

examine, analyze, and understand their own culture, value systems, and, ultimately, their inner world (p.114). They offered additional insight by sharing their ICM Disposition Framework, which emphasized the importance of bringing self-awareness to candidates' consciousness, in order to guide, build, develop, and foster desirable dispositions throughout a TEP (Schussler et al., 2008). They argued that candidates' ability to think about the why and how lies at the center of developing high-quality teachers. Although their study did not result in definitive generalizable data, it indicated that engaging in case analysis facilitated candidates' thinking about teacher assumptions. Similarly, Wadlington and Wadlington (2011) emphasized the importance of investigating ways to support candidates to become more self-reflective and aware of their dispositions, especially as they related to their teaching styles and preferences. They utilized various psychological measurements with their 150 participants and found that TDs and teacher styles were significantly related. Even accounting for some limitations, the authors posited that their results support that teacher educators must encourage candidates to improve their self-awareness and that this must be done early and throughout programming in order to better prepare them to make informed decisions and choices as teachers.

Using another strategy, Kim and Zimmerman (2017) offered a unique theoretical framework for addressing TDs, based on an eighteenth century German philosophical concept of *Bildung* (educating and forming of the self). They utilized a case study to examine the autobiographical journey of one teacher. In advocating for the highly individualistic, personal, evolving, self-determined, and self-transformational nature of TD, they concluded that *Bildung* (educating and forming of the self) and *Bildungsroman* (story of personal growth) could provide a more authentic, multi-dimensional reflective tool. In this way, they offered a unique philosophical framework and practice to incorporate into teacher education programming.

To investigate this conversation with a wider lens, Rose (2013) conducted a study that gathered and examined effective strategies utilized by 236 TEPs. Of the institutions surveyed, 79 percent reported that they intentionally considered how to teach and encourage a certain set of TDs. In combing through the data, he found 15 strategies that were commonly used by TEPs. The most popular of these included large-group direct instruction, writing about TDs, engaging in observations and conversing about TDs, and using simulations and case studies related to TDs. In addition to these strategies, Rose (2013) suggested that teaching tools such as videos that illustrate TDs in action and case studies focused on dispositions-in-context are lacking in the field and that their development would be welcomed by teacher educators. In this way, Rose (2013) took the pulse of the field and found that many TEPs were working on refining the ways in which they address TDs in their programming. His work illustrated the wide variety of strategies used as well as commonly shared strategies that teacher educators used to integrate TDs into their curriculum.

Together, many researchers have called for a systematic, integrated, transparent, and comprehensive approach to addressing TDs. Instead of a tentative approach, many have suggested that TDs are best addressed when TEPs intentionally and thoughtfully build in disposition-cultivating strategies throughout the entire programmatic sequence, woven throughout content and clinical courses, and explicitly sharing both the procedures and intent of the design with candidates for full transparency. Throughout decades of research, teacher educators have recommended a progressive approach, in which complex experiences and space for authentic reflections occur through multiple, scaffolded opportunities that address the highly personal and developing nature of TDs (Kim & Zimmerman, 2017; Schussler, Bercaw, & Stooksberry, 2008). Finally, the literature provides a nuance to this effort by adding an important and humbling idea that ‘teacher

education must be viewed as a starting point in a teacher's [dispositional] development, rather than a culmination that requires occasional tweaking' (Schussler, 2006, p. 264).

2.3.2 Implementation and Cultivation of Teacher Dispositions: Special Education Teacher Educators

As a dual-certification TEP, it is important to include the work of special education teacher educators. Increasingly diverse PreK-12 classrooms make it even more imperative for teacher educators to heed Villegas' (2007) compelling call for to prepare candidates who are responsive to the historically marginalized student population. The literature echoes this call and urges that we, as teacher educators, must prepare candidates who value all children, believe in the educability of all children, and can effectively teach them.

LePage, Nielsen, and Fearn (2008) are among the first special education teacher educators who tracked the progression and growth of their candidates' dispositional knowledge. With a sample group of graduate-level candidates entering an initial special education certification program, the researchers collected data by analyzing student products (vision statements), a survey about why they chose special education, and student interviews. Utilizing inductive cross-case analysis to allow patterns, themes, and categories to emerge from the data, they found differences in the progression of change between new and more experienced candidates. Moreover, their results highlighted the importance of measuring TDs as part of establishing a baseline at the beginning of the TEP to inform teacher educators about areas needing focus, rather than using it as a filter-out process. They asserted that this is important information for teacher educators to use in designing the curriculum. Dotger (2010) took an interdisciplinary approach and offered a unique

pedagogical method called “Parent/Caregiver Conferencing Model,” based on a medical-education pedagogy, to address the need in special education teacher preparation to be able to work collaboratively with families. Using this 15-week interventional pedagogy, the author targeted candidates’ multicultural awareness, ethical sensitivity, and ethical judgement via simulated parent-teacher interactions. Even with its moderately positive effect size, Dotger (2010) used a variety of methodologies for data collection, which supported the conclusion that this intervention for programmatic implementation appeared promising and provided a great example of an innovative method of addressing a critical need for collaborative special educators.

Conderman and Walker (2015) compared dispositional self-assessments from 248 undergraduate elementary and special education candidates with their 80 instructors’ assessments over the course of five semesters. They concluded that candidates do indeed profit from seeing example and non-examples of TDs through role playing and vignettes, which appeared to support candidates’ ability to more accurately self-assess. Moreover, they suggested that dispositional assessment should start early in the candidate’s programming and continue throughout, allowing for multiple opportunities for reflection and growth (p. 228).

Other researchers examined TD through the lens of a challenge that is especially notorious within the field of special education: teacher retention. Roegman, Pratt, Sanchez, and Chen (2018) explored how preservice teachers constructed teaching identities and used a qualitative case study design ($n=34$) to offer a unique perspective directly from the voices of preservice teachers about navigating the tensions of becoming special educators, and making sense of who they are in the context. Their findings suggested that teacher educators must provide support as special education preservice teachers navigate between the “extraordinary” skills and expectations they face in light of the marginalization of both special education teachers and their students with disabilities. At a

pragmatic level, the authors suggested that TEPs must carefully select cooperating teachers and schools, so that as preservice teachers develop and navigate their identity-building process, they can be supported in the most effective ways and have role models to work with.

To add to this conversation about dispositional development in clinical settings, Sciuchetti, Robertson, McFarland, and Garcia (2018) expressed the critical importance of examining *how* candidates develop “an awareness of the complexities and intricacies of the profession.” Their data suggested that candidates were more effectively able to develop a comprehensive understanding of their future roles and responsibilities as special educators through strategically aligned coursework and early, varied field experiences. They shared that their candidates identified specific characteristics and qualities of effective special educators’ dispositions, including a commitment to ongoing learning and development, advocacy, and setting and maintaining high expectations. These ideal TD characteristics, as well as the strategies for developing them, are important outcomes that inform special education teacher preparation.

In contrast, even when teacher educators are thoughtful in their approaches, researchers discovered that candidates’ experience of how TDs are addressed may be different. This indicates the continued need for examining and evaluating the construct of TD. Bercaw, Summers, Colby, and Payne (2012) examined their candidates’ perceptions about where and how TDs are developed in their program in an effort to strengthen it and their own teacher education practice. Using comparative methods, they surveyed 222 candidates at two different universities and found that their intended program design did not necessarily match candidate perceptions of how TDs were addressed in each of the two TEPs. The study resulted in insights that the program faculty then used to enhance and strengthen this important component of their program. This study highlighted

the importance of teacher educators continuing to find creative and strategic ways of cultivating and assessing dispositional growth in their candidates.

In summary, these approaches, as reflected in Diez (2006) and her work with Alverno's faculty, provide candidates with holistic and consistent opportunities for exploring, reflecting, and examining their own and others' value systems and ethical codes (p. 390). In many of these cases, teacher educators have both cultivated and assessed TD through context-based and values-aligned lenses, resulting in a wide range of program designs as well as instructional and assessment approaches. In the following section, research focused on the assessment component of this work is reviewed.

2.3.3 Assessing Candidates' Dispositions in Teacher Education Programs

Not unlike the variety of research on strategies for curricular integration, approaches to assessing for TDs have also been diverse. It can be assumed, however, that these researchers have based their work on the premise that candidates enter TEPs already endowed with many, if not most, of their innate dispositions. While earlier teacher educators advocated for using TD as one of the selection criteria for admittance into TEPs (e.g., Katz & Rath, 1985), many in recent years have heeded Damon's (2007) caution against assessing for TDs at the entry point, lest "aspiring teachers may be held accountable for their innermost beliefs and behavioral tendencies" (p. 368). Instead, he called for a more behaviorist approach in an attempt to avoid ambiguity and subjectivity of these attributes and to assess for clearly observable behaviors throughout their programming.

Singh and Stoloff (2008) were among the first to develop a measurement and assessment tool for TDs. Based on the NCATE/InTASC standards and Combs et al.'s (1969) Five Categories

of Teacher Perceptions, they utilized a self-assessment with Likert-type questions to develop the “Eastern Teacher Dispositions Index (ESTDI),” in which they identified 48 distinct TD characteristics and then administered to 86 candidates at a state university in Eastern Connecticut. The findings showed that most agreed in each of the scales and indicated a good understanding of the TDs needed for effective teaching. Their work, however, was significantly limited in that it only identified potential TDs but did not offer a reliable or a valid tool with which to assess TD growth. To further the work on assessment, Melin and Walker (2009) took on this “multidimensional conundrum” (p.59) by offering a more complex, programmatic-wide model that tracked and reported candidates’ TD throughout their time in the TEP, utilizing a sophisticated accountability system. Candidates and faculty members participated by using rubrics and a status-level reporting system, through which candidates regularly received performance ratings (acceptable and developing to alert-inducing unacceptable levels). When candidates’ behaviors warranted their performance ratings to fall in the unacceptable levels, their needs were addressed with development plans. In this way, the authors illustrated one TEP strategy to closely track and promote the development of what they considered appropriate TDs.

One starts to see common approaches among research examining assessment tools, including use of performance rubrics and status reporting (Melin & Walker, 2009), dispositional checklists (Beverly, Santos, & Kyger 2006; Rike & Sharp, 2008), self-assessments through journaling (Schussler et al., 2010), responses to case studies (Schussler & Knarr, 2013; Taylor & Wasicsko, 2000), and the use of portfolios (Carroll, 2012). In direct contrast to these assessment strategies, however, Choi, Benson, and Shudak (2016) offered a skeptical view, as expressed earlier by Borko, Liston, & Whitcomb (2007), against establishing and assessing for distinctive dispositional characteristics. Instead, they suggested that teacher educators view TDs as a single,

more global construct with dimensions. Their data suggested that even the two NCATE mandated TDs (fairness and belief that all students can learn) are not distinct from each other and that there is no significant correlation between candidates' dispositions ratings and their ability to engage students in learning.

In summary, the various attempts at measuring and assessing candidates' TDs have resulted in a diverse range of ways in which teacher educators have conceptualized the construct and assessed for dispositions. Yet, it remains clear that the field is still in need of research that examine and refine reliable and valid instruments that TEPs can use to assess for dispositions (Bercaw, Summers, Colby, & Payne, 2012; Choi, Benson, & Shudak, 2016). Moreover, at the macro-level, we must continue to ask for the purpose and the *why* behind evaluating for TDs, and work to identify best practices for both evaluating for programmatic efficacy and for assessing TDs in candidates.

2.4 Summary

Most would agree that teaching requires more than having content knowledge and pedagogical skills. Researchers have supported the efforts examining the TD construct by maintaining that not only is it a key component of successful classroom practice and can impact student learning (Darling-Hammond, 1999) but that there is a relationship between teacher efficacy and TDs (Thompson, Ransdell, & Rousseau, 2005). Additionally, TDs are shown to affect teacher retention as well as teacher resilience in facing challenges in the classroom and in the larger school context (Parrott, Da Ros-Voseles, & Eaton, 2013). It can then be argued that providing future

teachers the opportunities to foster and cultivate the foundation for this critical set of TDs is essential, if we are truly preparing twenty-first century teachers who can effectively handle the complexities of today's classrooms with countless diverse needs and demands. While the construct of TD in teacher education remains contentious and messy, various accrediting bodies maintain the construct's position in teacher education and expectations for TEPs to ensure that candidates possess the required dispositions necessary for licensure (CAEP, 2013). As such, it remains necessary that as a field, we continue to seek theoretically sound definitions of this elusive construct and to propose implementation strategies to build best practices in the field.

In examining the wide array of offerings in the literature on the TD construct, the majority have landed on certain sides of three tensions described by Diez (2007). Utilizing the incremental, holistic, and community-building approaches to understand and address TDs in TEPs, researchers have been productive in their response. From the incremental perspective, many teacher educators have organized their curricular designs based on a constructivist-developmental approach, setting TDs in a strength-based, growth-minded based conceptualization (Oja & Reiman, 2007). Concepts like Schussler's (2006) filter, Wasicsko's (2007) three-layered continuum, and Mills and Ballantyne's (2010) hierarchy of dispositions emphasized that TDs are best understood within the context of a continuously developing, thoughtful, reflective, and responsible teacher (Oja & Reiman, 2007, p 92). Moreover, programmatically, many have adhered to the mission- and value-centered call for curricula to address TDs in ways that reflect the ethos of the individual TEP (Katz & Raths, 1985). In so doing, voices in the literature have suggested for TEPs to reflect their context and the wider community while defining, identifying, cultivating, and then assessing for values-aligned, context-specific TDs in its candidates (Fonseca-Chacana, 2019; Shiveley & Misco, 2010). Furthermore, several voices emphasized the importance of looking at TDs through a social justice

lens and nurturing perhaps one of the most important dispositions, which is believing in the educability of all children (Mills & Ballantyne, 2010; Villegas, 2007). Using a social justice lens is especially pertinent to the need for us to closely distill dispositions that are most valuable to preparing candidates for meeting the complex, sometimes challenging, and often diverse needs of exceptional children. As Wake and Bunn (2016) stated, “What seems warranted then is a combination of the above approaches... [using] reflection to raise awareness and support the development of TDs in candidates in an iterative model. In this way, the means of measuring the TD construct then become an instructional tool for communication and empowering candidates in their own growth and development” (pp.36-37)

In integrating these offerings programmatically, Katz and Rath (1985), two teacher educators to initially discuss the TD construct, proposed that valued dispositions of a program should be reflected in the TEP’s *ethos*. In addition, researchers voiced that it is insufficient to address TD at the entry and exit points in the TEP, sporadically and in isolated instances such as during the clinical phases of the curriculum, or simply *hope* that candidates will naturally develop appropriate TDs by merely going through the TEP. In response, numerous researchers have offered curricular frameworks that systematically integrate dispositions by establishing clear, consistent expectations and providing meaningful context and opportunities throughout the entire program to acquire, practice, and generalize these behaviors (Altan, Lane, & Dottin, 2019; Beverly, Santos, & Kyger, 2006; Fonseca-Chacana, 2019; Nelson, 2015; Oja & Reiman, 2007; Schussler, Bercaw, & Stooksberry, 2008). Feiman-Nemser and Schussler (2010) specifically recommended a three-stage process in conceptualizing dispositions in a TEP. These include: 1) defining what is meant by the term TD, 2) determining the specific TDs that the college wishes to espouse, and 3) justifying the reasons for selecting those particular TDs. Similarly, Shiveley and Misco (2010)

proposed a four-step process for how TEPs can integrate and assess for TDs: 1) defining dispositions, 2) operationalizing dispositions, 3) assessing the dispositions, and 4) data collection and analysis. These approaches specifically inform the foundational design of my research study.

Although teacher educators have enriched the conversations and made definite strides on the TD construct, more work needs to be done. For example, there is a scarcity of research focused on *how* TEPs should go about preparing candidates with a necessary set of TDs to meet the challenging needs of the twenty-first century classroom. Children with and without learning differences require persistent, well prepared, and equipped teachers who believe in the educability of all children and have the knowledge, skills, and dispositions necessary to effectively serve them. Perhaps, at the most foundational level, however, there is a need to address a gap in the recent literature that discuss *how* a TEP's faculty should go about even taking those first steps of conceptualizing and understanding the TD construct. For this reason alone, I believe that teacher educators must continue building on the 30-plus years of research to refine our current understanding and best practices in curricular implementation of TD and continue this dialogue because, perhaps, "...mucking about in the murkiness is time well spent" (Schussler, 2006, p. 261).

3.0 Improvement Project

Adaptive challenges can only be addressed through changes in people's priorities, beliefs, habits and loyalties. Making progress requires going beyond an authoritative expertise to mobilize discovery, shedding certain entrenched ways, tolerating losses, and generating the new capacity to thrive anew." (Heifetz et al., 2009, p. 19)

This purpose of this study was to explore how one TEP's faculty navigated the ambiguous terrain of unpacking, examining, and conceptualizing the TD construct. This study utilized improvement science as the primary approach, with the intent for its findings and insights to improve our TEP. A qualitative case study design was also chosen, as case study methodology is best used in situations where the researcher is investigating *how* questions (Yin, 2018), and the study is bounded by time and place. Furthermore, the study was driven by the following inquiry questions: *How does the Collaborative Inquiry Process (CIP) inform faculty's understanding of the TD construct and faculty's perception of the TD construct's role in the program?*, *How does the CIP impact faculty's awareness of their own and each other's dispositions?*, and *To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?*

This chapter details the rationale behind the study's inquiry design, describes the theory of improvement and the process of arriving at the change idea, summarizes the timeline, and explains the methods and measures implemented during the study. The chapter also includes a synopsis of the data analysis procedures used to arrive at the findings, trustworthiness considerations and strategies employed, and concludes with a discussion of researcher's reflexivity.

3.1 Inquiry Design

The improvement science approach provided the foundational framework guiding this inquiry study, with an ultimate aim to improve the organization while addressing a complex problem of practice. Improvement science seeks to analyze systems and organizations, using an iterative approach to fully understand the problem at hand before designing an efficient learn-by-doing (sometimes failing!) approach. “Rapid tests of change” are then activated, enabling change agents to “learn fast and implement change well” (Perry, Zambo, & Crow, 2020, p. 14).

With the valuable strategies and tools provided by this approach, a qualitative case study methodological framework was used to bound the study. Primarily driven by the inquiry study’s “how” questions, its propositions or predictions, the case was bounded by time (November-December 2020) and place (one teacher education department). Additionally, inspirations were drawn from the literature, the field of self-study of teacher education practices (S-STEP), and its approach to research, as well as the work done by the LUMA Institute. S-STEP provides an inquiry approach specific to the field of teacher education, with its aim to investigate questions of practice that are both individually important and of broader interest to the teacher education community. Aligned with the qualitative and constructivist paradigms, this inquiry approach is context-focused, emphasizes the interpersonal and collaborative engagement that is deep reflective process, and promotes ongoing co-construction of knowledge (Samaras, 2006). In addition, the LUMA System of Innovation provided a “unique framework for practicing human-centered design” with a versatile and flexible set of tools to tackle problems (LUMA Institute, 2020). The tools are fully described in the methods and measures section below. Both sources of inspiration

were well-suited for designing an authentic, dynamic inquiry study for a TEP with an eye towards continuous improvement.

3.2 Theory of Improvement and the Change Idea

Given our TEP's faith-based mission and its emphasis on the moral, ethical, and spiritual dimensions of candidates, it is natural to presume that our curriculum provides ample opportunities for candidates' dispositional development. Moreover, as a TEP that aims to prepare educators who are deeply caring, compassionate, and reflective practitioners, and in turn, positively impact the learning and lives of their future students, this work can be assumed as a natural part of our continuous efforts to deliver high-quality mission-aligned teacher education programming. Yet, there is clear and substantial evidence that we neither share a clearly articulated conceptualization of the TD construct, nor provide transparent, intentionally sequenced TD growth opportunities throughout the TEP. This, paired with an expressed desire to improve how we address TDs, and supported by a body of literature that indicates a dearth of research that provides applicable guidance on *how* teacher educators should address this problem, affirmed the need for this study. By attending to this vital piece of teacher education, we aimed to strengthen the curriculum and "move the needle" closer to achieving the larger aim of continuously improving our TEP (Perry, Zambo, & Crow, 2020, p. 95).

3.2.1 Theory of Improvement

According to Perry, Zambo, and Crow (2020), a working theory of improvement seeks to answer the question, “What will work to improve the problem?” (p. 90). After carefully examining the practical knowledge with the supporting knowledge based on previous research, the following theory of improvement was developed:

If we want BAC teacher education program’s primary stakeholders (faculty & candidates) to be able to articulate a shared understanding of the teacher dispositions construct and how it is integrated within our program, **then** we must focus on the faculty conceptualizing and understanding the TD construct, as well as specifying a vision for the construct’s role in the program. This begins with program faculty collectively reflecting and having sustained dialogue in order to co-construct an operationalized definition of the TD construct.

3.2.2 Arriving at the Change Idea

The theory of improvement stated above can be likened to a hypothesis, as it describes “how the scholarly practitioner will move from problem analysis to actually tackling the problem during the testing phase” (Perry, Zambo, & Crow, 2020, p. 90). The process of moving from examining and knowing the problem to transforming the root causes into specific change ideas was accomplished by utilizing an improvement tool called the “Driver Diagram” (see Figure 2). This tool allowed change ideas to surface and helped to identify major levers that could be pulled to contribute towards systemic improvement. For example, primary and secondary drivers were identified to communicate the “potential avenues” for improvement. They indicated the *where* and *what* leverage points in the system and helped visualize how we might address our problem of practice. In other words, this *working* driver diagram provided a visual overview of the primary

and secondary drivers and pinpointed relevant change ideas that could lead to improvements toward our goal.

As indicated by the Driver Diagram, our high-leverage, primary drivers included stakeholders' shared awareness and understanding of the construct of TD (Alawiye & Williams, 2010; Almerico, 2011) and an emerging vision of a framework that would transform into a concrete plan for curricular integration of TD. In breaking down the primary drivers into the secondary drivers, or actionable leverage points, faculty's understanding of TD using clear and shared language, candidates' and other stakeholders' shared understanding of TD, curriculum and course enhancements, advising relationships, and clinical placements, surfaced as the *what* or potential areas with opportunities for actionable change.

Examining these drivers resulted in a number of change ideas, or alterations within our system and existing processes that could potentially be utilized and tested through a Plan-Do-Study-Act (PDSA) cycle. If these change ideas were effective, the outcomes would then positively impact and improve the drivers identified above. For the scope of this study, bounded by time and place, the targeted change idea was to create a series of four collaborative inquiry (CI) sessions, inviting the BAC's TEP faculty to engage in iterative listening and collaborative work to co-construct an operationalized definition of TD. The impact of this change idea on the drivers and the system was measured by triangulation of data collection methods such as pre-study and post-study surveys, audio recordings of the CI sessions, artifact/document data resulting from the CI sessions, semi-structured interviews, and observational notes. The four CI sessions were intended to increase shared understanding of the construct through collective dialogue and reflection. Shared understanding would then set the stage and build the foundation for the future work of co-constructing a curricular framework centered on TD, resulting in a more intentional and thoughtful

integration of TD development opportunities for our candidates. This work aimed to improve our TEP's ability to support our candidates, in cultivating and fostering the kinds of dispositional qualities that would then positively affect the learning and lives of their future students.

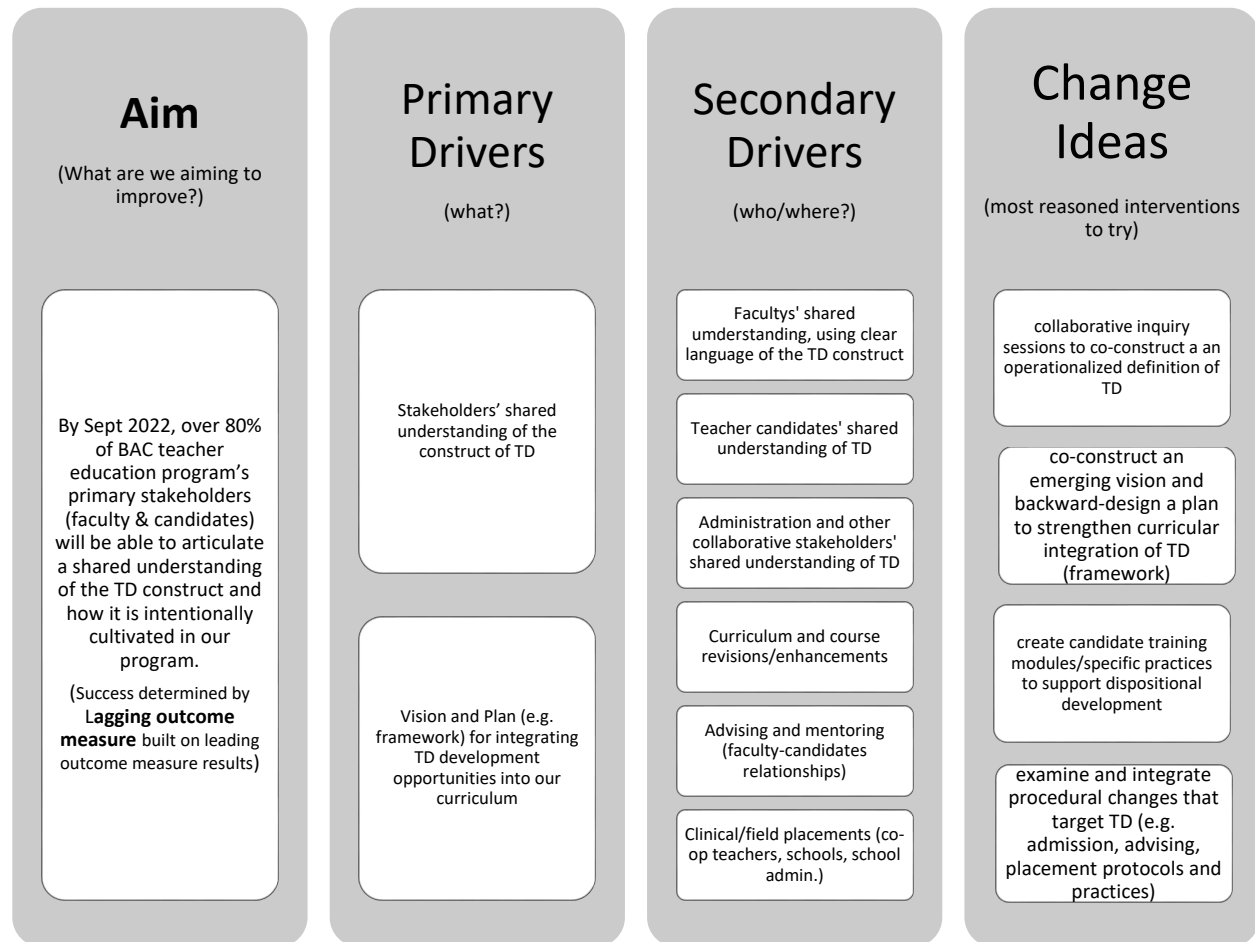


Figure 2. Drivers Diagram

3.2.3 Plan-Do-Study-Act (PDSA) Timeline

This study occurred within a bounded timeframe. First, the study overview/proposal defense with the dissertation committee was scheduled and executed on October 13, 2020, followed by the completion of the IRB process. Once the study proposal was approved by the

dissertation committee and IRB determination letters were obtained from both BAC and University of Pittsburgh respectively (see Appendices H and I), the Collaborative Inquiry Process (CIP) began. The CIP, representing all of the procedural components of the study, launched with the pre-study preparation session. During this session, the faculty participants were informed of the study's purpose, timeframe, protocols, and procedures, including how data was going to be collected and treated. In the informed consent that they signed, participants were given the option to remain anonymous (with utilization of a pseudonym) throughout the process, including the eventual writing and publishing of this dissertation.

The four CI sessions then commenced in mid-November of 2020, with the distribution of the pre-study survey via Qualtrics. Between November 8 and December 14, 2020, the CI sessions took place in-person, with about two weeks between each session. The four CI sessions were followed by the post-study Qualtrics survey, and then final semi-structured interview were completed virtually via Zoom with each of the three participants towards the end of December, 2020. Each CI session was informed by the previous, and necessary and appropriate adjustments were made, making the process as human- and user-centered as possible.

The CIP and its use of diverse range of data collection methods resulted in a robust data set that led to the findings. Although preliminary informal data analysis took place throughout the phases of CIP in order to inform a responsive inquiry process, the rigorous and methodical sense-making process of data analysis, with its iterative coding strategies, took place between the end of December 2020 and February of 2021. Writing about these emergent findings began in March of 2021, followed by a deeper discussion of key learning and implications between April and May of

2021. Ultimately, these steps (as detailed in Appendix A: Gantt Chart) led to defending the dissertation on July 1, 2021.

3.3 Methods and Measures

Combining the principles of improvement science and the methodological framework for qualitative case study design, the methods and measures utilized in this study aimed to show *how* one TEP's faculty navigated the ambiguous terrain of TDs. The following subsections describe the inquiry questions and predictions proposed at the outset, participants of the study and their demographics, and the methods through which data were captured.

3.3.1 Inquiry Questions

The inquiry questions that guided the study and the implementation of the change idea were the following:

1. How does the collaborative inquiry process (CIP) inform faculty's understanding of the teacher dispositions (TD) construct and its role in the program?
 - 1a. How does the CIP inform faculty's understanding of the TD construct?
 - 1b. How does the CIP inform faculty's perception of the TD construct's role within the program?
2. How does the CIP impact faculty's awareness of their own and each other's dispositions?

3. To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?

3.3.2 Predictions (Propositions)

Yin (2018) asserted that development of propositions guide data collection and analysis as well as lay the “groundwork for making analytic rather than statistical generalizations from your case study” (p. 24). Therefore, mirroring the inquiry questions above, the following predictions or propositions were proposed:

1. Engaging in the CIP will increase faculty’s individual and collective understanding of the TD construct, and better inform the faculty of the construct’s role in the program.

- 1a. Although some similarities may exist from the beginning, faculty members’ initial understanding of the TD construct will also vary widely. Through the CIP, individual understanding will become clearer, and collective understanding will become more cohesive.

- 1b. The CIP will provide foundational building blocks such as shared language and inform as well as improve faculty clarity on the TD construct’s role in the program’s curriculum.

2. The CIP will provide faculty with opportunities to reflect on and deepen understanding of one’s own and one another’s dispositions, thereby make visible our dispositions as teacher educators.

3. The CIP will facilitate dialogue centered around our mission, values, and commitments will lead us to co-construct an operationalized definition of TD that is more coherent with the mission and ethos of our program.

Inquiry questions and related predictions are reflected in the phases of the PDSA cycle, with its CIP Phases, as illustrated below (Figure 3: Overview of PDSA, Related Inquiry Questions and Data Sources).

3.3.3 Recruited Participants

Three faculty participants recruited for this study are full-time teacher educators at BAC's Education Department. Qualtrics surveys were utilized to collect formal participant demographics data from the three faculty participants. All three participants identified themselves as white, female teacher educators ranging from their mid-40s to early 60s. All reported having more than 13 years of experience teaching in preK-12 grades, while their years in higher education and specifically in teacher education ranged from three to over 20 years of experience. This purposive sampling was directly related to the aim of this study, which set out to deeply examine the impact of the change idea, the CIP, in the specific context of one college's TEP. It should be noted that I, as a member of this faculty, participated as a researcher-participant during the course of the study. Therefore, the four faculty participants made up the sample population of participants in this study. In addition, pseudonyms for the faculty participants (e.g., Participant A, B, C and D) were created during data analysis to protect their identity and privacy.

3.3.4 Procedures for Implementation

This study was designed in the qualitative research tradition, with its aim to understand and improve practice, and to produce authentic, rigorous, and trustworthy accounts of problematic

situations. Moreover, the study intended to elicit curiosity in my place of practice, as well as in the field of teacher education (Pinnegar & Hamilton, 2009). The inquiry questions also drove and shaped the study, leveraging the change idea of engaging rich dialogue about the construct of TD, facilitated primarily through the four CI sessions.

Although the end-user and target audience for the effected change are our candidates, and there are definite plans to create opportunities to include them more extensively in the scaled-up phase of this work, it was important to scale down the study for feasibility. Therefore, this inquiry initiated with the other immediate stakeholder group - the faculty of the BAC's TEP, who would eventually implement ideas and action-items that surface from the findings of the study.

As described in the timeline discussed above, the preparation session as well as the four CI sessions were built on one another and required both recurring as well as session-specific protocols and procedures. The overview of the PDSA cycle as illustrated by Figure 3, included the four CI sessions with the inquiry questions posed and the predictions made, specific resources and protocols required for each session, and data collection methods used to collect and measure the impact of change.

In order to ensure that the CI sessions resulted in concrete, measurable improvement, practical measurements, or "limited, quick and easy-to-collect data," were used, which then informed of the improvement effort's efficacy (Perry, Zambo, & Crow, 2020, p. 102). Unlike ones used in traditional research, measurements used in improvement efforts aim to better understand the nature of the problem at hand, provide motivation resulting in concrete data evidencing the extent of the problem, and yield the baseline data for comparison to inform continued efficacy (Perry, Zambo, & Crow, 2020). In the iterative multi-phased CIP, we implemented four types of

practical measures to assess whether the change was, in fact, resulting in improvement: outcome measures, process measures, driver measures, and balance measures.

Outcome measures, which included both lagging and leading measures, resulted in data that indicated whether or not the change idea introduced actually impacted the system. Lagging measures indicated eventual impact towards the broader overall aim of improving our TEP, which also will require additional work beyond the scope of this study. All the while, the leading outcome measures specifically produced data that indicated whether the CI sessions within the PDSA cycle had immediate impact and were moving us toward the overall aim. Driver measures, on the other hand, indicated whether the change idea impacted the primary and secondary drivers, and impacted the major levers within the system. For example, the pre-study and post-study surveys examined the shift and change in the faculty participants' shared understanding of the TD construct. Process measures, such as observational notes and audio recordings of the CI sessions, resulted in data that illustrated the more immediate impact of the change idea and captured whether the activities executed during the four CI sessions produced the predicted impact. It should be noted that although the specific LUMA methods were not frequently utilized within our departmental routine, they provided practical, realistic, and innovative tools easily implemented and within my realm of influence. Moreover, they had the potential to be adopted for future departmental use. These measures and data collection methods are detailed below.

3.3.5 Data Collection Methods

In order to “pursue a critical methodological practice – converging lines of inquiry” within the scope of this case study, multiple sources of data collection methods were utilized (Saldaña,

2016, p. 127). Four overlapping data sources to measure the impact of the change idea on the system included pre-study and post-study surveys via collected via Qualtrics, narrative data collected via audio recordings from each of the four CI sessions, artifacts from the CI sessions resulting from the LUMA-inspired activities such as Affinity Clustering and Concept Poster, and semi-structured interviews with each participant. Observation notes collected throughout the study served to supplement the thick description and provided iterative reflection opportunities to minimize biases. These triangulated data sources strengthened the trustworthiness of the findings and provided important nuances to the data and uplifted the voices of the faculty participants.

3.3.5.1 Pre-Study and Post-Study Qualtrics Survey

Pre-study and post-study surveys, each containing 18 questions, were sent to the three participants in an automated email from Qualtrics, an online survey application. The survey questions centered on the lines of inquiry and measured the ways in which the four CI sessions informed faculty understanding of the TD construct and its role in the program. In addition, the surveys examined to what extent the CI sessions impacted faculty members' awareness of their own dispositions as teacher educators. The pre-study survey was distributed four days before the first CI session and followed by the post-study survey, which was distributed two days after the final CI session. See Appendix C for the survey protocols.

3.3.5.2 Collaborative Inquiry Sessions

Four CI sessions were implemented during the months of November and December 2020. Due to COVID-19, protective measures such as social distancing and masking were added to the plan. Although virtual CI sessions were considered, the collective interest in being together in-

person while engaging in these sessions superseded, and the cautionary measures taken were agreed upon as sufficient. Each CI session took place in a classroom space known as the “Ed Room” on campus. While sessions were scheduled for approximately two hours, they often ran over time due to the vibrancy of the conversations. Each CI session was recorded using the Zoom virtual meeting platform, capturing participant dialogue and providing the rich narrative data intended to illuminate the progression of the work and its impact on the participants. The Zoom recordings also automatically generated transcripts, which were then edited line by line after each session, capturing the dialogue more accurately. This resulted in four sets of 19~25-page single-spaced transcripts. It should also be noted that due to technical difficulties with the audio during the third session, approximately 20 minutes of the audio recording was lost. However, the back-up recording did successfully record a large portion of the session and was used to manually transcribe the majority of the third session. Moreover, each session produced artifact data resulting from the hands-on LUMA-inspired activities, which were then physically preserved and photographed as well. The photographs were later uploaded onto ATLAS.ti qualitative analysis platform to be examined during data analysis phase of this dissertation.

Although plans for each CI session were carefully designed with the inquiry questions and the intentions in mind, each session was planned with room for necessary pivoting, aligned with the stance of a practitioner-researcher promoted by the improvement science framework. This allowed each session to be informed by the previous session and to be implemented in a truly user-centered and user-informed manner. See Appendix D for the CI session agendas, including the specific LUMA exercises planned for each of the sessions.

3.3.5.3 Semi-Structured Interviews

Each of the participants was invited for a post-study semi-structured interview. The interviews each lasted approximately 30 minutes and were scheduled in the two weeks following the last CI session. The intent was to gather nuanced and individual perception data, and gain insight into the lived experiences of each faculty participating in this study. The interviews took place remotely using Zoom and were recorded. This allowed for automatically generated transcripts, which were then reviewed and edited soon after the interview in order to accurately represent the interview and participant's voices. See Appendix E for the interview protocol.

Table 1 below outlines each session of the CIP, with its overall aim, inquiry question(s) driving that session, and the methods used for collecting the data, whereas Appendix B: PDSA Cycle details the procedural steps.

Table 1. Overview of PDSA, Related Inquiry Questions and Data Sources

PDSA: Phases of the CIP & Related Inquiry Questions	Data Collection: Methods & Sources
Pre-Study Preparation Session: What is our current state re: the TD construct? (history of the construct in the program, share existing evidence of how the construct currently “shows up” within the program, and socialize participants to study by introducing PoP, study design & timeline; distribute informed consent)	Informal baseline data collected via observation notes on participant dialogue; garner feedback on the study
Inquiry Question: 1. How does the collaborative inquiry process (CIP) inform faculty's understanding of the teacher dispositions (TD) construct and its role in the program?	-Pre-study survey distributed via Qualtrics immediately prior to CI session I
CI Session I: Faculty initial understanding of the teacher dispositions construct Inquiry Question: 1a. How does the CIP inform faculty's understanding of the TD construct?	-Audio recording of participant dialogue -Artifacts collected from the session (e.g., open ended “brain-dumping” exercise, LUMA activities called “Concept Mapping” and “What’s on Your Radar”) -Observation Notes
CI Session II:	-Audio recording of participant dialogue

Table 1 continued

<p>Examining others' research and work on the construct & its role in programming</p> <p>Inquiry Question:</p> <p>1b. How does the CIP inform faculty's perception of the TD construct's role within the program?</p>	<p>-Artifacts collected from the session (e.g., LUMA method called "Affinity Clustering")</p> <p>-Observation Notes</p>
<p>CI Session III:</p> <p>What are the <i>essential</i> components of our operationalized definition of TD?</p> <p>Inquiry Question:</p> <p>3. To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?</p>	<p>-Audio recording of participant dialogue</p> <p>-Artifacts collected from the session (e.g., LUMA method called "Persona Profile" and "Round Robin")</p> <p>-Observation Notes</p>
<p>CI Session IV:</p> <p>Articulating a working definition & visualizing how the resulting definition might inform the program's curriculum.</p> <p>Inquiry Question:</p> <p>1. How does the collaborative inquiry process (CIP) inform faculty's understanding of the teacher dispositions (TD) construct and its role in the program?</p>	<p>-Audio recording of participant dialogue</p> <p>-Artifacts collected from the session (e.g., LUMA method called "Concept Poster")</p> <p>-Observation Notes</p> <p>-Post-study survey distributed via Qualtrics immediately after CI session IV is completed</p>
<p>Semi-structured Interview</p> <p>1. How does the collaborative inquiry process (CIP) inform faculty's understanding of the teacher dispositions (TD) construct and its role in the program?</p> <p>2. How does the CIP impact faculty's awareness of their own and each other's dispositions?</p> <p>3. To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?</p>	<p>-Individual semi-structured interviewed conducted with each faculty member, soon after CI session IV is complete</p>

3.4 Data Analysis

The analysis of the resulting data confirmed the impact of the change idea. It should be noted that throughout the study, balance measures such as pulse-checks (e.g., formative check-in conversations) were utilized to monitor for and mitigate risks and to ensure that the change idea

introduced was, in fact, improving the system, staying user-centric, informing reasoned decisions along the way, and not disrupting or negatively impacting the system as a whole (Perry, Zambo, & Crow, 2020). In this way, informal data analysis was performed through reflecting on observational notes and checking in with the participants to gather signs that we were indeed moving in the right direction.

Formal data analysis, however, began once the final data were collected. The data collection methods yielded a set of six surveys, four CI session transcripts and artifacts, and three interview transcripts, totaling 39 documents. These documents were uploaded into a qualitative data analysis software platform, ATLAS.ti 9., which provided a central space to house and utilize the data for the iterative coding cycles.

Following Yin's (2018) case study design and Saldaña's (2016) coding manual for guidance, the inductive qualitative data analysis that I set out to perform began with familiarizing myself with the data. Taking coding as a "heuristic" and an exploratory exercise, pre-coding analysis began with immersing myself in the corpus of data and then re-reading the transcripts to highlight significant and salient lines while memo-writing significant observations in the margins (Saldaña, 2016). The iterative cycles of coding were deeply reflexive and, at times, a trying process for me as a novice researcher. Trusting in this process, however, sparked new insights and moved me from an abundant amount of raw data to a set of organized and refined codes, eventually transformed into categories and themes (see Figure 3).

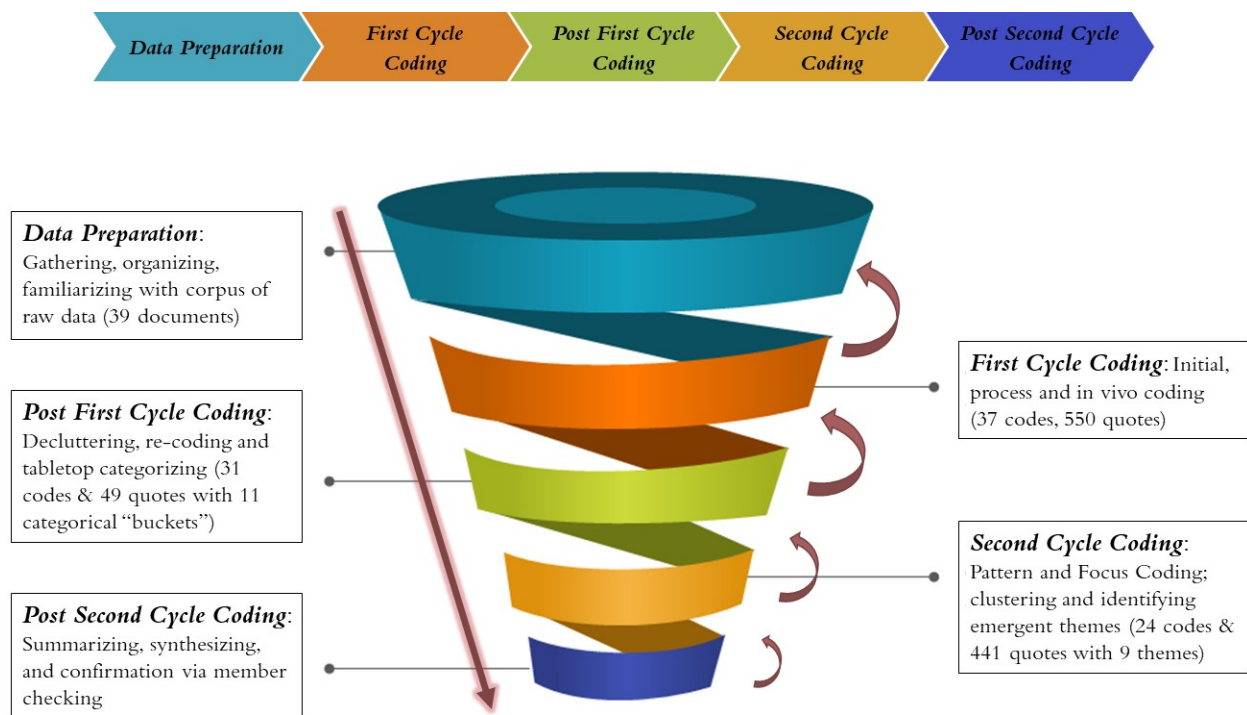


Figure 3. Overview of Coding Procedures and Thematic Development

The organic, dynamic, and iterative process of first cycle coding began in earnest, generating the “bones” of this qualitative analysis (Saldaña, 2016, p. 9). A flexible, emergent, and inductive approach during this first cycle of coding resulted in the initial codes, words or short phrase that symbolically assigned a summative, essence-capturing attribute for a piece of the data (Saldaña, 2016, p. 4). For example, holistic coding, often referred to as macro-level coding, was used to explore the data while attempting to grasp at some of the obvious themes, while structural coding, often referred to as utilitarian coding, helped refocus and view the data using the inquiry questions to frame the analysis (Saldaña, 2016). An eclectic mix of coding methods were then utilized, aligning with methodological considerations such as accentuating and honoring participant voices. For example, in vivo coding, also known as “verbatim” or “emic” coding, captured the words or short phrases from the actual language and terms used by the participants

and was deliberately chosen to ensure that the culture or ethos of the context was captured in this process (Saldaña, 2016, p. 105-106). In addition, a process or “action” coding method, using gerunds (“-ing” words) to indicate human actions observed in the data, was utilized in an attempt to capture dynamics and sequence of actions (Saldaña, 2016, p. 111). Figure 4 illustrates a snapshot of the first codes created.

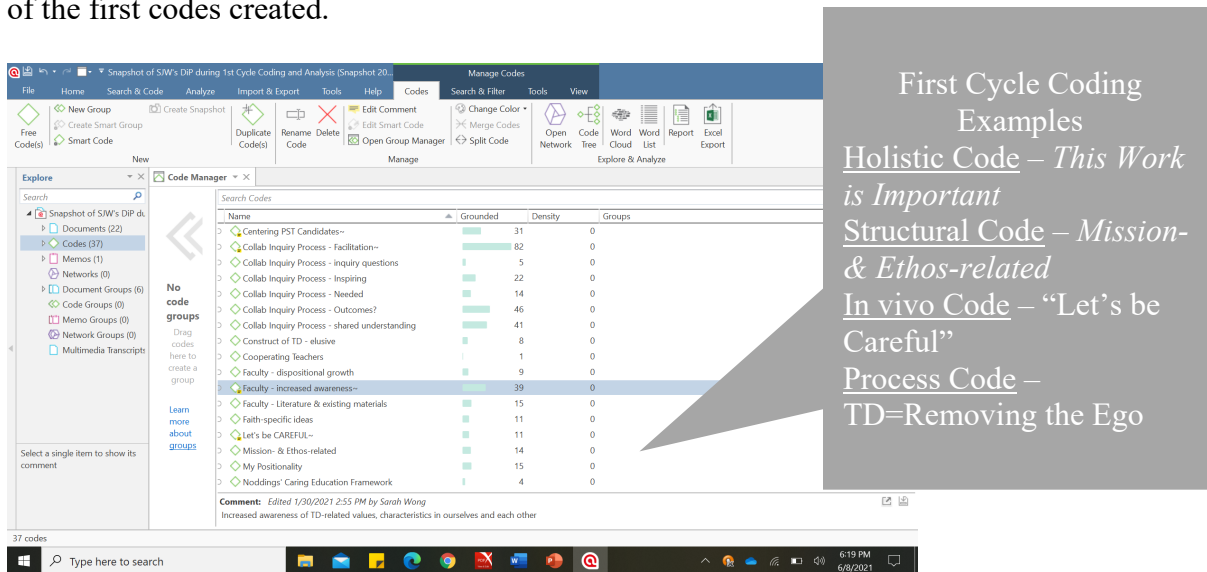


Figure 4. Snapshot of First Cycle Codes in Atlas t.i.

In an attempt to prevent what Saldaña (2016) refers to as code proliferation, or an overwhelming and haphazard cumulation of codes (p. 78), a more balanced approach of both lumping and splitting the data was employed, as illustrated in Figure 5, since there was a large amount of data to manage.

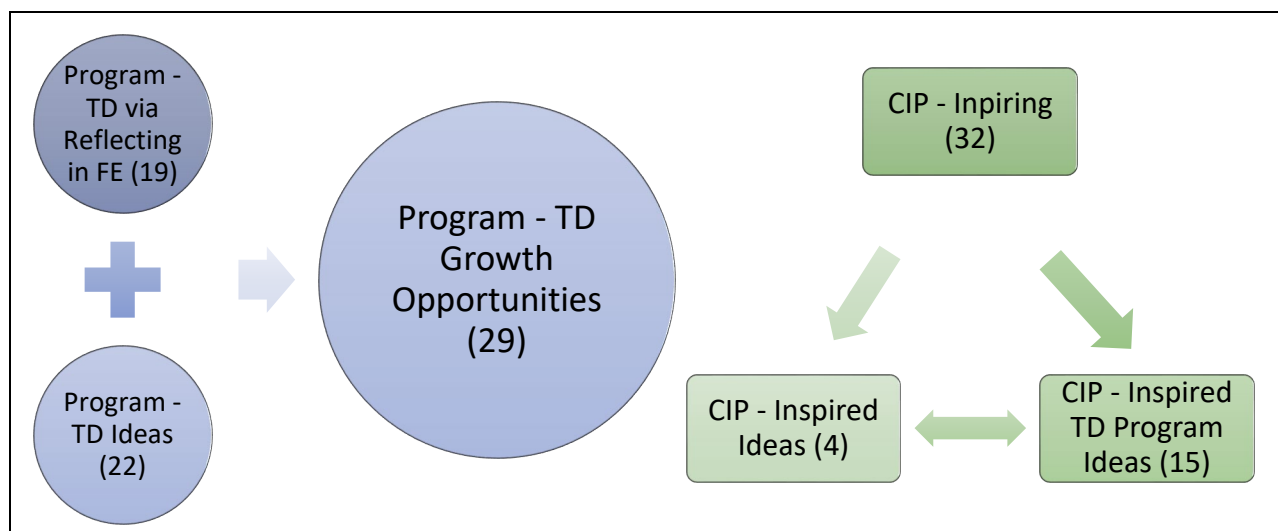


Figure 5. Lumping and Splitting Codes

Still, the very initial coding attempt within the first cycle resulted in 37 codes with over 550 quotes highlighted and commented on. As patterns and themes began to emerge, cleaning or re-coding and collapsing similar codes became part of the repertoire to establish stronger set of codes. Committed memo writing began during this time, and helped me shift into higher level analysis, transitioning from summative to reflective thinking.

During the post-first-cycle coding phase, the auditing process of decluttering and re-coding increased traction in the analytical process. As analytic memos started to accumulate, they became useful in determining the subsequent iterations of coding. The meaning-making part of the analysis began to take shape as I systematically examined the densest codes to determine both the appropriateness of the code as well as the saliency of the quotes. With continued collapsing and lumping, as well as splitting and re-coding, the iterative post-first-cycle coding was laborious yet productive, resulting in 31 codes with 490 quotes. Keeping the inquiry questions at the forefront, an increasingly more selective coding process resulted in clearer patterns as well as natural categories. Before I entered the more focused second cycle of coding, I discovered the need to step

away from using ATLAS.ti and to utilize a more physical hands-on approach. As suggested by Saldaña (2016), I implemented a more heuristic “Table-Top Category” Exercise, as shown in Figure 6. For this exercise, I printed a quotation report for each of the 31 codes and physically “played” with the data while refining representative quotes attached to each code, making both explicit and implicit connections between the codes as an attempt to develop a more “coherent metasynthesis of the data corpus” (Saldaña, 2016, p. 234). The recursive process of examining the codes while firming up the categories and gaining momentum towards turning them into bona fide themes was painstaking but ultimately, generative.

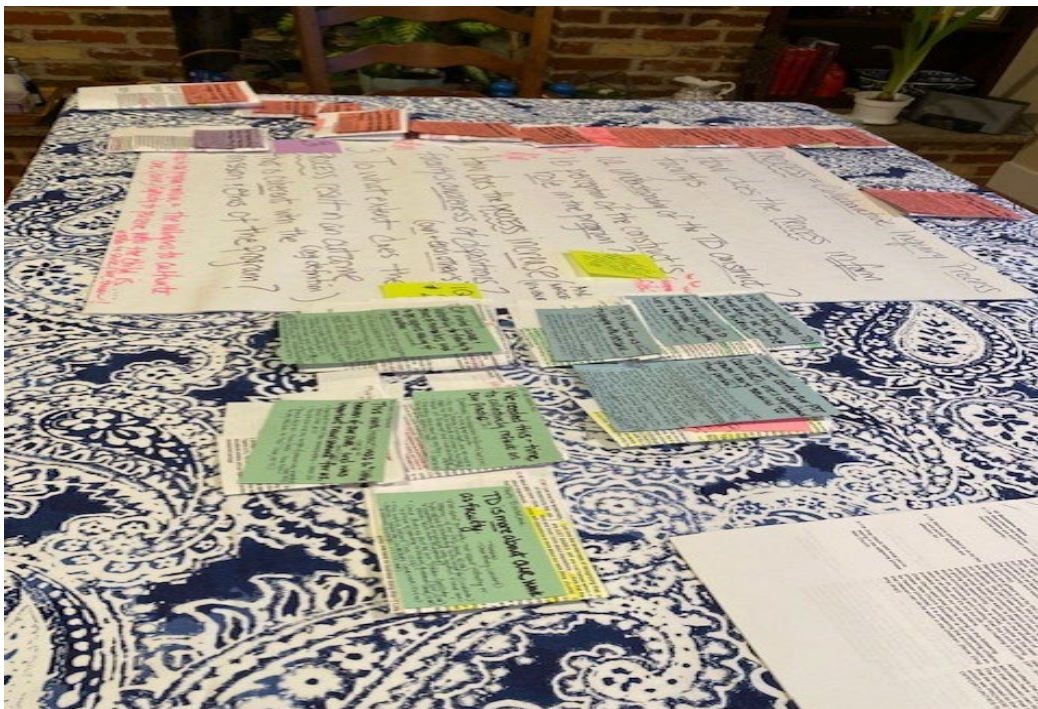


Figure 6. Photo of “Table-Top Category” Exercise

In the second cycle of coding, pattern and focused coding approaches allowed the move from the tabletop categorization approach with its 11 categorical “buckets” to uncovering and refining the thematic findings, resulting in 24 codes, 441 quotes, and nine themes. As I neared the

end of the analysis process, synthesizing strategies such as code-weaving and summarizing were useful. Ordering and re-ordering, while utilizing index cards and online tools such as Padlet (www.padlet.com), shown in Figure 7, provided a visual and concrete, analytic story lining process, as a lead-in to the writing process (Saldaña, 2016).

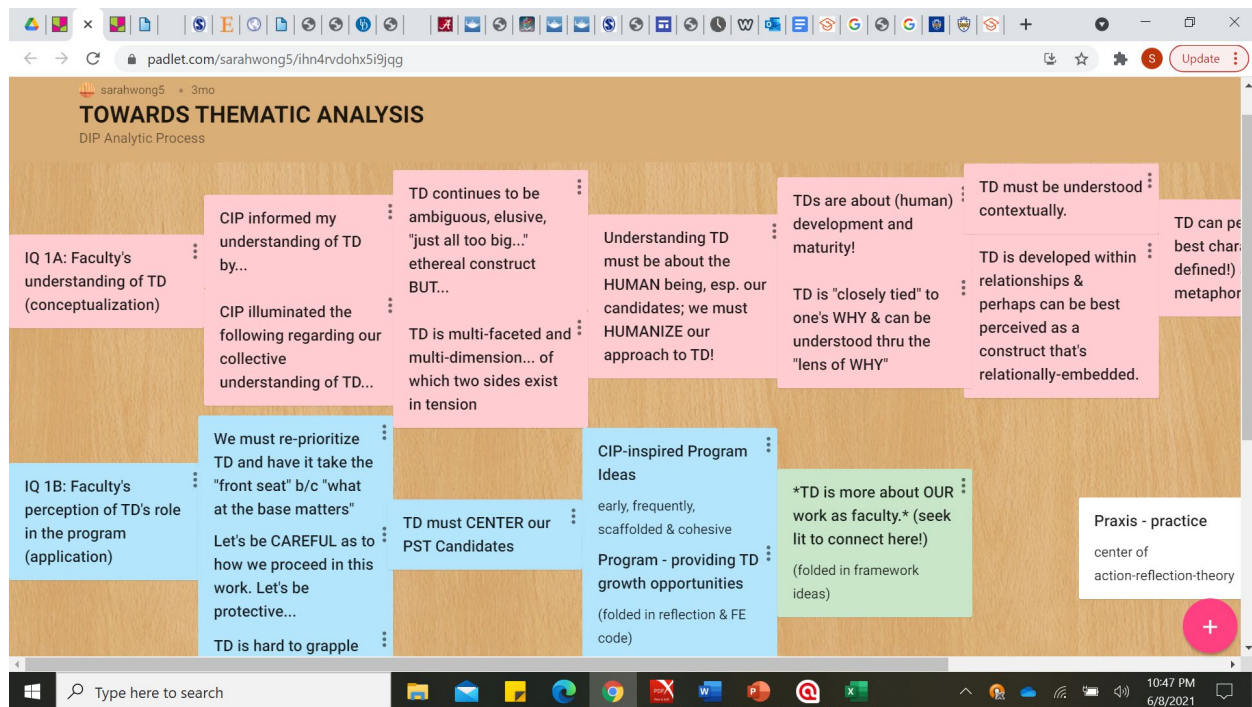


Figure 7. Analytic Story Lining in Padlet

Finally, performing a formal member-checking during this time was especially confirmatory and gratifying, as the ultimate aim of the analysis process was not just to “transform the data but to transcend them,” which allowed me to then share the story with others (Saldaña, 2016, p. 235).

3.5 Trustworthiness

Throughout the data collection and analysis phases, multiple strategies were implemented to promote trustworthiness and quality of this study (Brantlinger, Jimenez, Klinger, Pugagh, & Richardson, 2005; Patton, 2002). These strategies to increase trustworthiness followed Lincoln and Guba's (1985) evaluative criteria, including credibility (confidence in the truth of the findings), transferability (showing findings have applicability in other contexts), dependability (showing findings are consistent and could be repeated), and confirmability (neutrality or extent to which findings are shaped by respondents and not researcher bias/motivation/interest). During the data collection stages, strategies included prolonged engagement with the participants, triangulation of data sources, and member checking. Strategies used during the analysis phase included extensive memo-writing, member checking, and debriefing with dissertation committee members.

One of the trustworthiness strategies utilized was the triangulation of data collection methods and data sources. This supports one of the principles of case study research that the phenomena must be viewed and explored from multiple perspectives (Yin, 2018). Data sources included the pre-and post-study surveys, transcriptions and document/artifacts collected from the four CI sessions, and the three audio-recorded and transcribed semi-structured interviews. Triangulation resulted in thick description of the data and ensured a rich, robust, and comprehensive capture of the study and deeper understanding of the participants' voices.

Additionally, the member checking strategy became an especially important way to reduce research bias in this qualitative research, especially as I served as both data collector and data analyst, as well as researcher-participant. Although established rapport with the participants

enhanced the data with insider knowledge, it was important to attend to potential researcher bias intentionally and systematically. Therefore, member checking strategies were utilized at various junctures to reduce bias and to increase the credibility of this study. For example, I shared raw or preliminary data in between CI sessions and after the study implementation was complete to ensure accurate capture of the data. In addition, I asked for feedback and validation during the data analysis using questions such as, “Is this representing you accurately?” to engage faculty participants in the CIP and gave them the opportunity to check the accuracy and validity of the study’s findings (Miles, Huberman, & Saldaña, 2014). A formal member checking with each of the faculty participants, using a synthesized summary of the analyzed data handout shown in Appendix F, confirmed and validated the findings. Member checking served as a powerful tool to add credibility to the study and to validate the findings from the analysis.

Implementing a diverse range of strategies for trustworthiness created opportunities for enhancing the rigor and quality of the study as well as its findings. These techniques allowed for added clarity and deeper understanding of the phenomena during the analysis phase, and empowered participants’ voice while depicting a more accurate representation of their experience throughout the collaborative inquiry process.

3.6 Researcher Reflexivity

The design of this study utilized knowledge, skills, and dispositions gained throughout this Ed.D. program, embracing the principles of improvement science and adaptive leadership skills, and embodying the dispositions and mindset of a scholarly practitioner and improver (Lucas &

Nacer, 2015). Being user- and human-centered by listening to stakeholder voices with empathy, facilitating and generating ideas with them, thinking and reflecting together as a system, and facilitating problem-solving while tolerating uncertainty were just some of the aspirations that framed the work entailed in designing and executing this study.

Therefore, being a reflective scholar-practitioner became a prominent feature of this process. As the principal investigator of this study, attending to researcher bias while being a participant-researcher and the primary analyst of the data led to the challenges of navigating interconnected spaces between myself as the researcher and the participants, the participants and the research, as well as me and the research. From examining my assumptions and engaging in deep self-reflection, journaling the triumphs and failures experienced during the implementation of the study, memo writing and charting the thinking process throughout the analysis phase, shop-talking and member checking throughout the process, these measures were utilized to add credibility to this process and especially to the findings. Given that the TD construct was the central topic of this study, it was perhaps even more apropos to attempt to “understand and self-disclose my assumptions, beliefs, values, and biases (e.g., being forthright about position/perspective)” (Brantlinger et al., 2005, p. 201).

3.7 Conclusion

Through iterative thinking, learning, and reflective processes, the proposed study was intended to engage one TEP’s faculty in the collaborative, relevant, and meaningful work of exploring and conceptualizing the TD construct. In addition to co-constructing this shared

understanding and building the foundation for bolstering this component of our TEP, another aim at the systems level was to offer feasible strategies for new ways of working, enhancing future collaborative and problem-solving efforts through tools offered by improvement science and human-centered design. With the available expertise and capability, as well as the resources to execute this study without negatively impacting the existing human capital and resources, the hope was for this study to result in valuable findings not only in response to the inquiry questions posed, but to serve and add value to the context and the eco-system in which the study occurred.

4.0 Findings

This chapter presents the findings from a qualitative case study on one teacher education program's (TEP) journey, using the collaborative inquiry process (CIP) to examine the teacher dispositions (TD) construct. The study investigated ways in which the CIP informed faculty participants' understanding and perception of TD within the program, and impacted participants' own dispositional awareness. Additionally, the study examined the CIP's outcomes and those outcomes' coherence with the department's mission and ethos. Using the improvement science approach and methods (e.g., Plan-Do-Study-Act) and an exploratory case study methodology (Yin, 2018) to guide the study design, data were collected through pre-study and post-study Qualtrics surveys, four collaborative inquiry (CI) sessions, and semi-structured interviews (see Appendices C through E for protocols).

Through systematic and rigorous qualitative data analysis, primarily using iterative cycles of coding (Saldaña, 2016), the data were examined through the lens of the inquiry questions posed at the outset of the study:

1. How does the collaborative inquiry process (CIP) inform faculty's understanding of the teacher dispositions (TD) construct and its role in the program?
 - 1a. How does the CIP inform faculty's understanding of the TD construct?
 - 1b. How does the CIP inform faculty's perception of the TD construct's role within the program?
2. How does the CIP impact faculty's awareness of their own and each other's dispositions?

3. To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?

This chapter presents the thematic findings, organized by the four inquiry questions. Emergent themes are supported by participants' emic data, including quotes from the transcripts. The chapter then concludes with a summary of the findings.

4.1 Thematic Findings

Presented below are thematic findings that emerged from the data analysis, organized by the study's four inquiry questions. Each sub-heading represents one of the four inquiry questions and contains the themes that answer and support that inquiry question. The table displayed at the beginning of each sub-heading provides a visual representation of the themes with the connected codes and a representative quote(s) for each code under that theme. The narrative that follows depict the themes with illustrative quotes that characterize each theme in light of the inquiry question. Abbreviations "SI" through "SIV" and "CI sessions" are used to reference the four collaborative inquiry sessions. Furthermore, each participant was assigned a letter (Participant A through D) to preserve their anonymity.

4.1.1 CIP's Impact on Faculty Understanding of TD

In examining the faculty participants' grappling with the TD construct throughout the CIP, the following themes surfaced: 1) conceptualizing TD calls for ongoing work, 2) characterizing

TD's elusive dynamic dimensions with metaphors, and 3) humanizing the approach to TD. Table 2 summarizes these themes, codes, and representative quotes in collectively answering inquiry question 1a: How does the CIP inform faculty's understanding of the TD construct?

Table 2. Evidence of Themes That Address IQ 1a

Codes(density of code)	Representative Quotes
Theme #1: Conceptualizing TD calls for ongoing work	
TD – Faculty's individual understanding (16)	"After going through this process, I see the teacher dispositions construct as the thread that ties our program together as well as the foundation for success for every teacher to cultivate their own willingness to see children for who they are and the gifts [they] bring to the table. From this foundation, all other tangibles and intangibles are informed and developed." (Participant B, Post-Study Survey-Q11)
TD – Faculty's shared understanding (21)	"I think we have made significant progress in getting to a shared understanding of the construct; however, there is still much to do." (Participant B, Post-Study Survey-Q10a)
Theme #2: Characterizing TD's elusive, dynamic dimensions with metaphors	
TD is "elusive" and "ambiguous" (9)	"Elusive[ness] or ambiguity... [perhaps] is the reason why I think so many teacher educators over the last three plus decades have struggled with it." (Participant D, SI)
TD and its divergent dimension (18)	"And I was torn, because I do think there [are] some fundamentals as a program that's certified by the state, what would we want our teachers going out into the field to have. But again, it's almost like we have this ideal that really can't be measured, [and] ...we want those certain areas you want measured, but then there are these things we want to cultivate and help an individual find.... (Participant B, SII)
TD as a metaphor or a visual (33)	So you don't have to guide that – you don't have to prescribe the understanding and it gives them another way [in]. And developmentally, they are able to wrap their minds around a metaphor. In another words, they have the skillset to understand metaphors and make connections..." (Participant B, SIII)

Table 2 continued

Theme #3: <i>Humanizing our approach</i> to conceptualizing TD	
TD is about “the human” (16)	“Teacher dispositions are simply human dispositions and the greater variety there are, the greater we serve children and their families.” (Participant C, Post-Study Survey)
TD is “developmental” (21)	“Well... that it is developmental. Dispositions are developmental!” (Participant C, SI)
TD is about “the why” (9)	“You’re gonna have to meet [these] expectations... but you can control the <i>why</i> you are doing it. And that <i>why</i> ties to all those attitudes, values, and dispositions of a teacher – comes through that lens of the <i>why</i>You are doing it because that’s how you’re loving them.” (Participant B, SIII)
TD is context-dependent (8)	“...the context will impact their dispositions... [and] how they unfold in the environment that they are working in.” (Participant B, SI)
TD is relationally-embedded (7)	“... we can hopefully move away from identifying dispositions as something that occurs in a subject separate from us. But rather, arises in our relationships.” (Participant A, Interview)

4.1.1.1 Conceptualizing TD Calls for Ongoing Work

Throughout the CIP, faculty participants conveyed varying emotions regarding the ambiguity surrounding the TD construct, including dissatisfaction with the lack of clarity in state guidance, contextual constraints posed by academia, and overall concerns about the tentative process of grappling with the construct. Moreover, the wide range in participants’ conceptualizations of TD was reflected in their pre-study survey responses as well as during the first LUMA exercises. For example, “teach – but don’t assess,” and articulating that there are

touchable versus untouchable or measurable versus unmeasurable facets of TD were just some of the divergent notions shared by the participants.

At the conclusion of the CIP, however, participants conveyed a sense of relief. As indicated by the code “TD – Faculty’s Individual Understanding,” participants shared that conceptualizing TD through the CIP added clarity, deepened their individual understanding of an elusive construct, and provided shared language. Furthermore, tracing participants’ responses to Question 11 on the survey (“How would you define the teacher dispositions construct?”) also illustrated the shift in conceptualization at the individual level, as captured in the way this participant qualified her response during the interview:

...helped clarify for me the two aspects of what gets called dispositions; one being measurable behavior, professional behaviors, and the other being relational in that we can hopefully move away from identifying dispositions as something that occurs in a subject separate from us, but rather, arises in our relationships (Participant A, Interview).

The added nuances to her response indicated ways in which the CIP may have informed faculty participants’ understanding of the TD construct.

Despite CIP being an informative process, participants also came to terms with the status of their shared understanding at the conclusion of CIP, as indicated by the code “TD – Faculty’s shared understanding”:

I think we learned a lot [and] recognize the uncomfortable nature of knowing that the work is not anywhere near being done or finished... but getting to a place where we have something tangible to move forward with, as a collective department, and being okay with that [referring to variations in understanding] (Participant B, Interview).

While some felt uneasy, all participants agreed on the ongoing nature of this work and expressed the desire to continue the work together.

4.1.1.2 Characterizing TD's Elusive, Dynamic Dimensions with Metaphors

As participants articulated their understanding using various points of entry on the conceptualization continuum, they continued to point to the elusiveness and ambiguity that surrounded TD, represented by the code “TD is elusive and ambiguous.” Even while examining curated selections from the literature representing other teacher educators’ work on TD, participants acknowledged the challenging nature of the construct. Yet, participants courageously navigated ideas and attempted to build on each other’s offerings, while resisting the impulse to reduce this complex construct into one operationalized definition. It became apparent that this was not the direction that some participants wanted to take:

I’d love to articulate it, but I don’t want to have anything to do with standardizing it. So much of it was written in dry, abstract, theoretical terms, as if it could be some standardized program that universally could be... that it had nothing to do with individual human beings. And that’s the only place that it’s meaningful. The *only* place. (Participant A, SIII)

Rather than making this reductionistic move, one participant offered an idea that resonated with all participants. Instead of producing a definition, she suggested that we characterize the construct, resulting in a more meaningful and relevant outcome. More specifically, the use of metaphors, visuals, and stories to capture its dynamic facets, as indicated by the code, “TD and its divergent dimensions” with its 33 quotes, the densest of all the codes that fell under this inquiry question, signaled that the participants saw this as a more valuable way to conceptualize the construct for our TEP. Including champagne, a shovel, a tree not a two-by-four, a net, a swimming pool and filter, and even likening the supporting of candidates’ dispositional growth to teaching one how to drive stick-shift, participants proposed copious metaphors to conceptualize the construct.

Moreover, participants offered ways those metaphors could also be used to characterize the process of our candidates’ work in cultivating their own TD. They suggested that metaphors could

offer our candidates a more concrete, developmentally appropriate, and digestible way to understand and to think about their own TD development. One participant suggested the following metaphor for this process:

...so I am reminded of making rope. It's an intricate, deliberate, endless process that is creative and colorful, steady. And at the end, you have this thing that is really useful for a whole host of things. [In field experience] have them come up with all those attributes that we came up with... and see what they say. And then, you know, like braiding a rope, be able to adjust to the strands. [Take out] ones they didn't find useful and then re-braid it with ones that would be more useful. (Participant C, SIV)

Additionally, use of metaphors was extended to our work on conceptualizing TD as faculty, likening the process to gold mining. Although we were seeking a clear conceptualization of TD or this metaphoric gold, this metaphor reminded us not to dismiss the other treasures that we discovered throughout. In this way, characterizing the ambiguous and elusive TD using metaphors and visuals became a mainstay of the CIP.

4.1.1.3 Humanizing Our Approach to Conceptualizing TD

Participants consistently articulated the importance of recognizing that TD must be about the human beings involved, indicated by the code “TD is about the human.” This idea first surfaced while we engaged in the LUMA exercise called the Rose-Thorn-Bud and Affinity Clustering during SII. In summarizing the observations from that CI session, I shared with the participants how striking it was that the *only* cluster of roses, representing promising ideas that we all wrote on post-it-notes, independently of one another, seemed to point to one central idea phrased in several ways: humanizing dispositions, humanized dispositions, human ingredients, counterbalancing standardization, and accountability.

Emphasis on the human aspect of TD aligned with the conversations on the importance of viewing candidates and their developmental states while in our TEP were represented by the code, “TD is developmental”: “...in terms of their maturity and what really happens developmentally at this age. [There’s] this possibility of taking hold of your life in a new way. ...again, it's not measurable, but it's something developmental [that] happens around this age” (Participant A, SII). This participant added that she saw dispositions as “this interface between self and the world” that could not be forced but rather happened through growth and through practice. It is important to add that participants also offered a contrasting idea, referencing a colleague’s story from her early teaching years, when she probably had the kinds of dispositional characteristics long before her TEP.

Related to recognizing candidates’ human development, participants voiced the significance of contexts in which TD development occurs, as indicated by the code “TD is context-dependent.” As one of the participants stated, “...culture is something that contributes to everything when it comes to growth and maturity... and developing into an individual who has a possibility of acting, not reacting... out of and in [one’s] conditions” (Participant A, SII). Adding nuance to understanding contexts came in the way of exploring how to have developmentally appropriate conversations with candidates about their *whys* in wanting to become a teacher. Participants shared that having these types of conversations would contribute to candidates’ dispositional growth, as represented by the code, “TD is about the why,” and would be giving them the tool to re-center in their future contexts, especially as they face challenges:

In other words, to say [to them], even on those days when it was the hardest, hold on to the touchstone [of *why*] because the rest of it is so much noise. Because [if] they're able to hold on and foster the capacity to see the child - that will help eliminate a lot of the things that could throw them into a ditch or have them leave at the end of that first year. (Participant B, SIV).

Participants also voiced the importance of seeing candidates mature within the context of human relationships as represented by the code “TD is relationally embedded.” In fact, one participant stated that rather than thinking of TD in terms of whether one has a set of characteristics or not, it must be thought of in the context of relationships, adding the impact of this on our own roles and growth as teacher educators:

So, then our role becomes a very different one, maybe kind of a la Nel Noddings. That the way we regard and open ourselves to who our teacher candidates are, opens up avenues for growth in both parties. And yeah, through modeling and communication and confirmation [referring to Noddings’ caring education], some sort of process of birthing who we are all becoming - becomes more possible. (Participant A, Interview)

As we entered SIV, I reflected with the participants on how, in these ways, we are humanizing our approach to conceptualizing TD and infusing "human-ness" back into teacher education.

4.1.2 Summary

Data showed participants’ initial understanding of the construct varied widely, and they voiced frustration over the ambiguity of the construct. The analysis evidenced, however, that the CIP resulted in enhanced clarity at the individual level and created space for faculty to think collectively in order to arrive at a more cohesive understanding. Since the construct of TD hinged on the human factor, however, its multi-dimensional nature is something that participants determined will require ongoing work in order to better understand collectively and to integrate into practice. Findings of this study suggested that this work could be guided by the north star of proceeding with great care and by humanizing the approach.

4.2 CIP's Impact on Faculty's Perception of TD's Role Within the Program

As faculty participants delved into better understanding the TD construct, the conversation of the construct's role within the program surfaced quite naturally. Analyzing the data resulted in the following themes: 1) re-prioritizing TD with *care* while honoring candidates' *voices* and *choices*, 2) creating a nurturing program environment in which faculty *walk along* with candidates, and 3) continuing *our work* within a "laboratory of collegial[ity]." Table 3 represents these themes with their aligned codes and representative quotes, collectively answering inquiry question 1b: How does the CIP inform faculty's perception of the construct's role in the program?

Table 3. Evidence of Themes That Address IQ 1b

Codes(density of code)	Representative Quotes
Theme #4: Re-prioritizing TD with <i>care</i> while honoring candidates' <i>voices</i> and <i>choices</i>	
Program – Must Prioritize TD (16)	"I think one of the things that we discovered today is that... breadth needs to get in the backseat, and what needs to be in the front seat is that deep dive into your personal human spirit and... you know, searching for those places where your values and characteristics could use some work. We don't get to do that in our program." (Participant C, SI)
Program – Let's be careful (11)	"...I'm urging a big yellow light here [LOL]... in how we proceed with something like this." (Participant C, SIII)
Program – Faith Ideas (13)	"...the thing that I think is so hard for Swedenborgians to grapple with here... is that we actually believe that developing these things happen over a lifetime... that it is not something you are when you're 23 years old... that this idea regeneration is eternal." (Participant C, SI)
Program – Must center PST candidates (38)	"Our role is to help them get there - what [she] keeps bringing forward about – well, it's who this student is. We're helping them become the teacher that they are going to end up being. And who is that? That's our part." (Participant A, SIV)
Theme #5: Creating a nurturing program environment in which faculty <i>walk along</i> with candidates	

Table 3 continued

Program - Curricular Ideas Inspired by CIP (59)	<p>“... [let’s] look at our field experience program and maybe twice a term, have them do a seminar on dispositions – a two-hour discussion and ask: what do they think they are bringing to the table? what do they see... that children... cooperating teacher are bringing to the table? – all in terms of values, attitudes, and capacity. What heartbreaks and joys... have you seen in your classroom? I do think we could change that to have our students be more active in understanding their own dispositions. ...you know, over cheesecake and coffee!” (Participant C, Interview)</p> <p>“...the shepherds who do come first... take steps that he/she wouldn’t necessarily take in their own development. But they do it because it’s what the sheep needs...” [reference to faculty’s role]” (Participant A, Interview)</p>
Program – Providing TD Growth Opportunities (31)	<p>“...like braiding rope. [Help] them adjust the strands they didn’t find useful and then re-braid it with the ones that they would find more useful [in reference to supporting candidates’ TD growth].” (Participant C, SIV)</p> <p>“...that is something that we actually can then teach, share, and discuss. And I think what we talked about the last time... was providing opportunities, the space, for students to reflect on their own development, growth, experience.... In other words, we are looking for students to understand how to meet the needs of students.” (Participant B, SIII)</p>
<hr/> <p>Theme #6: Continuing <i>the work</i> within our “laboratory of collegial[ity]”</p> <hr/>	
Program – TD as OUR (faculty’s) work (26)	<p>“More and more I think about dispositions... I think that the work with dispositions is more about our work. It’s not about instructing or more requiring or anything. That you know - this comes out of reflecting on Nel Noddings’ piece. But also seeing how we would actually operate - And I’m thinking of two recent examples. ...let’s keep doing what we are doing, which is humbling work.” (Participant A, SII)</p> <hr/>

4.2.1 Re-Prioritizing TD with Care While Honoring Candidates' Voices and Choices

Participants agreed throughout the CIP that TD should be a priority and conveyed its value in our TEP, indicated by the code “Program – Must prioritize TD.” Participant C even lamented that due to external pressures, we did not get to prioritize this foundational aspect in our program re-design five years ago, and wistfully professed that TD had become more of an after-thought. In

an attempt to remedy this situation, she suggested the need to re-visit the foundation as a means of moving forward. Adding a layer of urgency, another participant highlighted that this need was even greater, posed by the current context of the pandemic as it relates to preparing our candidates to face those challenges.

In the re-prioritization efforts, however, participants also voiced the need to proceed with *care*, as represented by the code “Program – Let’s be careful.” In protecting the part of TD that is not “our realm” but rather candidates’ “sovereignty” and their spiritual journey, participants stressed the need to protect candidates’ readiness. These cautionary messages also closely aligned with many of the faith-specific ideas shared throughout the CIP, especially as they related to ones voiced under the code “Program – Faith Ideas.” Rather than intervening or imposing our own ideals in the approach to TD, participants vocalized the importance of considering one’s spiritual growth or regeneration. Participant A articulated, “New Church Education is not preparing children for heaven [chuckle]. It is preparing the environment so that Heaven can do its work in the children” (Participant A, SI). This participant later shared the idea of teacher educators taking on the gesture of a guide and facilitator or as a “shepherd,” and going on this journey of dispositional growth with the candidates. This provided a segue into the conversation about honoring candidates’ voices and choices.

From the beginning, participants voiced that this work needed to be *for* and *about* our candidates, as indicated by the code “Program – Must center PST candidates” with its 38 quotes; we centered the conversation around our candidates. Since dispositional development truly belonged to our candidates, participants emphasized the need to ensure relevancy so that candidates have a sense of ownership over their own dispositional development. Therefore,

participants discussed importance of creating these spaces within our program for candidates to do this work:

So how do we do that consciously... even down to just our assignments? And I think [she] does this beautifully over and over again in her assignments where there is a structure, there's a rubric...but there's a choice. Then there is space for them to play, make choices, own and something magic can happen. (Participant A, SIII)

Ultimately, participants urged that TD cannot be something that we as teacher educators impose on them, but rather support and guide them in selecting, nurturing, and fostering within themselves as part of owning their growth as future teachers:

Our list of words, again it's good and wonderful. But it's gotta be their list of words. That's what we need to elicit from them - what is their list of words? So I would love to see all of our cohorts make a list of those attributes - those words – and keep it with that cohort for their three years or four years. They can add to it or subtract from it or whatever, but [this] gives them ownership of those things which they claim that they value, right? (Participant C, SIV)

In re-prioritizing TD in our TEP, participants voiced that we must proceed with care to protect the candidates for whom this work is done. They insisted that their voices must be centered as we navigate the ways in which we implement this foundational component of our program.

4.2.2 Creating a Nurturing Program Environment in which Faculty Walk Along With Candidates

Starting with the gateway course of the program, participants enthusiastically maintained their desire to create a nurturing program environment in which we, as teacher educators, would *walk with* candidates as they paved their dispositional development path. Rather than imposing faculty's own ideals, as indicated by the 59 quotes linked to the code “Program – Curricular ideas inspired by CIP,” illustrated by this being the densest code under this inquiry question, participants

shared abundant ideas for weaving in opportunities and experiences that support candidates' abilities to cultivate and tend to their dispositional growth. They proposed that by giving candidates tools of self-examination and reflection, as well as keen observational skills, candidates could identify and explore dispositions that would best serve them and future students in their care.

As indicated by the density of the two codes that fell under this theme, the second one being "Program – Providing TD growth opportunities" with 31 quotes, participants offered thoughts and ideas about how this work on TD could be achieved in our program. For example, Participant B stated it would be important to consciously offer opportunities for students' self-reflection and to be more purposeful about how we articulate these options. Participants also had specific curricular ideas spanning from weaving in more self-examination practices to incorporating more case studies, stories, and metaphors to encourage dispositional growth. Participant A also articulated the desire to cultivate candidates' observational skills through aesthetics and sought to find a "ripe spot" in our program, such as in the junior year, to really home in on child development and the skill of seeing the whole child. Finally, Participant C articulated the idea of "hanging TD on FE" with the need for refining the way we guide candidates in their reflective and self-examination practices as an entry point idea to integrating TD growth opportunities in a more robust and meaningful way within the curriculum. In these ways, faculty participants engaged in rich dialogue about practical ways we could support candidates' abilities to actively work on their own dispositional growth, or "braid the TD rope," while taking on the stance of the shepherds by observing and asking candidates what they needed on their path.

4.2.3 Continuing OUR Work Within This “Laboratory of Collegial[ity]”

In reflecting on TD’s role in our program, participants voiced that much of this work also related to offering our candidates the *best* of ourselves as faculty. As one participant articulated, “This work brings about or brings out the very dispositions that each student needs from us and provides a time and place to offer the best of ourselves to our students” (Participant C, Post-Study Survey). As participants recognized and spoke of the value of having the time and space to do this work on TD, a significant finding surfaced through the analysis: that the work of TD is more about *our* work as faculty than perhaps it is about instructing or requiring more of our candidates.

As we began to focus on this idea, that the work of TD was more about the faculty’s work, Participant A offered a promising tool that offered structure to the process by way of the Child Study methodology used in the Waldorf Schools:

So... meeting with each other with a particular student at the [metaphoric] center of our meeting. Talking and sharing with the intention of supporting and bringing light to us as we open ourselves to who this person is - not with an agenda to improve and correct, but like [she] said, getting rid of the expectations and admitting – I don’t know what’s best for this human being in this time in their life. How could I? But in the process of opening, then we can receive guidance about how to support and that this could be a practice that we engage in that is about – dispositions! (SIII)

She explained that what changed in the process was not the child, but rather the teachers who saw that child differently and the openness that allowed the student to become a different child (Participant A). Indicating the internal nature of this work, participants agreed that this was something we could do together, in service of our candidates, and was perhaps the more important part of the efforts in this dispositional work.

Nel Noddings' Caring in Education framework (2010, 2012) became another promising way to frame our hidden curriculum, as affirmed by one participant: "And we can have the

conversation in terms of what our work is. ...That hidden curriculum that you talked about earlier, Sarah. That these are the things that we talk about in our work together about how we are maintaining – [allowing us] to hold tight to this - and not getting caught down by the tightrope problem that we're dealt with" (Participant B, SIV). In this way, this participant suggested ways to maintain the re-prioritized focus on TD as a cornerstone of our program rather than losing sight as we had done previous to the CIP.

4.2.4 Summary

Participants asserted that as a result of the CIP, they gained clarity on the role and value of the TD construct in our TEP. They shared that the CIP resulted in a deeper understanding of the construct as the heart of our work as teacher educators, and participants began to form a collective vision of a program that is more closely aligned to this clarity and deepened understanding. Creating a nurturing program in which PST candidates are truly centered, where we as faculty are walking with the candidates on their dispositional development journey, all the while working on our own dispositional development was indeed, as one participant expressed, like creating “a little heaven of our own” (Participant C, SII).

4.3 CIP’s Impact on Faculty’s Awareness of Their Own (and Each Other’s) Dispositions

Throughout the CIP, participants voiced their appreciation for the space created for self- and collective reflection. Although the work was primarily centered on grappling with the

challenging construct of TD and its role in the program, doing the work together and, as one participant put it, creating a “think tank,” resulted in positive and even unplanned outcomes. As indicated in Table 4, the analysis uncovered two themes: 1) creating time and space for reflection was nourishing and necessary, and 2) this work deepened participants’ regard for one another by seeing and being seen, collectively answering inquiry question 2: How does the CIP increase faculty’s awareness of their own (and each other’s) dispositions?

Table 4. Evidence of Themes That Address IQ 2

Codes(density of code)	Representative Quotes
	Theme #7: Creating time and space for reflection was nourishing and necessary
CIP – <i>We needed this</i> (16)	“...what I feel is lacking for us as a department... [referencing previously held “intentional” meetings] just not having time. I think our program hurt because of that. As we move forward, personally, I think it needs to be non-negotiable. ...we all [need to] commit... it’s something we need to model for our students, even if they are not seeing that... there is this cohesiveness.” (Participant B, SII)
CIP – <i>This work is important</i> (11)	“...this kind of work is really important. Important nourishment for us. And you nourished us in mind, body, and spirit! ...But it is something that we need to keep doing - meeting and studying together in this way. Because it was such a good experience, we all, I think, want to do it more.” (Participant A, Interview)
	Theme #8: Deepening regard for one another by <i>seeing</i> and <i>being seen</i>
CIP – <i>TD visibility among faculty</i> (46)	“...you’ll see that I have made [gesturing to her colleague] here with her barely-there orange scarf. Here, she’s standing, embracing the whole program here because... she does have that piece of recognizing that sovereignty of the students and making their process be what it’s about. And that is the gesture of the shepherd. I’m not here for me. Where’s the green pasture... where’s the next step on your path? ...This is a gift that she has.” (Participant A, SIV)

4.3.1 Creating Time and Space for Reflection was Nourishing and Necessary

During the first CI session, I shared with the participants that a secondary aim for this study's design was to bring the faculty together to re-center what I proposed was reflective of a foundation of our TEP. Given the ongoing external pressures within the system and the current contextual impact of COVID-19, as indicated by the code, "CIP – We needed this," participants expressed that it had indeed been a challenging time and that our dispositions had "suffered." Participants stated that not only was it necessary to explore the topic of TD, but the length of time and the space created for introspection and reflection was vital. During our post-study interview, one participant with deep institutional knowledge and memory shared that it had been over 20 years since the department had had an in-depth discussion on this topic. She added how important and refreshing it was to do this work together. Moreover, throughout the CIP, faculty participants not only acknowledged the necessity of prioritizing TD but the importance and value of this work, as represented by the code, "CIP – This work is important."

Participants voiced that the value of the work centered on TD extended beyond the scope of conceptualizing the construct for our program. They shared that this work spoke to their own development as teacher educators and as human beings. With deep sense of humility, one participant conjured up the visual of Rafael's Madonna and Child painting: "...I just love the tenderness of recognizing that, yes... we are just *babies*. We are just babies when it comes to [deep breath] being an individuality that can stand in the world and be a conduit for something higher" (Participant A, SIII). Another humble image came through when she likened our role to that of shepherds, who in the Advent story arrive first and take steps that they wouldn't necessarily take in their own development but do it because it's what the sheep need (Participant A, SIII). Other

participants voiced that this work inspired them to do better, and one even suggested expanded positive implications: "The whole is greater than the sum of its parts as it relates to your work here" (Participant B, Interview). Finally, Participant C generously complimented CIP's value and suggested that I package the study design as a professional development offering for other teacher educators. In these ways, participants overwhelmingly affirmed the positive impact of the CIP as both important and meaningful.

4.3.2 Deepening Regard for One Another by Seeing and Being Seen

As participants voiced the importance of the CIP in creating space that invited faculty participants to self-reflect and courageously share of themselves, they also revealed that the process led them to share their own values as well as reflections around this construct as teacher educators. This exchange naturally led to enhanced collegiality and frequent expressions of appreciation for one another, as indicated by the densest code under this inquiry question, "CIP – TD visibility among faculty" with its 46 quotes.

From the "brain-dump" to "What's on Your Radar" LUMA exercises during SI, in which participants were encouraged to articulate and share their values as teacher educators, vulnerable self-reflective opportunities presented themselves. As one participant openly shared about her growth and ongoing work as a teacher educator, she explained the need for continued work on not imposing her own ideologies onto the candidates. She then added that she had the most room to grow in becoming a teacher educator who can develop these sorts of relationships with our candidates.

Albeit emotionally charged at times, tension-filled moments often led to deeper self-reflection. One participant shared:

I had to keep checking my own dispositions in that work. Part of what I learned about myself, and then from my colleagues' point of view is... rigidity is difficult. [And] trying to honor and see value in all those perspectives, and not be fearful because that comes from a place of anxiety, right? ...Because maybe it's really where I'm a compliment to what they're saying. (Participant B, Interview)

The data analysis uncovered clearly visible pivotal turns in conversations where challenging moments often led to profound articulations of faculty participants seeing each other's value, as represented by another dense code "CIP – TD visibility among faculty" with its 46 quotes. Participants declared their appreciation for and celebration of one another, especially in the different ways each related to the world and showed up as teacher educators (Participant A). Whether highlighting a fellow participant's gifts in the classroom and seeing her ability to be student-centric or being moved by one's tender gesture of holding the program, participants honored each other in the process. Upon hearing her colleague's worries about being able to address candidates' dispositions in our program, one participant passionately offered her perspective and asserted how her colleague epitomized the dispositions we were considering: "You're so concerned about it, but this is you! You are the queen at this. Not only are you so good at modeling it because you always see their capacity, but you see the spiritual individuals in front of you" (Participant B, SIII).

Participants revealed to each other the roles and values that their colleagues contributed to the program. One articulated how well we balanced each other, as was clearly illustrated on the "What's on Your Radar" chart, to how much she appreciated the chance to listen in on each other's process (Participant A). Another participant maintained that our ability to get through the uncomfortable times successfully spoke to the relationships that we have with one another. All

participants voiced appreciation for the space created for vulnerability and presence of mind, as well as the rich conversation, with one even marveling at "just how grand it is - that all four of us are so different from each other...and that's good for our students - that we cover for one another" and added that she would indeed describe us as "people who are interested in having the capacity" (Participant C, Interview).

4.3.3 Summary

Participants expressed that the CIP provided the opportunity for collective reflection and allowed a deeper understanding of their colleagues and of themselves as teacher educators in relation to one another. Evidence from the analysis showed that the CIP invited vulnerability and courage to not only share one's deepest convictions as a teacher educator, but also allowed room for different perspectives to be shared, held, and appreciated. The CIP ultimately amplified participants' deep regard for one another and provided an opportunity that was sustaining and critical to our work as teacher educators.

4.4 CIP's Outcome and Its Alignment to the Mission and Ethos of the Program

As participants neared the end of the CIP, a promising outcome surfaced. As represented in Table 5 the analysis of the data resulted in the following theme, "Bridging the gap with 'the Thing' as we aspire to deliver on our mission" with its two aligned codes and representative quotes

collectively answering the final inquiry question 3: To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?

Table 5. Evidence of Themes That Address IQ 3

Codes(density of code)	Representative Quotes
	Theme #9: Bridging the gap with “the Thing” as we aspire to deliver our mission
Core disposition or “ <i>The Thing</i> ” (42)	<p>“...maybe that willingness to develop the capacity... IS the heart of the teacher!” (Participant C, SIII)</p> <p>“...it’s absolutely central to the mission of BAC. I think it also speaks to the mission of our specific department. But I think it’s bigger than all of that too – it is something that each individual can come to on their own - through the path that they are traveling. So looking at it as being central to the mission is [perhaps] too small.” (Participant C, Interview)</p>
Mission & Ethos connections (22)	<p>“YES! I think it actually gives us something tangible to even understand what our mission is... what are we trying to say? ...I just feel like this gives us something tangible to work with... that we could find evidence in. So I just think it's a nice bridge between that and something you can chew on that makes sense, as to what our mission says.” (Participant B, Interview)</p>

4.4.1 Bridging the Gap to Deliver Our Mission (via "The Thing")

The initial aim for an operationalized definition of TD as the outcome was a driving force behind CIP. Participants mirrored this aim when they asked if one central word or phrase (i.e. willingness and openness) might exist to encapsulate a conceptualization of TD that we would want to support in our candidates. As we neared the end of the CIP and, albeit this original aim needed adjustment, a promising phrase surfaced with the potential to become the outcome as the core disposition: *the willingness to develop one’s capacity to perceive who the child is*, also represented by the dense code, “Core disposition or ‘*the Thing*’” with its 42 quotes. Upon realizing

the potentiality, participants displayed energy around this discovery and began to call it “the Thing.” This pivotal finding led me to question out loud if “the Thing” wasn’t what we referred to as “attitude” in the mission statement, which appears as one of the triumvirates of teacher education listed within the mission statement. This prompted a conversation that spanned from the end of the third CI session into the fourth CI session, when participants navigated this discovery and shared varying thoughts around this phrasing. While one cautioned how we might deliver this message to our candidates, another participant announced a desire to try it:

I just think, we would be remiss to not show our own vulnerability failing at this – and understanding the long-term consequences of failing at this. ...I just don’t see it as something we’re measuring. Rather, we’re saying... hey, always keep this at the core of your heart. (Participant B, SIII)

Much discussion ensued and participants mostly asserted affirmation around “the Thing,” even calling it the “heart of the teacher.” As we concluded the final CI session, however, participants still appeared to be uncertain. Therefore, a follow-up question during the post-study 1:1 interview directly mined for participants’ thoughts on “the Thing” as the outcome of our work, as well as about its coherence with our mission and ethos (see Question #3 on interview protocol).

Analysis revealed that “the Thing” indeed resonated with all participants and illuminated the department’s mission and ethos, as indicated by the code, “Mission & Ethos connections.” One participant shared that the attitude piece of the mission was something, prior to the CIP, she couldn’t put into words and that this process finally provided a bridge to make sense of it. Others enthusiastically agreed that “the Thing” deeply aligned with our mission. A participant added that unlike mainstream thinking, this helped us turn the focus of our program to supporting future teachers appreciate the human being in front of them in a more qualitative sense, which aligned with our programmatic ethos. Participants expressed that “the Thing” not only illustrated what was

meant by the word “attitude” in our departmental mission, but also gave us shared language and something tangible or a “touchstone,” representing a programmatic cornerstone.

4.4.2 Summary

Participants agreed that the core disposition, or “the Thing,” was indeed reflective and coherent with our mission and ethos. They not only deemed it well aligned to the mission but also stated that it gave them tangible shared language to then be able to share with others, including our PST candidates and other program stakeholders. One participant even suggested that it not only was “central to the mission,” but that it spoke to something bigger (Participant C, Interview).

4.5 Conclusion

This chapter presented the findings from rigorous rounds of analyzing data collected throughout the CIP, otherwise known as the PDSA cycle. In sum, nine themes emerged from the iterative coding processes. These emergent themes were tied back to the study’s four inquiry questions and were presented with illustrative emic data, in the form of participant voices, both paraphrased and directly quoted. Overall, the resulting findings collectively responded to the inquiry questions.

With regard to faculty participants’ understanding of the TD construct, the themes indicated that the CIP informed them that conceptualizing TD called for ongoing work; that characterizing TD’s elusive, dynamic dimensions might be better attempted with metaphors,

visuals, and stories; and that emphasized the importance of humanizing their approach to conceptualizing TD within the program. With regard to faculty participants' perception of the TD construct's role within the program, the themes revealed that the CIP informed them that re-prioritizing TD must happen with care while honoring candidates' voices and choices, which, in part, would result in creating a nurturing program environment in which faculty *walk along* with candidates on their dispositional growth journey, and all the while, perhaps their work on TD might be best addressed by continuing the *work* within their laboratory of collegiality. With regard to CIP's impact on faculty's awareness of their own (and each other's) dispositions, the themes indicated that creating time and space for reflection was not only nourishing and necessary but also allowed deepening of regard for another and oneself by seeing and being seen. Finally, with regard to CIP's outcome and its coherence with the program mission and ethos, the theme illustrated that "the Thing" bridged the gap as the faculty aspired to deliver on the mission.

In conclusion, the CIP invited a measure through which the participants, as teacher educators, could unpack and navigate the uncharted territory of TD and begin to find more solid footing regarding their individual and collective understanding of a critical construct within their teacher preparation programming, aligned to their departmental mission and ethos. The next chapter will discuss these findings and their implications within the contexts of the literature and practice, as well as personal reflections.

5.0 Discussion

The purpose of this case study was to examine one TEP faculty's journey while navigating the elusive terrain of conceptualizing the TD construct. Using the collaborative inquiry process (CIP) as the change idea, the study examined its impact on four faculty participants unpacking and grappling with construct of TD by asking these overarching inquiry questions: *How does the CIP inform faculty's understanding of the TD construct and its role in the program?*, *How does the CIP impact faculty's awareness of their dispositions?*, and *To what extent does the CIP result in an outcome that is coherent with the mission and ethos of the program?* This chapter will summarize and situate the key learnings from this study, within the contexts of the literature and practices in the field of teacher education; discuss the study's limitations as well as implications for both future research and practice; and conclude with implications for continued professional growth.

5.1 Key Learnings

Although participants' initial understanding of the construct varied widely and some even voiced frustration over the ambiguity, the analysis evidenced that the CIP resulted in added clarity at the individual level and created space for faculty to think collectively. In the end, participants articulated that this work led to a more cohesive, nuanced conceptualization of the construct, an expanded perception of TD's role in our program, and rediscovering its value. They shared that

the deepened understanding stirred realizations about TD existing at the heart of their work as teacher educators, thus leading them to form a collective vision of a program better aligned with this learning. Moreover, the CIP created an opening allowing faculty participants to exchange expressions of deep regard, and expanded their understanding and appreciation for one another, enriching cohesion within the system of the department. Finally, participants agreed on a core disposition, an outcome which was not only coherent with the program's mission and ethos but one that provided shared language and could potentially be shared with other program stakeholders. Due to TD's elusive and dynamic dimensions, however, the CIP also illuminated that conceptualizing and integrating TD called for ongoing work. Rather than narrowly reducing the construct to one operationalized definition as originally intended, faculty participants offered that characterizing the TD construct with metaphors, visuals, and stories might be a much more humane approach with which to better understand this human construct.

5.1.1 Key Learning #1: Teacher Dispositions Construct is a Human Construct

As reflected in more than three decades of literature and in this study's findings, the iterative conversations that teacher educators have had around TD can be described as productive, yet sometimes contentious and tension filled (Katz & Raths, 1985). Illustrating the value of such conversations, however, teacher educators in both the literature and this study persevered and persisted to better understand and unpack the inner workings of a teacher, especially as it relates to the practice of educating future teachers (Schussler, 2006). As a significant pillar of teacher education, along with knowledge and skills (NCATE, 2002; CAEP, 2013), the complexity intertwining of these triumvirates only adds to the challenge of grappling with the TD construct.

The push and pull of various threads of discourse on TD have led to ongoing tensions, as clearly articulated by Mary Diez (2007): entity vs. incremental, separate vs. holistic, and screening individuals vs. building a professional community.

The data from this study revealed that the faculty participants clearly supported and viewed TD as a construct that is incremental and developmental in nature. In other words, TD was conceptualized as malleable, capable of maturing and being fostered (Diez, 2007). This assumed position led to discussing the potentially positive impact that a TEP can have on a candidate's dispositional development. Rare variances to this assumption surfaced, specifically when a participant responded to a colleague's dispositional development story by saying she likely had developed much of her dispositions long before entering her TEP, mirroring Lortie's (1975) seminal theory of the 'apprenticeship of observation'; however, most of the dialogue pointed to the idea that the time candidates spent in their TEP would contribute towards their dispositional development (Altan et al., 2019; Diez, 2007; Oja & Reiman, 2007). This, in turn, necessitates this TEP to continue to examine the ways in which TD is conceptualized and understood.

Furthermore, participants maintained that the TD construct essentially is a human construct and posited that it could only be characterized as such, echoing Borko and colleagues (2007) who saw TD as a singular and more global construct with dimensions. Rather than narrowing and pinning it down to a singular operationalized definition as was initially intended during the study's design phase, the participants deliberated and voiced during the CIP that the TD construct itself as well as the process of conceptualizing TD must be humanized to truly capture the complexities of the construct for it to then serve the TEP and its candidates. Specifically, preserving the sanctity of our candidates, and recognizing them as individual human beings on their own life's path and journey, was of utmost importance to the participants of this study. Similarly, this human

dimension is also reflected in the literature that conceptualizes TD as a set of moral virtues (Sokkett, 2009), or with a moral dimension, and relates to the literature that posits the work of TD as part of preparing morally and ethically sound practitioners (Murrell et al., 2010). Yet, differing from those who enumerated moral characteristics (Villegas, 2007), faculty participants in this study also voiced the importance of distancing from the urge to indoctrinate candidates, and mirrored previous researchers who cautioned faculty about narrowly selecting these dispositions (Borko et al, 2007). To the contrary, the study data revealed participants' desire to conceptualize the construct in a more holistic, transformational sense, and less in a technical or transactional way.

Similarly, aligned with researchers who took the constructivist-developmental approach to conceptualizing the TD construct (Breese & Nawrocki-Chabin, 2007; Oja & Reiman, 2007), participants urged for counterbalancing the accountability culture (Damon, 2007; Fonseca-Chacana, 2019) and rejected the more reductionistic, limiting approach to TD. Study findings revealed that participants steered the conversation away from a more behavioristic approach and stood firm against using checklists to measure the “unmeasurable,” and opposed viewing TD as more stable, innate, and resistant to change (Combs & Snygg, 1959; Damon, 2007; Wasiesko, 2007). They seized the opportunity to conceptualize TD in ways that were more meaningful and relevant to their program. Instead of being constrained by the approach typical of academia, the CIP seemed to allow spacious room for participant voices to inform and even shape the study as it progressed.

As a construct that hinges on the human element, TD's multi-dimensional nature was something that participants determined would require ongoing work, to not only continue to refine their collective understanding but to integrate it into intentional practice of teacher preparation.

Unlike the historical moves of some teacher educators, caving into accreditation requirements as the impetus for doing dispositional work as a program, faculty participants of this study emphasized the necessity of this as ongoing work for them as teacher educators and highlighted the importance of iteratively examining TD as the critical thread in teacher education.

Ultimately, at the conclusion of the study, the faculty participants arrived at an outcome, or a core disposition: *the willingness to cultivate one's capacity to perceive who the child is*. This outcome was not only resonant of the mission and ethos of the program, but the study data revealed that the outcome provided a bridge and concrete language with which to better deliver that mission. Guided by the north star of doing TD work with great care, the CIP provided a process with which to humanize both the construct itself and the approach to conceptualizing it, ultimately leading to rich dialogue about implementing TD work into the program and curriculum.

5.1.2 Key Learning #2: Centering and Walking with Teacher Candidates

The study findings revealed faculty participants' determination, metaphorically speaking, to return to the *front seat* and re-prioritize the TD construct in their TEP. However, in doing so, the participants ardently voiced the need to be mindful and protective of the candidates for whom they were doing this work. They drew the metaphor of a shepherd, guiding and walking along with the sheep. In this way, safeguarding the individual candidate's professional, moral, and spiritual development as their own became an essential finding. Further, reflecting prior researchers who also emphasized the importance of partnering with the candidates in this work, faculty participants of this study expressed the importance of recognizing their role with humility while centering and honoring the candidates' voice and agency (Bercaw et al., 2012; Wake & Bunn, 2016). Rather than

risking the dangers of indoctrination (Borko et al., 2007), the participants mirrored Nelson's (2015) work of joining the candidates as co-inquirers during this short span of time in their lifelong journey.

Moreover, in direct juxtaposition with prior research that suggested assessing dispositions as a gatekeeping measure to screen out individuals (Katz & Rath, 1985), this study's findings aligned with those that opposed doing so (Damon, 2007). Faculty participants sided with shifting the paradigm from a more of an intervention and medical model of assessing for and somehow "fixing" candidates' dispositional gaps, to asking about how life ought to be lived in the program and ways that could translate into candidates' professional practice and teacher educators' thinking about modelling this for their candidates (Dottin, 2006, 2010).

Faculty participants' use of the "braiding rope" metaphor illustrated the need for carefully and deliberately creating intentional opportunities for candidates. As indicated by the metaphor, the study findings emphasized the importance of providing protected space within the program to witness candidates' individual growth path and for candidates to have opportunities to do dispositional work. Both the literature and this study specifically underscored the importance of candidates having the time and space to engage in self-reflection, self-examination, and self-inspection (Mills & Ballentyne, 2010; Villegas, 2007; Wadlington & Wadlington, 2011). Furthermore, the study findings evidenced the importance of building the community (Fonseca-Chacana, 2019) within which candidates could do this work. By nurturing this program's cohort model to do focused dispositional work, especially during the candidates' practicum years, this study's faculty participants articulated ways in which they could support candidates' ability to foster and cultivate their *inner capacity to perceive who the child is*.

The study findings furthered prior research that dispositional work starts with faculty's conceptualization of TD (Shively & Misco, 2010). In contrast, the study evidenced that at the heart of it, it must center candidates' voice and agency as well as honor their individual development and journey as human beings. At the most foundational level, participants of this study asserted that perhaps the best could be offered within the context of their relationships with the candidates. Echoing Nel Noddings' Caring Education Framework (2010, 2012), this study's participants supported the idea of creating a caring program climate in which faculty conceptualized TD more as a relationally embedded construct that could be cultivated through modeling, dialogue, practice, and confirmation. Specifically, creating collaborative, caring space within the program would allow both faculty and candidates to collectively attend to and cultivate this critical aspect of their professional and personal development, stepping closer toward *becoming* who they were meant to be. In this humble stance, faculty would perhaps be more primed to do this work for and with their candidates. This naturally led to the final key learning.

5.1.3 Key Learning #3: Shifting the Paradigm of Teacher Dispositions as Faculty's Work

Findings of this study posited a need for a shift in thinking about the work of TD. From the paradigm of changing or fixing our candidates, and adding more expectations of them in their training, participants of this study articulated and expressed in humility the importance of teacher educators focusing inward and reflecting on their own dispositional work. Unlike the majority of the voices in previous literature, the study data pointed to the fact that dispositional work that occurs within a TEP is *as if not more* necessary for the program's faculty as it is for its candidates. In order to do this deep dive work, however, it was clear from the initial sessions that participants

needed to come to some shared understanding. This finding aligned with prior research that not only must program faculty begin with a clear understanding and conceptualization of the construct (Edick, Danielson, & Edwards, 2007; Schussler, Bercaw, & Stooksberry, 2008), but also that this was a necessary foundation for ongoing inquiry and examination of integrating dispositional work within the program (Bercaw et al., 2012).

The study's findings further revealed that CIP helped recover and re-introduce a *laboratory of collegiality*, in which intentional time, space, and structure is built into the life of the program to continue this work. As one participant offered, the dispositional work can be likened to how shepherds might take steps that they wouldn't otherwise, but only in service of our candidates. In the daily hum and fullness of this work, participants lamented how difficult it is to create room for this kind of collaborative work. Yet, faculty asserted how necessary and reinvigorating (Participant B) this was and that engaging in this dispositional work together could allow them to step closer to offering their best selves for their candidates and be more "worthy of imitation" (Participant A). In this way, the study data evidenced just one way to concretely live and reflect both the mission and ethos of the program, in which the work of self-reflection, self-examination, and the context-specific, doctrinal idea of *regeneration* could come to life.

The findings also suggested that the CIP invited courage and vulnerability among its faculty participants. The CIP created space for participants to share their deepest convictions and values as teacher educators, as well as allowed room for different perspectives to be shared and appreciated. In this space, participants' deep regard for one another was amplified, and they articulated that it provided an opportunity for a sustained and critical examination of a construct that lies at the heart of teacher education. As supported by existing literature as well as learnings from this study, the collective and collaborative inquiry (Bercaw et al., 2012) deepened not only

the participants' understanding of the construct but enriched and increased cohesion within the faculty team, inevitably translating into program cohesion.

5.2 Summary

As a re-designed program in its fifth year of implementation, the opportunity provided by the CIP for reflection and self-examination was timely. The CIP invited measures through which faculty participants unpacked and navigated their own uncharted territory of TD. At the conclusion, they found more solid footing in their individual and collective understanding of a critical construct within our teacher education programming. One of the outcomes, an articulated core disposition, harnessed a conceptualization of TD that was central to the heart of the program, resonant with their mission and ethos, and provided shared language with which to enact this collective understanding. Finally, the study invited the participants to discover and recognize the work of TD as the work of the teacher education faculty. As co-inquirers (Nelson, 2015) and a community of humans continuously developing and actively doing dispositional work within, faculty participants voiced the desire to offer the best of themselves as teacher educators. As one participant tearfully shared during a member checking meeting, this “entirely useful [process] more than resonated because it changed what I [now] do and drove me to action” (Participant C).

This case study illustrated the effort of one TEP to better understand and conceptualize the construct of TD. The study findings clearly illustrated that the faculty participants viewed the experience as a valuable, productive struggle, echoing Schussler who described this work of TD as worthy of “...mucking about in the murkiness” and “...time well spent” (2006, p. 261).

Moreover, the study findings mirrored the sentiment expressed by previous researchers that the work of conceptualizing TD is as much about the process as it is about outcome (Dottin, 2006; Feiman-Nemser, & Schussler, 2010).

5.3 Limitations

There are limitations inherent in this study's design, implementation, and interpretations. As a case study, the intentions were to explore and gain insights from examining one TEP faculty's journey and retain a holistic and realistic perspective as they grappled with the TD construct (Yin, 2018, p. 5). As Yin (2018) describes, however, when using a single case, the process does not always end conclusively. Therefore, it is important to note the limitations for future studies similar to this one.

One primary limitation of this case study, as is with most single case studies, is its generalizability or transferability. Although rich data and findings in the form of "thick" descriptions, resulted from the study, its context-specific study design, data sources, and sample size ($n = 4$) make it challenging to generalize its findings to the wider audience in the teacher education field. The study site was a small private faith-based institution. It is unclear if similar findings would result from a large public institution, especially when it comes to some of the specific mission- and ethos-related findings that are context-specific. Moreover, convenience sampling was necessary due to the intent of this study. However, it may have led to an inherent, participant selection bias, and the findings may have been different if the study was implemented with a potentially random sample of faculty participants.

Another limitation of this case study comes from the methods and measures implemented during the study. Although strategies to increase the trustworthiness of the study were implemented (e.g., triangulation of data sources; reflexivity strategies, especially during analysis; member checking of findings), the study's design and measures, the CIP, consisted primarily of researcher-created methods that were novel. In other words, this researcher created the research methods such as the questions in the pre- and post-study surveys, semi-structured interviews, and the sequence and details of the collaborative inquiry sessions. Therefore, the emergent findings from the study cannot lead to claims about its potential confirmability (e.g., neutrality) or dependability (Lincoln & Guba, 1985).

Finally, as a researcher who was also a participant in the study, the possibility of researcher bias must be acknowledged. Due to this researcher participating in the study as a faculty participant, there were some blurred lines regarding the potential impact of researcher bias, both during the study implementation and data collection, as well as in the data analysis phases. Due to this dynamic, it is important to note possible participants' bias. For example, the participants may respond and say what they think the researcher wants to hear. Therefore, the findings' credibility and confirmability can be questioned. Although mitigation strategies for achieving trustworthiness were implemented, this researcher acted as the primary investigator as well as the collector and analyzer of the data. Therefore, possible researcher bias and participants' bias need to be acknowledged for full transparency.

5.4 Implications

5.4.1 Implications for Future Research

Teacher educators, in their efforts to conceptualize and integrate the complex construct of TD into their practice, have dedicated decades of effort to contributing towards this work. Within a rich body of literature, many have conceptualized and discussed the construct as something to add into the curriculum, as added expectation to *put on* both the TEPs and their faculty as well as the candidates. The findings of this study suggest, however, a shift in this paradigm. Rather than TD being yet another construct that teacher educators are accountable for conceptualizing and integrating into their programming as expectations, the study data suggested that first and foremost, TD should be conceptualized as a human construct. Following this line of thinking, future research could examine the TD construct using a more human-centered approach.

The findings of this study revealed that one way to do this is to integrate TD into teacher preparation programming from the stance of faculty honoring the sovereignty of individual candidates, by centering their voice and agency, and walking *with* them on their individual journeys. Future research could build on current tools found in the literature that uplifts candidate voice and engages them as co-inquirers of this work (Nelson, 2015), investigating methods with which to elicit student agency and voice into the work and, therefore, the research. Doing so in community, teacher educators could then examine together with candidates the impact of various curricular changes and trace whether those changes empower candidates to cultivate and foster their own dispositional growth. Teacher educators can follow the lead of candidates throughout their program journeys and document where in the TEP they could maximize on “teachable

moments” for dispositional growth and approach the research in a more student-centered way. Following the inspirations of early researchers of teachable moments such as Dewey, Froebel, Gesell, and Kolb (as referenced in Hyun & Marshall, 2003), coupled with facilitating growth by leaning into moments of cognitive dissonance and disequilibrium (Liddell & Cooper, 2012), teacher educators can use these teachable moments (e.g., surfacing from reflective journals, observations made in field work) to identify, discuss, and integrate dispositional cultivation and growth opportunities. Documenting these instances and examining student perception as well as faculty perception could provide an exciting avenue for future studies while inviting a learner-centered research approach to examining TD in teacher education. Furthermore, additional longitudinal research could follow candidates after they exit the program and examine ways in which dispositional work can continue to be supported by both the TEP and through environmental-specific mechanisms such as induction and mentorship (Nixon et al., 2013).

Most importantly, perhaps, mirroring the finding from the study that dispositional work in teacher education actually begins with the faculty, further research can examine this work of turning to the self (self-examination, self-reflection) as the starting point for dispositional work. This work also closely aligns with anti-bias (Derman-Sparks, & Edwards, 2010) and anti-racist educational practices (Kishimoto, 2018), as both begin with exploration of self. As Kishimoto (2018) explained, “It begins with the faculty’s awareness and self-reflection of their social position and leads to the application of this analysis not just in their teaching, but also in their discipline, research, and departmental, university, and community work” (p. 541). Examination of faculty dispositions can serve as a natural starting point for any program grounded in and valuing anti-racist or anti-bias education. It is important to add that these ideas also reflect a key tenet in the religious work of Emanuel Swedenborg, whose theological works lay the foundation for and

inspire the mission of BAC. Swedenborg (2010), in his book *True Christianity*, explains that in the first step in one's spiritual growth and *regeneration* or the process of being "created anew," one must begin by actively examining one's inner self such as motives for actions (Swedenborg Foundation, 2021). Based on these ideas, future research could trace and examine the impact of the inner work of teacher educators and investigate how their own dispositional growth and development as teacher educators could potentially shed light and provide insight on how to better address TD within the program in service of their candidates.

A final recommendation is that this study could be formalized and replicated. Given that this is a single case study, additional work is necessary to test and strengthen the study design and methods presented in this dissertation so that it can be replicated (Yin, 2018). One way would be to invite an external auditor to examine both the study design and the resulting findings of the study. This would invite an unbiased researcher perspective to evaluate the study design and to provide important feedback to strengthen the trustworthiness of the study.

It is evident from the literature that a clear consensus regarding the idea and definition of dispositions is still in its sprouting stage (Diez & Raths, 2007). Yet it is vitally important that teacher educators continue to dialogue and learn from one another, while continuing to gain clarity about the construct and re-envisioning its role in preparing wholehearted, humane, and dedicated teachers for our future generations.

5.4.2 Implications for Practice

One can assume that teacher educators in the U.S. and around the world share the lofty aim of preparing the best possible candidates to effectively serve and teach the future generations. For

decades, knowledge and skills, the other two of the triumvirate of teacher education, have received most of the attention and responses from the field. However, in an educational climate where systemic inequities and complex, persistent issues like teacher attrition are pervasive, beginning teachers face the demands of making difficult intellectual, cultural, and moral decisions with little experience (Carroll, 2012). To this end, this study utilized TD as an entry point into this conversation. The study findings, in general, suggested that teacher educators collectively attend to and focus on TD as part of their effort to fortify candidates' internal capacity from which to draw upon as they face these challenges and stand rooted, while sustaining commitment to their professional practice (Wake & Bunn, 2016). More specifically, the following recommendations can be distilled from the key learnings of this study.

First, education is a human endeavor, and the findings of this study suggested that TD must be re-conceptualized as the core of this endeavor in teacher education. Thus, rather than positioning TD being as an afterthought, teacher educators positioned TD as the central piece of the *rope* that grounds both the knowledge and skills that make up the practice of teacher education. Bucking the trend of standardization and accountability, a recommendation that surfaces from this study is that teacher educators could re-center TD more robustly into conversations happening in their places of practice. Furthermore, this re-centering must be an ongoing process. Just as human growth and development is an ongoing process, fostering dispositional growth, TD must be the same, as reflected by Paulo Freire (1993): "The unfinished character of human beings and the transformational character of reality necessitate that education be an ongoing activity." This is especially relevant for our TEP described in this dissertation, whose faith-based mission prizes the moral, ethical, and spiritual dimensions of teacher candidate development. It will be important to

build on the work already accomplished through this study to move forward in our teacher education practice.

Second, centering and lifting up candidates' voices in doing dispositional work was a significant take-away from this study. Involving perhaps the most important of stakeholders would require teacher educators to socialize candidates to the TD construct as well as to invite them to co-inquire and engage in the cultivating their dispositional development. For our TEP, inviting the candidates to co-inquire about the TD construct and inquire about their own dispositions, and providing them the opportunity to interact with the core disposition that the faculty participants have begun to articulate, would be inviting starting places to partner with us early on in the process. The two primary stakeholders of our TEP then can start to build on a solid foundation laid together, and have shared language with which to communicate, continue the dialogue, and strengthen both the program and its ability to deliver on the mission. Additionally, following the line of thought about teachable moments and student-centered research on TD discussed in the section above, teacher educators can use these teachable moments in their classrooms to maximize those opportunities. From using case studies, journal reflections, and field-related activities, but perhaps most ideally examples surfacing from the candidates' own struggles, and challenges, teacher educators can guide candidates as they identify, navigate, and integrate these dispositional growth opportunities throughout their learning journeys in the program.

Third, aligned with intentions set behind this study and inspired by principles of improvement science to sustain the learning within the organization, another recommendation is to expand on the faculty prioritizing their own dispositional work within a *laboratory of collegiality*. Using concrete ideas discussed during the study such as the Child Study method, inspired by the Waldorf approach, this TEP could use targeted methods to sustain the dispositional

work together as teacher educators, building on the continuous improvement efforts. Further, building on Noddings' Caring Education framework (2010, 2012), faculty could build on its four pillars – modeling, dialogue, practice, and confirmation—and examine ways, within their own laboratory of collegiality, they could work together to support each other in building their own capacity to infuse a more caring, humanized approach to the work of teacher education. Dispositional work with the faculty would require maintaining opportunities for deep dialogue within the life and processes of the department. This would allow the inspired ideas born out of this study to be brought to life, become more concretized, and eventually bear fruits that would not only support the life within the system but could also serve the larger field of teacher education.

A related recommendation would be to build on components of the CIP. As a novel process for our teacher education department, the unique human-centered tools offer by LUMA could enhance regular processes, such as departmental faculty meetings. This could improve the system by moving from business-as-usual to designing innovative ways for faculty to explore, problem-solve, and enhance the program's continuous improvement efforts. As reflected in the voices of the participants, the user-centric, human-centered design inspired by LUMA clearly resonated with the faculty participants and has the potential to be adapted and scaled up for practical use by the team.

Finally, the CIP could potentially be scaled up as an offering in service of other teacher educators interested in examining TD within their own TEP. Packaged as either professional training or ongoing research, the study methods as well as the strategies used throughout the study inspired honest and open dialogue among teacher education colleagues. Despite moments of disagreement and varying perspectives, where deeply held ideas and beliefs seemed to be at odds with one another, the CIP supported and sustained the participants to engage in the dialogue in a

safe space, resulting in a deepened sense of trust and regard for one another. It appears that CIP as a process required courage to vulnerably open up among the participants and encouraged a series of valuable dialogues about a valuable construct. Faculty participants during the member checking spoke of ripple effect of experience, and even tearfully shared its powerful impact on their own practice as teacher educators. CIP became a tool that not only elicited honest dialogue but also helped build consensus and shared understanding. Therefore, the CIP can be utilized by other teacher educators as a tool to facilitate and bring forth a critically important dialogue and even enhanced cohesion around the construct of TD.

The implications for practice resulting from the study are far-reaching. Ultimately, prioritizing TD as a critical thread of teacher education by positioning candidates as principal stakeholders in the process and doing the actual dispositional work as teacher educators, the study's findings offer a stance and a set of recommendations for both the field of teacher education and for the place of practice in this study. In the end, we can assume that as teacher educators, we are in the business of preparing deeply caring and compassionate teachers who strive to truly perceive each child for who they are, in order to serve them. Therefore, if we can assume TD as a critical component of teacher education, we must continue to engage in this conversation in order to provide meaningful context and opportunities for candidates to do this work with us, as part of their preparation experience (Fonseca-Chacana, 2019; Nelson, 2015; Schussler, Bercaw, & Stooksberry, 2008).

In conclusion, the implications for practice generated by this exploratory case study open up many avenues for further consideration, in terms of both practice and research. Although this study captured the journey of one particular TEP, I whole-heartedly believe the in-depth story behind the journey has the potential to serve other TEPs, as so aptly captured by author Sue Monk

Kidd: “The deeper we go into our own experiences, our own journey... the more likely we are to hit the universal” (*Unlocking Us* Podcast with Brené Brown (4/28)).

5.4.3 Implications for Continued Professional Growth

In *Dare to Lead*, Brené Brown states that the greatest challenge in a developing leader is the ability to answer to their personal call for courage; she adds that courage is something that can be learned if “we are willing to put down our armor and pick up the shared language, tools, and skills we need for rumbling with vulnerability, living into our values, braving trust, and learning to rise” (2018, p. 271).

In reflecting on this dissertation journey, I am deeply humbled by the trust that my faculty colleagues granted me to facilitate this improvement effort. As dedicated faculty who deeply care for our TEP, their willingness to roll up their sleeves and rumble with me in the arena while navigating and unpacking an ambiguous construct required an enormous amount of vulnerability and courage. Even during the uncomfortable experiences of holding conflicting ideas in tension, they embraced the uncertainty with me and boldly stayed engaged despite my fumbles along the way. Instead of taking the easy way out, they leaned into the process with me and, as a result, we were gifted with deeply insightful series of conversations about what ultimately recognized as a critically important construct to the program. The process gave us shared language and inspired ideas put into practice, as well as growth and cohesion as a team.

Leadership, especially in the improvement work, takes a lot of practice, continued reflection on that practice, and really could only be learned by doing (Garvey-Berger & Johnston, 2015). As a growing leader, improver, and scholar practitioner, I have made tremendous gains in

my knowledge, skills, and even dispositions. Reflecting on ideas from adaptive leadership (Heifetz et al., 2009) as well as Bryk et al.'s (2017) improvement principles, I learned and re-learned throughout the process that in order to truly tackle a problem of practice in a meaningful way, the approach must be user-centered and, even more specifically, human-centered in its design.

Although I embraced this idea early on and worked hard to design a study that would aim to discover the gift of insight from this small, tight-knit community of teacher educators, I also initially held back from engaging the faculty participants early in the process. It is important to note the limitations posed by extenuating circumstances, such as one-fourth of the department faculty being away on sabbatical and the challenges of conducting research during the global COVID-19 pandemic. Yet, upon reflection, my failure-averse, perfectionistic tendencies combined with the desire to present a more fully formed study held me back from enacting this important principle as fully as I intended. In my future improvement work and leadership, I would make routine the improvement science practices of shop-talking and engaging with the stakeholder-participants and engaging their input early on in a more robust way. This strategy, along with other improvement science methods such as implementing small tests of change and failing fast while learning fast, will encourage my continued growth as a leader, improver, and scholar-practitioner, thereby impacting positive changes as a result.

This journey has tremendously impacted my growth in the various arenas of life. As a scholar-practitioner and a qualitative research neophyte, this process required a new level of resilience, persistence, and critical thinking. But by rumbling with a complex and ambiguous problem, while staying curious and taking on the improver's stance, I was able to hone my skills as a scholar-practitioner. Perhaps more importantly, as a leader, it was a journey of self-discovery. My hope is to build on what I have learned, embracing both my stumbles and progress as I continue

to learn and navigate life while serving those around me. I walk away having honed some tools to better serve in my profession as a teacher educator and in this laboratory of life as a human being.

“We are not born for the sake of ourselves, but for the sake of others.” (Swedenborg, *True Christianity*, 406)

5.5 Conclusion

This study charted one TEP’s story as the participants journeyed into the uncertain and unfamiliar terrain of de-constructing and then re-constructing the TD construct. The outcome and the findings of the study indicated that the time and space created by the CIP welcomed the transformative opportunity for a critical series of conversations. This dialogue led to shared understanding of not only the TD construct itself but of the faculty’s own deeply held values, commitments, and stories as teacher educators. Although we didn’t settle on one operationalized definition as was intended at the outset of the study, the resulting outcomes, including the articulated core disposition and other discoveries, were perhaps even more significant and mission-centered than originally imagined. Articulating the core TD in this way the *willingness to cultivate one’s capacity to perceive who the child is* preserved the humanity of the TD construct as well as the process of conceptualizing the construct. Furthermore, as expressed by this study’s faculty participants, protecting the humanity within the process of integrating TD work led to the assertion that candidates’ voice and agency must be uplifted and protected while treating them as co-investigators and walking *with* them on their teacher education journeys. As the center and core piece to the braided rope that is both this TEP and, metaphorically, a candidates’ preparation journey, this study proposed that the work of TD must be done in the context of relationships and

within community. Finally, this realization led to perhaps one of the most significant findings surfacing from this study – that TD work as a whole must begin with and continued within the teacher education faculty. Shifting the focus from primarily fixing or adding additional expectations of the candidates, the faculty participants of this study humbly posited the need for teacher educators to turn inward and begin the dispositional work within themselves and with each other, inside the *laboratory of collegiality*, supportive and in community.

Ultimately, the CIP created an invaluable opportunity for one TEP's faculty to truly embrace the ambiguous TD construct. Although this study was bounded by time and place and served dual purposes as an improvement project for our TEP and for this dissertation, the findings do provide a solid foundation that invites sustained work centered on TD. The key learnings of this study not only provide the cornerstone for continued work within this TEP but serve to bolster the body of research and the aim to integrate this important construct more fully into the fabric of teacher education practice. As we continue to aim high in ushering deeply caring, impactful educators into the very complex and challenging waters of teaching in the twenty-first century, teacher educators must, perhaps more than ever, maintain human-centeredness by focusing on this critical thread of teacher dispositions, arguably the heart-center of teacher education.

Appendix A Gantt Chart – Timeline for Dissertation in Practice

TASK	ASSIGNED TO	PROGRESS	START	END
Study Design and Development (Plan)				
Draft Overview Proposal	Sarah		8/1/20	9/15/20
Study Proposal and Preparation (Plan)				
Finalize Proposal with Advisor	Sarah		9/15/20	10/1/20
Schedule Virtual Proposal Overview with Committee; email proposal	Sarah & Advisor		10/1/20	10/5/20
Prepare Presentation & Defend Proposal with Committee	Sarah		10/5/20	10/15/20
Complete & Receive IRB Approval	Sarah		10/15/20	10/23/20
Prep and Implement the Pre-Study Prep Phase with BAC Ed Dept. Faculty	Sarah & Ed Faculty		10/23/20	11/1/20
Study Implementation of PDSA Cycle (Do)				
Prepare & Execute Phase I, including Pre-Study Survey	Sarah & Ed Faculty		11/1/20	11/9/20
Organize and input data collected from Phase I; reflect and make adjustments to Phase II as appropriate	Sarah		11/9/20	11/13/20
Prepare and Execute Phase II	Sarah & Ed Faculty		11/13/20	11/20/20
Organize and input data from Phase II; reflect and make adjustments to Phase III as appropriate	Sarah		11/20/20	11/27/21
Prepare and Execute Phase III	Sarah & Ed Faculty		11/27/20	12/1/20
Organize and input data collected from Phase III; reflect and make adjustments for Phase IV	Sarah		12/1/20	12/10/20
Prepare and Execute Phase IV	Sarah & Ed Faculty		12/10/20	12/15/20
Organize and input data collected from Phase IV; reflect and plan for interviews	Sarah		12/15/20	12/30/20
Execute semi-structured interviews with each participant	Sarah & Ed Faculty		12/15/20	12/30/20
Data Analysis (Study)				
Organize collected data, clean-up transcriptions & begin entering them into Atlas t.i.	Sarah		12/1/20	1/10/21
Review data in Qualtrics, enter into Atlas t.i. and begin the analysis/coding process	Sarah		1/15/21	2/15/21
Continue to work on analysis; begin to organize the findings; initial member checking!	Sarah		2/15/21	3/1/21
Draft Chapter 4 (Findings) of DIP	Sarah with support of Committee		3/1/21	4/15/21
Draft Chapter 5 (Discussion) of DIP	Sarah with support of Committee		4/15/21	5/15/21
Track and adjust timelines as needed, refine the final stretch of journey	Sarah with support of Committee		5/15/21	6/1/21
Study Reflection (Act)				
Synthesized Member Checking & Presenting Findings to Ed Dept Faculty & Engage in Collective Reflection	Sarah & Ed Faculty		4/15/21	5/1/21
Wrok on edits and finalize DIP for Defense	Sarah with support of Committee		5/1/21	6/15/21
Consider conference presentations and publications	Sarah		6/15/21	7/15/21
Prepare for Dissertation Defense; Schedule with Committee	Sarah & Advisor		6/1/21	6/30/21
Defend (virtual) Dissertation - with Committee	Sarah & Dissertation Committee		7/1/21	7/1/21
File paperwork and officially graduate	Sarah		7/1/21	8/1/20

Appendix B PDSA Cycle

PDSA Form			
Test Title:	Collaborative Inquiry Process (CIP) - Understanding teacher dispositions	Date:	Fall/Winter 2020
Tester:	Sarah Wong	Cycle #:	Prep phase + Study Phases 1-4
What Change Idea is being tested?	Co-constructing an operationalized definition of teacher dispositions	Driver:	Shared understanding of teacher dispositions
What is the overall goal/hypothesis you are testing?	If we want BAC Education program's primary stakeholders (faculty & candidates) to be able to articulate a shared understanding of teacher dispositions (TD) and how it is intentionally cultivated in our teacher education program, then we need to focus on stakeholders sharing a transparent understanding of the construct through ensuring that the faculty share clear language and conceptualization of the construct. (Change idea) To do this, program faculty must first co-construct an operationalized definition of teacher dispositions.		

1) PLAN Details: Describe the who/what/where/when for the test. Include your data collection plan. Pre-Study Prep Phase: What is our current state re: TD? History, overview of my journey/intentions, examine needs assessment, mission, and process map through program - where does TD/"attitudes" show up for our teacher candidates? and introduce PoP. Introduce the study design and its aim (driver diagram and Tol - do I have it right? garner feedback and buy-in); orient to timeline etc. Phase I: Pre-Study Survey; Faculty members' initial understanding of the teacher dispositions construct; work session includes LUMA's exploratory (looking and understanding) activities called "What's on your Radar" and "Concept Mapping" Phase II: Examining other teacher educators' work to inform faculty member's understanding of the construct and its potential role in the program; work session include examining others' work, extracting pieces that align with our mission/program as well as LUMA's understanding activity called "Affinity Clustering" Phase III: What are the essential components of our operationalized definition of TD? Determine what our essentials (non-negotiables too?) "look like" by developing a prototype (e.g. graduate profile) and "sound like" using words & phrases to include in our working definition and ; work session include LUMA's understanding activity called "Persona Profile" and a making activity "Round Robin" Phase IV: How will the resulting definition inform program's curriculum? Based on the working, operationalized definition, create an initial sketch of curricular plan (e.g. a vision board sketching out the framework); work session includes LUMA's making activity "Concept Poster"; complete the study with a Post-Study Survey and a series of Semi-structured Interviews with each faculty member. Member check throughout. *See Gantt Chart for timeline (when).	2) DO Briefly describe what happened during the test, 1. Preparation Phase: Oriented participants to study. Gather informed consent and shared intention, timeline; Pre-Study Survey via Qualtrics for baseline data 2. Phase I: Explored and gathered participants' initial conceptualization and understanding of the TD construct 3. Phase II: Examined curated collection of literature and prior work on TD; helped determine what pieces align/do not align with our program including moving away from the originally intended outcome of an operationalized definition of TD 4. Phase III: Deep conversation about the essential components of our conceptualization of TD; although LUMA activity did get completed, pivoted from plan to have a very productive session 5. Phase IV: Arrived at a core TD; discussed and visually displayed how this TD might already show up & could be further developed/emphasized within program 6. Post-Study Survey; then Semi-Structured interviews w/ each participant		
Inquiry Questions: Questions you have about what will happen. What do you want to learn?	Predictions: Make a prediction for each question. Not optional.	Data: Data you'll collect to test predictions.	What were your results? Comment on your predictions in the box below. Were they correct? Record any data summaries as well.
1. How does the process of co-constructing an operationalized definition inform faculty's perception of the teacher dispositions construct and its role in the program?	1. Engaging in the process of co-constructing an operationalized definition will increase faculty's individual and collective understanding of the teacher dispositions construct as well as better inform the faculty of the construct's role in the program.	Pre-Study and Post-Study Survey; Audio recordings of dialogue during sessions; Artifact resulting from LUMA activities; Semi-structured interviews; Observation notes	Data from the entire collaborative inquiry process (CIP) evidenced that the process increased both individual and collective faculty participants' understanding of the TD construct and its role in our program.
1a. How does the process of co-constructing an operationalized definition inform faculty's understanding of the teacher dispositions construct?	1a. Although some similar elements may exist from the beginning, faculty member's initial understanding of the teacher dispositions construct will vary widely. Through the process, individual understanding will become clearer and the collective understanding will become more cohesive.	Pre-Study and Post-Study Survey; Audio recordings of dialogue during sessions; Artifact resulting from LUMA activities; Semi-structured interviews; Observation notes	The findings from the data showed that although there was a wide range in faculty participants' conceptualizations and even feelings about the TD construct, the CIP allowed time and space for sharing and clarifying one's own as well as arriving at a more clear, collective understanding of TD. Data suggested increased cohesion at various levels.
1b. How does the process of co-constructing an operationalized definition inform faculty's perception of the construct's role within the program's curriculum?	1b. The process of co-constructing an operationalized definition will provide foundational building blocks such as shared language and inform as well as increase clarity on the construct's role within the program's curriculum.	Pre-Study and Post-Study Survey; Audio recordings of dialogue during sessions; Artifact resulting from LUMA activities; Semi-structured interviews; Observation notes	The findings from the data showed this novel set of engagement and exercises resulted in increased clarity on the TD construct's role in the program as well as unveiled an emerging vision of the TD's role in our program, as part of our continuous program improvement.
2. How, if at all, does the collaborative inquiry process impact faculty's awareness of their own and each other's teacher dispositions?	2. The collaborative inquiry process will provide faculty with opportunities to reflect on and deepen understanding of one's own and one another's most valued dispositions, thereby making visible our dispositions as teacher educators.	Pre-Study and Post-Study Survey; Audio recordings of dialogue during sessions; Artifact resulting from LUMA activities; Empathy interviews; Observation notes	The findings from the data illustrated that the time and space created by CIP allowed a valuable and much-needed opportunity to reflect together and deepen understanding of our own as well as each other's TD as teacher educators. Showing regard for and honoring each other's TD throughout CIP was of significant importance.
3. To what extent does the collaborative inquiry process result in a definition that is coherent with the mission and ethos of the program?	3. The collaborative inquiry process will facilitate dialogue centered around our mission, values and commitments, leading us to co-construct a definition that is coherent with the mission and ethos of our program.	Pre-Study and Post-Study Survey; Audio recordings of dialogue during sessions; Artifact resulting from LUMA activities; Semi-structured interviews; Observation notes	Although we pivoted from the original, intended outcome of articulating an operationalized definition, the findings from the data displayed that the CIP resulted in a characterization of a core disposition, that specifically aligned to our program's mission and ethos.

4) ACT Describe modifications and/or decisions for next cycle; what will you do 1.Continue to engage in our "laboratory of collegiality" to do this work on TD; 2.Engage teacher candidates into the TD conversation and center them in the subsequent work on our curriculum; 3.Use LUMA exercises to engage in various problem-solving and large-picture project work within our department (systems outcome); 4.Further program/curricular work to integrate TD based on the outcomes of the study; 5.Engage with other teacher educators and gain their insights to continue to build on the work; further contribution to research and literature.	3) STUDY What did you learn? 1.Key learnings indicate that this was a valuable process for all - participants and researcher alike; 2.The nine themes are emerged answered the four inquiry questions and even went beyond original vision of the study's potential outcome; 3.Staying user- and human-centered from the design process was easy; ensuring this stance throughout the CIP was more challenging and pivoting was required; but in the end, this resulted in rich, powerful outcomes; 4.Although the outcome was not the intended "operationalized definition" of TD was not reached, both the anticipated and unanticipated outcomes far surpassed the originally intended plans.
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Appendix C Pre-Study and Post-Study Survey Protocol

Teacher Educator's Perception of the Teacher Dispositions Construct

Thank you for agreeing to participate in this study titled, "Embracing the Construct of Teacher Dispositions: Bryn Athyn College Education Department's Collaborative Inquiry Journey Towards a Definition."

Introduction: This survey, distributed both at the beginning and at the conclusion of this study, is intended to capture your understanding and perception of the teacher dispositions construct. Please note that this survey is in no way attempting to evaluate the extent of your knowledge or level of expertise on the construct. Rather, the survey data will be a part of a larger data set collected throughout the study and will serve the purpose of examining the impact of the collaborative inquiry sessions.

Instructions: This survey should take approximately 10-15 minutes to complete. Please answer based on your current opinion and understanding of the construct. You will receive the same survey after our four collaborative inquiry sessions are completed. For the Likert-scale types of questions, please rate your level of agreement or disagreement with the statements given. For the open-text answers, please write in your responses; full sentences are not required and simplified phrases and lists are acceptable.

Confidentiality Statement: All responses to the survey will be kept confidential and available only to the researcher and the faculty advisors.

Your participation and support are much appreciated. If you have any questions regarding your rights as a participant or concerns regarding this study, you may contact the principal investigator, Sarah Wong at sjw93@pitt.edu, or the faculty advisor, Dr. Anastasia Kokina at Kokina@pitt.edu.

Demographic Information

1. How would you describe your gender identity?

Drop-down options include: Female, Male, Non-Binary, _____, Prefer not to disclose

2. What is your age?

Drop-down options include: 18-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84, 85 or older

3. How would you describe your race and/or ethnicity?

Drop-down options include: White, Black or African American, Native American, American Indian or Alaska Native, Asian or Asian American, Native Hawaiian or Pacific Islander, Bi-racial or Multi-racial, Hispanic or LatinX, _____, Prefer not to disclose

4. Please specify your religion? (comment box)

5. What is the highest level of school you have completed or the highest degree you have received?

Drop-down options include: Bachelor's degree in college (4-year), Master's degree, Doctoral degree, Professional degree (JD, MD)

6. Please indicate your years of teaching experience in PreK-12.

Drop-down options include: 1-3 years, 4-6 years, 7-9 years, 10-12 years, 13-15 years, 16-18 years, 19-21 years, 22-24 years, 25-27 years, 28-30 years, 30+ years

7. Please indicate your years of teaching experience in higher education.

Drop-down options include: 1-3 years, 4-6 years, 7-9 years, 10-12 years, 13-15 years, 16-18 years, 19-21 years, 22-24 years, 25-27 years, 28-30 years, 30+ years

8. Please indicate your years teaching at Bryn Athyn College.

Drop-down options include: 1-3 years, 4-6 years, 7-9 years, 10-12 years, 13-15 years, 16-18 years, 19-21 years, 22-24 years, 25-27 years, 28-30 years, 30+ years

Understanding of the Teacher Dispositions Construct

1. "I have a clear understanding of the teacher dispositions construct."

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

2. "As a group of teacher educators, we have a clear and shared understanding of the teacher dispositions construct" (e.g. clear and shared language)

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

Optional comments on your selection above (comment box)

3. How would you define the construct of teacher dispositions? (comment box)

4. Please list the characteristics of a teacher candidate who embodies the *ideal* teacher dispositions. (comment box)

5. As a teacher educator, how might you describe your own dispositions? (comment box)

Role of Teacher Dispositions Construct in Teacher Preparation

6. “I believe the teacher dispositions construct should play a significant role in our program.”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

7. “We have a clear and robust curricular plan for supporting candidates’ dispositional development”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

8. “We have a clear and robust evaluation method(s) for how effectively we are addressing the teacher dispositions construct in our program”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

Optional comments on your selection above (comment box)

Teacher Dispositions Construct Relative to Our Program Mission & Ethos

9. “We effectively convey our program’s mission and ethos to our teacher candidates.”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

10. “Our program’s mission and ethos should be reflected in the way we define and implement the teacher dispositions construct throughout our curriculum.”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

11. “Our program’s mission and ethos are clearly reflected in the way we define and implement the teacher dispositions construct throughout our curriculum.”

Strongly agree, Somewhat agree, Neither agree or disagree, Somewhat disagree, Strongly disagree

Optional comments on your selection above (comment box)

Appendix D Collaborative Inquiry Session Plans (4 Sessions)

9:00am – 11:00am Sunday, November 8, 2020

Session I: Faculty's initial understanding of the teacher dispositions construct

Aim is to explore and establish the baseline of faculty's initial conceptualization and understanding of the construct (Pre-Study Survey distributed immediately prior this session).

8:30am – 9:00am - **Preparation & Set-up** (30 Minutes)

Get to the meeting environment at least 30 minutes early to prepare and settle in.

- Make sure to have all the materials and supplies, chairs and table space ready for all participants. Double-check and test any technology needed during the session (e.g., laptop, adaptors, chargers, projectors, cameras, Wi-Fi, etc.).
- Create a welcoming environment for participants (beverages, snacks, music and welcome)

9:00am – 9:15am **Share intentions & Initial Brainstorm** (15 minutes)

Welcome participants then share highlights from preparation session and overview and agenda for today's collaborative inquiry work session. Begin with an open-ended brain-dump (what words/short phrases come to mind when you hear the words, "teacher dispositions"); to be done individually, each participant will be given 5 minutes to come up with as many words/phrases as possible on their post-it notes (each participant will have 1 color stack of post-it notes)

9:15am – 10:00am (45 min.)

Next, introduce and engage in LUMA activity “**Concept Mapping**” to depict and visually document the conversation on this ambiguous topic of teacher dispositions. This will help the team achieve more clarity and build shared understanding of the construct through collaboration and communication. This activity will allow us to better visualize the relationships between various concepts and ideas that surround the construct of teacher dispositions. Steps will include:

- Brainstorm and create a list of concepts related to TD (think broadly to include people, places, and things); could be a list on whiteboard or on post-it notes
- Arrange these concepts in an orderly way
- Draw lines with arrows to connect related concepts
- Label the lines with words describing the relations
- Circle and label related groupings.
- Open up for a brief (5-10 min) discussion of what we see & want to take-away (Take pictures & later create replica on “paper”)

Quick Break

10:00am – 10:30am (30 min.) Using the post-it notes from the initial brain-dump and Concept Mapping exercises, engage participants in the next LUMA activity **“What's on Your Radar?”** This will help us continue to reflect and prioritize our many ideas and aspects of understanding of the construct. This exercise in which people plot items according to personal significance will help us see what we (individually and collectively) value when it comes to this construct. Steps will include:

- Introduce a large “radar screen” with 3 concentric circles (primary, secondary, tertiary) and 4-6 segments (to be labeled with subcategories)
- Have each participant take a few minutes to whittle down their pile of post-it notes down to 10-15 of their most “valued” words
- invite participants personally consider their word(s)’ and rank them according to personal importance
- taking turns, have them plot each somewhere on one of the concentric circles and describe their reasons and/or thoughts on their considerations
(Take pictures & later create replica on “paper”)

10:30 am – 11:00 am - **Group discussion & Wrap up** (30 Minutes)

Debrief & discuss the process & artifacts above. What can we observe about our initial conceptualization and understanding of the construct? Listen closely to the *whys* (e.g. why each faculty chose where they plotted words and what connections were made) and personal reflections. Capture the conversation on a whiteboard or flipchart paper. Take notes and photos of artifacts to send to the group via email following the session. Thank colleagues for their time, energy, and contributions. Celebrating all that you have accomplished and end session with a quick preview of Session II and distribute pre-reads.

If possible, immediately do some reflection and write down observation notes from the session.

9:00am – 11:25am Thursday, November 19, 2020

Session II: What will we learn from other teacher educators?

Aim to explore and examine a curated collection of other teacher educators' research and work on the construct of teacher dispositions (definitions, frameworks, strategies/tools). Begin to select (“harvest”) and gather components (especially definitional and curricular implementation pieces) that might align well with our program characteristics (realistic) and ethos (mission & vision).

8:30am – 9:00am - **Preparation & Set-up** (30 Minutes)

Get to the meeting environment at least 30 minutes early to prepare and settle in.

- Make sure to have all the materials and supplies, chairs and table space ready for all participants. Double-check and test any technology needed during the session (e.g., laptop, adaptors, chargers, projectors, cameras, Wi-Fi, etc.).
- Create a welcoming environment for participants (beverages, snacks, music and welcome)

9:00am – 9:55am **Share intentions, introduce session & “Divide & Conquer”** (55 min.)

Welcome participants. Share highlights from Session I session and agenda & aim for today’s collaborative inquiry work session. Begin with orientation of what’s out in the field (via key findings from literature review and summer internship). Share out take-aways from assigned pre-reads (TBD). Then examine curated collection of definitions and programmatic strategies used by other TEP to integrate the teacher dispositions construct. Each participant will write on their individual-color sticky notes the components that particularly stand out to them and those that align well with our program. Inform participants to aim for about 15 sticky notes.

Quick 5 min. break.

10:00am – 10:45am (45 min.) Next introduce LUMA activity “**Affinity Clustering**,” which is a visual, graphic technique for sorting items according to similarity. It is intended to organize what could be an overwhelming amount of information, reveal participant insights and take-aways from the prior exercise, discover thematic patterns, facilitate a productive discussion on the work of other teacher educators, and build shared understanding. This emergent activity is intended to help us select thematic patterns and components (both definitional and implementational) that exists in the literature (and the field) align well with our program and ethos.

Using the sticky notes from activity above, steps will include:

- Start with each participant examining their pile and narrow down to 7-10 sticky notes. -Then have one participant come up at a time to describe and then place an item on the whiteboard (pile note together; pick one you didn’t write.. and discuss as one places on the whiteboard)
- Invite others to place similar post-it notes in proximity.
- Repeat the pattern until all post-it notes are included
- Discuss what we see on the board and rearrange items as groupings emerge.
- Label the clusters that finally take shape (delay this until all post-its are up; labels should characterize... avoid one word noun to avoid just categorizing/classifying; think “headline”)

10:45am – 11:15am **Group discussion & Debrief** (30 Minutes)

Debrief together and discuss our key take-aways from examining existing literature & research, as well as the discoveries made through the Affinity Clustering activity. Dig into the “why” and make sense of the insights that we develop, articulating the implications on our work. A question we might ask: Could these labels/categories serve as pillars of our framework and areas of TD that we want to develop in our teacher candidates? Capture the conversation on a whiteboard or

flipchart paper. Take notes and photos of artifacts to send to the group via email following the session.

11:15am – 11:25 am **Wrap-up & reflection** (10 Minutes)

Go over what was covered during the session and ask participants if they had any personal reflections they would like to share. Thank colleagues for their time, energy, and contributions. End the session by celebrating all that you have accomplished! Celebrating all that you have accomplished and end session with a quick preview of Session III and confirm date/time.

If possible, immediately do some reflection and write down observation notes from the session.

9:00am – 11:30am Monday, November 30, 2020

Session III: What are the "essentials" that must be included in our operationalized definition of the teacher dispositions construct?

Aim to narrow in on and distill the essentials of the construct for our program (non-negotiables) by revisiting and evaluating take-aways from our previous sessions; and then align those essentials with our mission & values (ethos); begin to concretize what that "looks like" and "sounds like" in the form of a candidate prototype and our initial stab at an operationalized definition.

8:30am – 9:00am - **Preparation & Set-up** (30 Minutes)

Get to the meeting environment at least 30 minutes early to prepare and settle in.

— Make sure to have all the materials and supplies, chairs and table space ready for all participants. Double-check and test any technology needed during the session (erg., laptop, adaptors, chargers, projectors, cameras, Wi-Fi, etc.).

— Create a welcoming environment for participants (beverages, snacks, music and welcome)

9:00am – 9:15am **Share intentions & introduce the session** (15 minutes)

Welcome participants then share highlights/take-aways from Phases I & II; share the driving questions for the day as well as the agenda for the collaborative inquiry work session.

9:15am – 10:00am (45 min.) Next introduce LUMA activity **“Persona Profile”** which is an activity intended to summarize our findings and deepen empathy doing this work, towards our primary stakeholders - our teacher candidates. It will help us summarize our essentials with the mindset, needs, and goals typically held by our candidates, creating a visible archetype(s) borne of our work thus far. Steps will include:

-Pick out THREE categories or areas (using labels produced from last session) and decide on the sets of “essentials” that we want to develop in detail.

- Write a personal description of each category and give each a realistic candidate name, with a representative portrait for each persona.
- Describe their distinguishing characteristics.
- Establish their needs and goals.
- Summarize their mindset with a memorable quote.
- Compose a summary sheet for each type (if time).
- Quick debrief

Quick 5 min. break

10:05am – 10:50am (45 min.) Inviting input from all team members, equalizing their voices and facilitating group authorship, our next LUMA activity “**Round Robin**” will channel our collective understanding and attempt to generate our first formulations of operationalized definition of teacher dispositions. It will require us to inherit and build upon each other’s ideas with the hopes that several versions of the definition will emerge from the collective input. Steps will include:

- Give each person writing utensils and a folded Round Robin template (4-pt worksheet)
- Direct to look at first box, which should have the question: “How might *we* operationally define the construct of teacher dispositions?”
- Instruct the group to then unfold the template once and draft a definition inside the second box. Invite participants to reference our previous work if needed (10 min).
- Then instruct everyone to pass each worksheet to the left and unfold to the next box.
- Ask them to respond to the proposed definition and write why it might not work (write candid and critical responses) (5 min)
- Instruct everyone to pass each worksheet again and respond in the next box by writing down a way to resolve the critique by writing a new draft of the original definition at the top, addressing the criticism.

10:50am – 11:20am **Group discussion & Debrief** (30 Minutes)

Debrief together and discuss our key take-aways from creating the Persona Profiles and Round Robin’ing the definitions. Dig into the insights and take-aways of the participants and encourage articulating the implications of today’s work. A question we might ask: What do we need to do to finalize our working definition? How might we use this definition to envision its integration in our program’s curriculum? Capture the conversation on a whiteboard or flipchart paper. Take notes and photos of artifacts to send to the group via email following the session.

11:20 am – 11:30 am **Wrap-up & reflections** (10 Minutes)

Go over what was covered during the session and ask participants if they had any personal reflections they would like to share. Thank colleagues for their time, energy, and contributions.

End the session by celebrating all that you have accomplished! Celebrating all that you have accomplished and end session with a quick preview of final Session IV and confirm date/time. Heads up for email sent out to schedule semi-structured interviews post the Session IV date.

9:00am – 10:20am Monday, December 14, 2020

Session IV: How might our operationalized definition reflect our ethos and thereby inform the program's curriculum?

Aim of the session will be to wordsmith a working, operationalized definition that will hopefully reflect our program's ethos and thereby, inform the curriculum. We will envision together the curricular plan and conclude this PDSA cycle. Post-Study will be distributed at the conclusion of the session and scheduling of Semi-structured Interviews (early December).

8:30am – 9:00am - **Preparation & Set-up** (30 Minutes)

Get to the meeting environment at least 30 minutes early to prepare and settle in.

— Make sure to have all the materials and supplies, chairs and table space ready for all participants. Double-check and test any technology needed during the session (e.g. laptop, adaptors, chargers, projectors, cameras, Wi-Fi, etc.).

— Create a welcoming environment for participants (beverages, snacks, music and welcome)

9:00am – 9:15am **Share intentions & introduce the session** (15 minutes)

Welcome participants to the session and share highlights/take-aways from Phases I - III; share the driving questions of the day (what is our working definition of the construct? & how might we envision this definition to be integrated into our program's curriculum?) as well as the agenda for our final collaborative inquiry work session.

9:15am – 9:45am **Wordsmith a working definition** (30 Minutes)

Using all of the artifacts and take-aways from our previous sessions, collaborate and wordsmith a working definition. The goal is not perfection here – encourage participants that we have valuable information within these artifacts and to not over-think it. Key word: *working*

Quick 5 min. break

9:50am – 10:30 (40 min): In an attempt to “try out” our new, working definition and promote a vision of the future (operationalize and utilize it), invite the participants to engage in a LUMA activity to create a “**Concept Poster**” which is intended to convey our operationalized definition

to its full potential, and visualize how it may be integrated into our teacher preparation program's curriculum. Steps will include:

- Come up with a title/name and a tag line for how we might integrate the construct & our definition into our curriculum.
- Write a short summary of the big idea(s) we want to include.
- Include a description of the key stakeholders (e.g. how candidates might be served or influenced by the curriculum).
- List a few features and benefits.
- Illustrate the concept with a big picture or diagram (e.g. diagram of the TD portion of the curriculum; for example, utilizing timeline concept, draw how a teacher candidate might experience the curriculum that integrates the construct at the program's entry, during, and exit or... use a storyboard)
- Add a timeline for developing the solution (e.g. timeline of implementation plan)
- Draft the layout and draw the final poster.

10:30am – 11:00am **Debrief & final re-visit of our working definition** (30 Minutes)

Debrief together and discuss our key take-aways from creating the Concept Poster. Dig into the insights and take-aways of the participants and encourage how we might articulate our take-aways and apply it to our working definition. Make appropriate edits to the working definition. Capture the conversation on a whiteboard or flipchart paper. Take notes and photos of artifacts.

11:00am – 11:20am **Wrap-up (reflections & next steps)** (30 Minutes)

Reflect on the journey together. BIG THANK YOU to the colleagues for their time, energy, and contributions. Celebrate our accomplishments. Conclude with the two follow-up activities: Post-Study Survey via Qualtrics and the scheduling of individual Semi-structured interviews in early December.

If possible, immediately do some reflection and write down observation notes from the session.

Appendix E Semi-Structured Interview Protocol

Dissertation in Practice – Semi-Structured Interview Protocol

Interviewee:

Date:

Time:

Inquiry Questions:

1. How does co-constructing an operationalized definition inform faculty's perception of the teacher dispositions construct and its role in the program?

1a. How does the process of co-constructing an operationalized definition inform faculty's understanding of the teacher dispositions construct?

1b. How does the process of co-constructing an operationalized definition inform faculty's perception of the construct's role within the program's curriculum?

2. How, if at all, does the collaborative inquiry process increase faculty's awareness of their own dispositions?

3. To what extent does the collaborative inquiry process result in a definition that is coherent with the mission and ethos of the program?

Remember: Humanize the process. Seek stories and emotions. Set guardrails (time limit; response protected etc.).

TIME	CONTENT	NOTES ON WHAT WAS SAID	CONTEXT: Environment, feels, thoughts, actions, tone, body language
	1. Introduce Self & Interviewee (re-establish rapport for the interview)		
	2. Share intentions of interview and give overview of questions/intended organization of interview		
	3. Ask Questions (evoke stories)		

	<p>-Start by asking how the collaborative inquiry process and journey was for her. What part(s) of the experience did you like, dislike, value, could have done without?</p> <p>In what ways did the process change/enhance or inform</p> <p>-your understanding of the construct?</p> <p>-your perception of the construct's role in our program?</p> <p>How, if at all, do you think the process resulted in an outcome (e.g. core disposition) that is reflective our mission and the "culture" or ethos of our program?</p> <p>Can you share with me any thoughts you might have, as to ways in which we move forward with work, if at all?</p> <p>Is there anything else that you might want to share with me, that I didn't ask about?</p>		
	4. Leave time & space for interviewee to share (last question)		
	5. Thanks and wrap-up		

Tips: Explore Emotions

- Walk me through how you... (made that decision, completed that task, got to a place, etc.).
- What were you thinking at that point?
- Why do you say that? Tell me more.
- How did you feel at that moment, when __ happened?"
- Could you tell me why is that important to you?
- What emotions do you have about that?

Appendix F Summary of Findings Member Checking Handout

SUMMARY OF FINDINGS

(shared as part of member-checking)

March 2nd, 2021

Key:

CIP – Collaborative Inquiry Process

TD – teacher dispositions

Framing the findings around these **Inquiry Questions**:

1. How does the CIP inform faculty's understanding of the TD construct and its role in the program?
 - 1a. To what extent does the CIP inform faculty's understanding of the TD construct?
 - 1b. How does the CIP inform faculty's perception of the TD construct's role within the program?
2. How does the CIP impact faculty's awareness of their own (and each other's) dispositions?
3. To what extent does the CIP result in an outcome (originally operationalized definition) that is coherent with the mission and ethos of the program?

Thematic Findings

IQ 1A.

- ☐ Although CIP was edifying, conceptualizing TD calls for ongoing work.
- ☐ Its elusive, multi-dimensional nature makes TD a challenging construct to understand and "pin down" (perhaps should not try?).
- ☐ TD is about the *human*; therefore, we must *humanize our approach* to conceptualizing the construct.

IQ 1B.

- ☐ Let's re-center and prioritize this valuable cornerstone of our program, with care.
- ☐ Let's honor our PST candidates' *voices and choices* in this work.
- ☐ Let's create a nurturing program environment, with scaffolded experiences where we *walk along* with our candidates as they explore, discover, and cultivate their own inner landscapes.
- ☐ Let's continue *OUR work* within this "laboratory of collegial[ity]."

IQ 2.

- The time and space for self- & collective reflection was nourishing & necessary.
- Sharing of ourselves invited opportunities to SEE and be SEEN, deepening our regard for one another.

IQ 3.

- The core disposition ("the THING") gave us a tangible bridge as we aspire to deliver our departmental mission.

We aspire to provide a teacher education program, enriched with nurturing, relational opportunities, that support our teacher candidates in discovering and developing a teacher's disposition that serves, protects, and nurtures children in their care.

Core disposition
("the THING")

This disposition is characterized by a teacher's WILLINGNESS TO DEVELOP ONE'S CAPACITY TO PERCEIVE WHO THE (unfolding) CHILD IS... with the aim to CARE FOR and LOVE the whole child.

Appendix G Invitation to Participate

Collaborative Inquiry Sessions Examining the Teacher Dispositions Construct

Dear Bryn Athyn College Education Department Faculty!

You are warmly invited to participate in a dissertation study on the topic of the teacher dispositions construct in teacher preparation, conducted by Sarah Jin Wong, a doctoral student at the University of Pittsburgh School of Education.

This study aims to investigate the teacher dispositions construct, as it is understood and utilized in the Bryn Athyn College's Education Department. By participating in a series of collaborative inquiry sessions created for the faculty in a departmental meeting format, the study will provide its participants the time and space to collaboratively examine and co-construct their working, operationalized definition of the construct, and explore the impact of this process. The potential benefits of this study include enhanced participant understanding of the teacher dispositions construct, and a clearer vision for how to integrate the construct into teacher preparation programming. Participation in this study is voluntary and you may withdraw at any time.

As part of the study, you will be asked to complete two online surveys to gather your perception about the construct of teacher dispositions, engage in four collaborative inquiry sessions and hands-on activities examining the construct as it pertains to our program which will be audio-recorded, and at the conclusion of the study, participate in individual, audio-recorded semi-structured interviews. The online surveys will be distributed prior to the beginning of the collaborative inquiry sessions, and again after at the conclusion of the fourth collaborative inquiry session. It is estimated that the study will take about 10 hours of your time, over the span of two months.


There are no known risks associated with this study. There is no cost to participate in the study. No reimbursement will be provided to you for your participation in the study. All responses to the study will be kept private and available only to this researcher and the faculty advisor(s).

To volunteer for this project or if you have any questions, please email me at [REDACTED] using in the Subject Line, Your Name - Participate in the Teacher Dispositions Study. Emailing your name will imply that you have read this information and agree to participate in the study. If you have questions regarding your rights as a participant or any concerns regarding this project, you may contact this PI or the faculty advisor, Dr. Anastasia Kokina at [REDACTED].

Thank you for your support and contribution towards efforts to potentially better understand and improve the integration of this important construct in our teacher preparation program.

Sarah Jin Wong
Ed.D. Candidate 2021

Bryn Athyn College
2945 College Drive
P.O. Box 717
Bryn Athyn, PA 19009

A large black rectangular redaction box covers the contact information, including a phone number and email address, located below the address.

Appendix H Informed Consent

Consent to Act as a Participant in a Research Study

Title: Embracing the Construct of Teacher Dispositions: Bryn Athyn College Education

Department's Collaborative Inquiry Journey Towards a Definition

Principal Investigator:

Sarah Jin Wong, M.A.

Bryn Athyn College
2945 College Drive P.O. Box 717 Bryn Athyn, PA 19009

Questions about the Study: If you have questions regarding your rights as a study participant or any concerns regarding this project, you may contact this researcher at [REDACTED] or the faculty advisor, Dr. Anastasia Kokina at [REDACTED]. *If you wish to talk to someone other than the research team, please call the University of Pittsburgh Human Subjects Protection Advocate toll-free at 866-212-2668.*

Introduction: This study aims to investigate the teacher dispositions construct, as it is understood and utilized in the Bryn Athyn College's Education Department. By participating in a series of collaborative inquiry sessions created for the faculty in a departmental meeting format, the study will provide its participants the time and space to closely examine and co-construct their working definition of the construct. The collected data will reflect the impact of this process. The potential benefits of this research study include enhanced participant understanding of the teacher dispositions construct, and a clearer vision for how to integrate the construct into teacher preparation programming. Participation in this research study is voluntary and you may withdraw at any time

You have been selected as potential participants of this research study because of your role as a teacher educator and as a faculty in the Bryn Athyn College's Education Department. This study intends to enroll 3 faculty participants and will require approximately ten hours, taking place over a span of three months during the Fall Term of the 2020-2021 academic year.

Research Activities: During each of the collaborative inquiry sessions (represented by the four phases), data will be collected through audio recordings of the participant dialogue, resulting artifacts collected from each of the session activities, and observation notes collected throughout. Moreover, a pre-study and post-study survey will be distributed to each of the participants, and each participant will be invited to a semi-structured interview at the conclusion of the last Session.

The focus of each Session is listed below:

Session I: Faculty' initial understanding of the teacher dispositions construct

Session II: Examining others' research and work on the teacher dispositions construct & its role in programming

Session III: What are the *essential* components of our operationalized definition of the teacher dispositions construct?

Session IV: Articulating a working definition & envisioning how the resulting definition might inform the program's curriculum

Study Risks & Cost: There is no known risks associated with this research study. There is also no cost to participate in this research study, other than your time.

Study Benefits: The potential benefits of this research study include enhanced participant understanding of the teacher dispositions construct, and a clearer vision for how to cohesively integrate the construct into the teacher preparation programming. No reimbursement, however, will be provided to you for your participation in this research study.

Privacy and Confidentiality: All responses to the research study will be kept private and confidential, available only to this researcher and the faculty advisor(s). Completed surveys and audio recordings of the collaborative inquiry sessions as well as the interviews will be stored securely and only researchers will have access to the records.

Withdrawal from Study Participation: You can, at any time withdraw from this research study by informing the principal investigator, at the contact information listed on the first page of this form.

Voluntary Participation: Your participation in this research study is entirely voluntary. The investigator will be available to answer your current and future questions. Whether or not you provide your consent for participation in this research study will have no effect on your current or future employment or relationship with the investigator.

Statement of Consent: The above information has been explained to me and all current questions have been answered. I understand that I am encouraged to ask questions, voice concerns or complaints about any aspect of this research study during the course of this study, and that such future questions, concerns or complaints will be answered by a qualified individual or by the investigator listed on the first page of this consent document at the telephone number(s) given. I also understand that I may contact the Human Subjects Protection Advocate of the IRB Office, University of Pittsburgh (1-866-212-2668) to discuss problems, concerns, and questions; obtain information; offer input; or discuss situations that occurred during my participation.

By signing this form, I agree to participate in this research study. A copy of this consent form will be given to me.

Printed Name of Participant

Signature of Participant

Date

Appendix I BAC's Site Permission Letter

BRYN ATHYN COLLEGE



FOUNDED IN 1877

October 16, 2020

Dear Members of the IRB Committee,

On behalf of Bryn Athyn College, I am writing to formally indicate our awareness of the research proposed by Sarah Jin Wong, a student in the EdD Program at the University of Pittsburgh School of Education, titled: "Embracing the Construct of Teacher Dispositions: Bryn Athyn College Education Department's Collaborative Inquiry Journey Towards a Definition". We are aware that Sarah Jin Wong intends to conduct her research into the construct of teacher dispositions by hosting collaborative inquiry sessions in which faculty in the Bryn Athyn College Education Department will have the opportunity to examine and formulate their own working definition of the construct and explore its integration into the curriculum. We are aware that data will be collected through the following modes: online pre-and post-study surveys, audio-recordings and artifacts collected during the collaborative inquiry sessions, and empathy interviews at the conclusion of the study.

I grant Sarah Jin Wong permission to conduct her research at our organization. If you have any questions or concerns, please feel free to contact me at [REDACTED] or [REDACTED].

Best,

Wendy E. Closterman

Dean of Academics and Chief Academic Officer

Professor of History and Greek

Appendix J University of Pittsburgh's IRB Determination Letter



University of Pittsburgh *Institutional Review Board*

3500 Fifth Avenue
Suite 106
Pittsburgh, PA 15213
(412) 383-1480
(412) 383-1508 (fax)

MEMORANDUM

TO: Sarah J. Wong

FROM: Human Research Protection (HRP)

DATE: October 30, 2020

SUBJECT: IRB#2010014: Embracing the Construct of Teacher Dispositions:
Bryn Athyn College Education Department's Collaborative Inquiry Journey
Towards a Definition

The above-referenced project has been reviewed by the Institutional Review Board. Based on the information provided, this project has been characterized as being an activity that does not meet the formal definition of research, according to the federal regulations at 45 CFR 46.102(l)

That is, the proposed activity is not a systematic investigation, including research development, testing, and evaluation, designed to develop or contribute to generalizable knowledge. Should the scope of this project change such that the definition of research is subsequently met, the investigator must notify the IRB immediately.

Given this determination, you may now begin your project.

Bibliography

- Alawiye, O., & Williams, H. (2010). Dispositions profile inventory: An assessment tool for measuring the professional attitudes and behaviours of teacher education candidates. *National Social Science Journal*, 32(2). Retrieved from <http://www.nssa.us/journals/2010-34-2/2010-34-2-01.htm>
- Almerico, G. M. (2011). Pre-service teacher dispositions at work. *Research In Higher Education Journal*, 12, 1-22. Retrieved from <http://www.aabri.com/manuscripts/11830.pdf>
- Altan, S., Lane, J. F., & Dottin, E. (2019). Using habits of mind, intelligent behaviors, and educational theories to create a conceptual framework for developing effective teaching dispositions. *Journal of Teacher Education*, 70(2), 169-183. <https://doi.org/10.1177/0022487117736024>
- Beverly, C., Santos, K., & Kyger, M. (2006). Developing and integrating a professional disposition curriculum into a special education teacher preparation program. *Teacher Education and Special Education*, 29(1), 26-31. <https://doi.org/10.1177/088840640602900104>
- Bercaw, L. A., Summers, D. G., Colby, S. A., & Payne, M. (2012). Mirror images: Teacher candidates' perceptions of disposition development. *Action in Teacher Education*, 34(56), 514-525. <https://doi.org/10.1080/01626620.2012.729481>
- Borko, H., Liston, D., & Whitcomb, J. A. (2007). Apples and fishes: The debate over dispositions in teacher education. *Journal of Teacher Education*, 58(5), 359-364. <https://doi.org/10.1177/0022487107309977>
- Brantlinger, E., Jimenez, R., Klingner, J., Pugach, M., & Richardson, V. (2005). Qualitative studies in special education. *Exceptional Children*, 71(2), 195-207. <https://doi.org/10.1177/001440290507100205>
- Breese, L., & Nawrocki-Chabin, R. (2007). The social cognitive perspective in dispositional development. In M. E. Diez & J. Rath (Eds.), *Dispositions in teacher education* (p. 33 - 52). Information Age Publishing.
- Brown, B. (2018). *Dare to lead*. Random House.
- Brown, B. (2021, April 28). Unlocking podcast [Audio podcast]. <https://brenebrown.com/podcast/brene-with-sue-monk-kidd-and-jen-hatmaker-on-longing-belonging-and-faith/>

- Bryk, A. S. (2015). 2014 AERA Distinguished Lecture: Accelerating how we learn to improve. *Educational Researcher*, 44(9), 467-477.
<https://doi.org/10.3102/0013189X15621543>
- Bryk, A. S., Gomez, L. M., Grunow, A., & LeMahieu, P. G. (2015). *Learning to Improve: How America's schools can get better at getting better*. Harvard Education Press.
- Bryk, A., & Schneider, B. (2002). *Trust in schools: A core resource for improvement*. Russell Sage Foundation.
- Bryn Athyn College Education Department. *Assessment and metrics plan 2018-2019*. Author.
- Bryn Athyn College. (2018). *Mission and history*. Retrieved from <https://brynathyn.edu/about/our-history/>.
- Bernhardt, V. (2013). *Data analysis for continuous school improvement*. Routledge.
- Carroll, D. (2012). Examining the development of dispositions for ambitious teaching: One teacher candidate's journey. *The New Educator*, 8(1), 38-64.
<https://doi.org/10.1080/1547688X.2011.619950>
- Choi, H., Benson, N. F., & Shudak, N. J. (2016). Assessment of teacher candidate dispositions: Evidence of reliability and validity. *Teacher Education Quarterly*, 43(3), 71-89.
- Combs, A. W., & Snygg, D. (1959). *Individual behavior: A perceptual approach to behavior*. Harper.
- Combs, A., Soper, D., Goodling, C., Benton, J., Dickman, J., & Usher, R. (1969). *Florida studies in the helping profession*. Social Science Monograph #37. University of Florida Press.
- Conderman, G., & Walker, D. A. (2015). Assessing dispositions in teacher preparation programs: Are candidates and faculty seeing the same thing? *The Teacher Educator*, 50(3), 215-231.
<https://doi.org/10.1080/08878730.2015.1010053>
- Council for the Accreditation of Educator Preparation [CAEP]. (2013). *CAEP standards for accreditation for educator preparation*. Retrieved from <http://caepnet.org/standards/introduction>
- Council of Chief State School Officers [CCSSO]. (2011, April). Interstate Teacher Assessment and Support Consortium (InTASC) model core teaching standards: A resource for state dialogue. Author.
- Damon, W. (2007). Dispositions and teacher assessment: The need for a more rigorous definition. *Journal of Teacher Education*, 58(5), 365-369.
<https://doi.org/10.1177/0022487107308732>
- Darling-Hammond, L. (1996). What matters most: A competent teacher for every child. *Phi Delta Kappan*, 78(3), 193-200.

- Darling-Hammond, L. (1999). *Teacher quality and student achievement: A review of state policy evidence*. Center for the Study of Teaching and Policy, University of Washington.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Education Policy Analysis Archives* 8(1). Retrieved from: http://people.ucsc.edu/~ktellez/d_hammond.pdf
- Darling-Hammond, L. (2006). Constructing 21st-century teacher education. *Journal of Teacher Education*, 57(3), 300-314. <https://doi.org/10.1177/0022487105285962>
- Derman-Sparks, L., & Edwards, J. O. (2010). *Anti-bias education for young children and ourselves*. National Association for the Education of Young Children.
- Dewey, J. (1910). *How we think*. D.C. Heath & Co.
- Dewey, J. (1933). *How we think: A restatement of the relation of reflective thinking to the educative process*. D.C. Heath & Co.
- Diez, M. (2006). Assessing dispositions: Context and questions. *The New Educator*, 2(1), 57-72. <https://doi.org/10.1080/15476880500486137>
- Diez, M. E. (2007). Assessing dispositions: Context and questions. In M. Diez,& J. Rath (Eds.). *Dispositions in teacher education* (pp. 183-201). Information Age Publishing.
- Diez, M. E., & Rath, J. (Eds.). (2007). *Dispositions in teacher education*. Information Age Publishing.
- Dotger, B. H. (2010). "I had no idea": Developing dispositional awareness and sensitivity through a cross-professional pedagogy. *Teaching and Teacher Education*, 26(4), 805- 812. <https://doi.org/10.1016/j.tate.2009.10.017>
- Dottin, E. S., & Sockett, H. (2006). A Deweyan approach to the development of moral dispositions in professional teacher education communities. In H. Sockett (Ed.), *Teacher dispositions: Building a teacher education framework of moral standards* (pp. 27-47). AACTE Publications.
- Dottin, E. (2010). Professional judgment and dispositions in teacher education. *Teaching and Teacher Education*, 25(1), 83-88. <https://doi.org/10.1016/j.tate.2008.06.005>
- Dweck, C. S., Walton, G. M., & Cohen, G. L. (2014). Academic tenacity: Mindsets and skills that promote long-term learning. Bill and Melinda Gates Foundation. Retrieved from <https://ed.stanford.edu/sites/default/files/manual/dweck-walton-cohen-2014.pdf>
- Edick, N., Danielson, L., & Edwards, S. (2007). Dispositions: Defining, aligning and assessing. *Academic Leadership*, 4(4). Retrieved from http://www.academicleadership.org/emprical_research/Dispositions_Defining_Aligning_and_Assessing.shtml

- Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. *Teachers College Record*, 103, 1013-1055.
- Feiman-Nemser, S., & Schussler, D. (2010). Defining, developing, and assessing dispositions: A cross-case analysis. In P. C. Murrell, Jr., M. E. Diez, S. Feiman-Nemser, & D. L. Schussler (Eds.), *Teaching as a moral practice: Defining, developing and assessing professional dispositions in teacher education* (pp. 177-201). Harvard University Press.
- Fonseca-Chacana, J. (2019). Making teacher dispositions explicit: A participatory approach. *Teaching and Teacher Education*, 77, 266-276. <https://doi.org/10.1016/j.tate.2018.10.018>
- Freire, P. (1993). *Pedagogy of the oppressed* (New rev. 20th-anniversary ed.). Continuum.
- Heifetz, R., Grashow, A., & Linsky, M. (2009). *The practice of adaptive leadership: tools and tactics for changing your organization and the world*. Harvard Business Press.
- Helm, C. (2006). Teacher dispositions as predictors of good teaching. *The Clearing House*, 79(3), 117-118. <https://doi.org/10.3200/TCHS.79.3.117-118>
- Hyun, E., & Marshall, J. D. (2003). Teachable-moment oriented curriculum practice in early childhood education. *Journal of Curriculum Studies*, 35(1), 111-127. <https://doi.org/10.1080/00220270210125583>
- Katz, L., & Rath, J. (1985). Dispositions as goals for teacher education. *Teaching and Teacher Education*, 1(4), 301-307. [https://doi.org/10.1016/0742-051X\(85\)90018-6](https://doi.org/10.1016/0742-051X(85)90018-6)
- Kim, J., & Zimmerman, A. (2017). Bildung, bildungsroman, and the cultivation of teacher dispositions. *The Teacher Educator*, 52(3), 235-249. <https://doi.org/10.1080/08878730.2017.1315624>
- Kishimoto, K. (2018). Anti-racist pedagogy: From faculty's self-reflection to organizing within and beyond the classroom. *Race Ethnicity and Education*, 21(4), 540-554. <https://doi.org/10.1080/13613324.2016.1248824>
- LePage, P., Nielsen, S., & Fearn, E. J. (2008). Charting the dispositional knowledge of beginning teachers in special education. *Teacher Education and Special Education*, 31(2), 77-92. <https://doi.org/10.1177/088840640803100202>
- Liddell, D. L., & Cooper, D. L. (Eds.). (2012). Facilitating the moral growth of college students: *New Directions for Student Services*, 139. ProQuest Ebook Central. <https://ebookcentral.proquest.com>
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage Publications.
- Lortie, D. (1975). *Schoolteacher: A sociological study*. University of Chicago Press.

- Lucas, B., & Nacer, H. (2015). *The habits of an improver. Thought paper*. The Health Foundation. Retrieved from <https://www.health.org.uk/sites/default/files/TheHabitsOfAnImprover.pdf>
- LUMA Institute (2020). *Why LUMA? Our system*. <https://www.luma-institute.com/why-luma/our-system/>
- Melin, L., & Walker, D. (2009). A data-driven dispositions model for teacher candidates and program review. *Action in Teacher Education*, 31(1), 58-74. <https://doi.org/10.1080/01626620.2009.10463511>
- Miles, M. B., Huberman, M., & Saldaña, J. (2014). Drawing and verifying conclusions. In *Qualitative data analysis: A methods sourcebook* (pp. 275–322). Sage.
- Mills, C., & Ballantyne, J. (2010). Pre-service teachers' dispositions towards diversity: Arguing for a developmental hierarchy of change. *Teaching and Teacher Education*, 26(3), 447-454. <https://doi.org/10.1016/j.tate.2009.05.012>
- Murrell, P. C. (2010). *Teaching as a moral practice: Defining, developing, and assessing professional dispositions in teacher education*. Harvard Education Press.
- National Council for the Accreditation of Teacher Education [NCATE]. (2002). Professional standards for the accreditation of schools, colleges, and departments of education. Author.
- Nelsen, P. J. (2015). Intelligent dispositions: Dewey, habits and inquiry in teacher education. *Journal of Teacher Education*, 66(1), 86-97. <https://doi.org/10.1177/0022487114535267>
- Noddings, N. (2010) Moral education and caring. *Theory and Research in Education*, 8(2), 145-151. <https://doi.org/10.1177/1477878510368617>
- Noddings, N. (2012) The caring relation in teaching. *Oxford Review of Education*, 38(6), 771-781. <https://doi.org/10.1080/03054985.2012.745047>
- Nixon, A., Packard, A., & Dam, M. (2010). Principals judge teachers by their teaching. *The Teacher Educator*, 48(1), 58-72. <https://doi.org/10.1080/08878730.2012.740154>
- Notar, C., Riley, G., Taylor, P., Thornburg, R., & Cargill, R. (2009). Dispositions: Ability and assessment. *International Journal of Education*, 1(1), 2-14.
- Oja, S. N., & Reiman, A. J. (2007). A constructivist-developmental perspective. In M. E. Diez & J. Rath (Eds.), *Dispositions in teacher education* (pp. 91-115). Information Age Publishing, Inc.
- Palmer, P. (2007). *The courage to teach: Exploring the inner landscape of a teacher's life*. John Wiley & Sons, Inc.
- Parrott, M., Da Ros-Voseles, D., & Eaton, P. (2013). A picturesque view of dispositions, autonomy, and efficacy during the educational preparation of early childhood

- educators. ERIC Clearinghouse on Elementary and Early Childhood Curriculum. (ERIC Document Reproduction Service No. ED540356). Retrieved from <https://eric.ed.gov/?id=ED540356>
- Perry, J. A., Zambo, D., & Crow, R. (2020). *The improvement science dissertation in practice*. Myers Education Press, LLC.
- Phelps, P. (2006). The dilemma of dispositions. *Clearing House*, 79(4), 174-178. <https://doi.org/10.3200/TCHS.79.4.174-178>
- Pufpaff, L., Sciuchetti, M., & Taylor, L. (2017). Dispositions by committee for educator preparation programs. *The Teacher Educator*, 52(3), 268-283. <https://doi.org/10.1080/08878730.2017.1313923>
- Rike, C., & Sharp, L. (2008). Assessing preservice teachers' dispositions: A critical dimension of professional preparation. *Childhood Education*, 84(3), 150-153. <https://doi.org/10.1080/00094056.2008.10522994>
- Roegman, R., Pratt, S., Sanchez, S., & Chen, C. (2018). Between extraordinary and marginalized: Negotiating tensions in becoming special education-certified teachers. *The New Educator*, 14(4), 293-314. <https://doi.org/10.1080/1547688X.2017.1287317>
- Rose, S. (2013). How do teacher preparation programs promote desired dispositions in candidates? *SAGE Open*, 3(1), 1-8. <https://doi.org/10.1177/2158244013480150>
- Samaras, A. P., & Freese, A. R. (2006). *Self-study of teaching practices primer*. Lang.
- Schon, D. A. (1987). *Educating the reflective practitioner*. Jossey-Bass.
- Schussler, D. (2006) Defining dispositions: Wading through murky waters. *The Teacher Educator*, 41(4), 251-268. <https://doi.org/10.1080/08878730609555387>
- Schussler, D., Bercaw, L., & Stooksberry, L. (2008). Using case studies to explore teacher candidates' intellectual, cultural, and moral dispositions. *Teacher Education Quarterly*, 35(2), 105-122.
- Schussler, D., Stooksberry, L., & Bercaw, L. (2010). Understanding teacher candidate dispositions: Reflecting to build self-awareness. *Journal of Teacher Education*, 61(4), 350-363. <https://doi.org/10.1177/0022487110371377>
- Schussler, D., & Knarr, L. (2013). Building awareness of dispositions: Enhancing moral sensibilities in teaching. *Journal of Moral Education*, 42(1), 71-87. <https://doi.org/10.1080/03057240.2012.722987>
- Sciuchetti, M., Robertson, P., McFarland, L., & Garcia, S. (2018). Preservice special education teachers' reflections on their developing professional awareness via in-context

- learning. *The Teacher Educator*, 53(2), 150-166.
<https://doi.org/10.1080/08878730.2017.1419393>
- Shiveley, J., & Misco, T. (2010). "But how do I know about their attitudes and beliefs?": A four-step process for integrating and assessing dispositions in teacher education. *The Clearing House*, 83(1), 9-14. <https://doi.org/10.1080/00098650903267669>
- Shoffner, M., Sedberry, T., Alsup, J., & Johnson, T.S. (2014). The difficulty of teacher dispositions: Considering professional dispositions for preservice English teachers. *The Teacher Educator*, 49(3), 175-192. <https://doi.org/10.1080/08878730.2014.917528>
- Singh, D. K., & Stoloff, D. L. (2008). Assessment of teacher dispositions. *College Student Journal*, 42(4), 1169-1180.
- Sockett, H. (2009). Dispositions as virtues: The complexity of the construct. *Journal of Teacher Education*, 60(3), 291-303. <https://doi.org/10.1177/0022487109335189>
- Stooksberry, L. M. (2007). Dispositions as a dialogue in teacher preparation. In M. E. Diez & J. Rath (Eds.), *Dispositions in teacher education* (pp. 219-232). Information Age Publishing, Inc.
- Swedenborg Foundation (Retrieved May 17th, 2021). "Regeneration." <https://swedenborg.com/emanuel-swedenborg/explore/regeneration/>
- Swedenborg, E. (2010). *True Christianity*. Translated by Jonathan S. Rose. Swedenborg Foundation, 2010. Retrieved from: newchristianbiblestudy.org
- Taylor, R., & Wasicsko, M. (2000, November). *The dispositions to teach*. Paper presented at the Southern Region Association of Teacher Educators Conference, Lexington, KY.
- Thompson, S., Ransdell, M., & Rousseau, C. (2005). Effective teachers in urban school settings: Linking teacher disposition and student performance on standardized tests. *Journal of Authentic Learning*, 2(1), 22-36.
- Villegas, A. M. (2007). Dispositions in teacher education: A look at social justice. *Journal of Teacher Education*, 58(5), 370-380. <https://doi.org/10.1177/0022487107308419>
- Wadlington, E., & Wadlington, P. (2011). Teacher dispositions: Implications for teacher education. *Childhood Education*, 87(5), 323-326.
<https://doi.org/10.1080/00094056.2011.10523206>
- Wake, D., & Bunn, G. (2016). Teacher candidate dispositions: Perspectives of professional expectations. *The Teacher Educator*, 51(1), 33-54.
<https://doi.org/10.1080/08878730.2015.1107440>

- Wasicsko, M. M. (2007). The Perceptual Approach to Teacher Dispositions. In M. E. Diez & J. Rath (Eds.), *Dispositions in teacher education* (pp. 53-89). Information Age Publishing, Inc.
- Wilkerson, J. R., Lang, W. S. (2007). *Assessing teacher dispositions: Five standards-based steps using the DASSM model*. Corwin Press.