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The Mattering Model: The Foundational Elements Of Mattering For K-12 Educators

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THE MATTERING MODEL: THE FOUNDATIONAL ELEMENTS OF MATTERING FOR K–12 EDUCATORS

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by

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VITA

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ABSTRACT

Mattering is the feeling that one's actions are significant, and that one would be missed if one were gone (Rosenberg & McCullough, 1981). So far, little research has addressed the teacher's sense of mattering in the K–12 setting. This study examined the possible foundational elements or building blocks of mattering for K–12 teachers by using exploratory factor analysis. A thorough review of the literature identified the possible elements of mattering for K–12 educators; based on that, an initial theoretical construct was designed. A survey instrument consisting of 102 items was created, and it was taken by 1,110 participants from diverse backgrounds and school demographics.

The analysis revealed eight factors as the foundation of mattering for K–12 teachers: community, authenticity, flow, compensation, purpose, assimilation, job crafting, and job stability. The eight factors were categorized into three thematic units: Interpersonal (community, authenticity, and flow), Intrapersonal (purpose and assimilation), and External (compensation, job stability, and job crafting).

The identification of these factors will be useful in examining some of the common problems that educators face today, including high stress levels, job dissatisfaction, and low pay. Policymakers and school leaders who understand and address the foundational elements of mattering may lead to a more positive work environment, which could, in turn, lead to higher job retention among teachers. This study serves as a starting point for future research on mattering for K–12 teachers.

PREFACE

This dissertation has been submitted for the degree of Doctor of Philosophy to the Indiana State University, Terre Haute, IN, USA. The research was conducted under the supervision of Dr. Ryan Donlan.

Originally, I was going to research chronic teacher absenteeism and the reason behind some schools having more chronically absent teachers than others. While investigating this issue, I had many subject-related conversations with various professionals. Dr. Ryan Donlan introduced the term "mattering" to me, and we discussed how this could impact absenteeism. My reading eventually led me to ask this question: "What makes a teacher feel like they matter?" Thus, my research topic was born.

For the educational leaders to understand how they can assist with a teacher's sense of mattering, they must be able to identify the elements that make up mattering. While writing the literature review, I became intrigued with the various concepts that could be possible elements. Some possible elements were more obvious than others. Yet, these were merely clues and conjecture. Through factor analysis, I was able to quantify and identify these essential elements. Eventually, supposition led to knowledge, and that knowledge led to the development of the Foundational Elements of Mattering for K–12 Teachers construct.

I am excited to see how the topic of mattering for teachers develops and evolves in the future. This relatively unexplored concept could have a significant impact on a teacher's career satisfaction.

ACKNOWLEDGMENTS

I would like to thank my committee chair, Dr. Ryan Donlan, for his invaluable guidance and advice during the development and writing of this dissertation. I could not have asked for a better dissertation chair. His questions and comments allowed me to refine my ideas and put thoughts into words.

I appreciate the time and advice of my other committee members as well. Dr. Steve Grunert's expertise in factor analysis helped me gain a critical understanding of the process. Dr. Julie Reese acted as a sounding board for my ideas. Her probing questions allowed me to reflect on my thoughts as I developed the construct.

No words can express the thanks and gratitude I have for my mother, Roberta Wilfong. Her unwavering support throughout my life and career have enabled me to have the confidence I need to continually challenge myself. Her patience, as I endlessly rambled on about mattering, is something I will always cherish.

I would like to thank Dr. David Hoffert for encouraging me to start pursuing my Ph.D. again. I am so thankful for his leadership; every day, I appreciate that he hired me, making me a part of the WCS family. With his guidance, I have been able to stretch and grow professionally in ways I never thought possible.

I want to thank Dr. Steve Troyer for his support over the past few years. Steve helped rekindle my excitement and passion for learning and educational discourse at a critical time in my career. If it were not for his encouragement, I would not be writing this today. I have enjoyed watching him grow as an educational leader and the things he has accomplished.

I want to thank and acknowledge Dr. Robert Duell and James Kirkton for helping me develop early in my educational career and igniting my love for teaching and learning. I would not be where I am today without their guidance and leadership. They never backed down from educational challenges and always had the students' best interests at heart. The leadership strengths that I have are a direct result of their mentorship and example.

Finally, I would like to take this opportunity to encourage my niblings Allison Pinion, Tyler Hostetler, and Timothy Hostetler to always pursue their goals with excitement and energy: Keep learning. Continue growing. Strive to make the world a better place.

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CHAPTER 1

MATTERING

Mattering is the feeling that one's actions are significant, and that one would be missed if they were gone (Rosenberg & McCullough, 1981). Very little research has addressed the teacher's sense of mattering in the K–12 setting. This study examines the possible foundational elements or building blocks of mattering for K–12 teachers, by using factor analysis. This information is useful when examining some of the common problems that educators face today, including high stress levels, job dissatisfaction, and low pay. If school leaders can understand the foundations of how or why a teacher feels they matter, it may lead to a more positive work environment, which in turn could lead to higher job retention among teachers.

Background of the Problem

Educators, and specifically K–12 classroom teachers, are the linchpins of a successful education system. However, classroom teachers are also often the scapegoats for failures in the U.S. society. Since the publication of *A Nation at Risk*, the U.S. education system has been perceived by the general public to be failing the country, communities, and students. Politicians and policymakers (Kirst, 2010) have derided the K–12 education system and, directly or indirectly, the people working in educational institutions (National Commission on Excellence in Education, 1983) and have blamed the education system for many of the failures in American society.

In 2019, 90% of the population completed high school in the United States (United States Census Bureau, 2019). In other words, most people in the U.S. have at least thirteen years of experience (K–12) as a student; all too often, people mistake that experience for understanding the intricacies and nuances of teaching. Despite decades of education reforms, teachers continue to bear the brunt of the criticism. Federal legislations such as "No Child Left Behind" (Behind, 2002) and "Race to the Top" (GovTrack.US, 2019) have reiterated the criticism of the American education system. Various state legislative initiatives have focused on improving the education system yet have given little direct support to teachers in the classroom.

After decades of politicians using the education system as an example of mediocrity to generate campaign support, teachers are more dissatisfied and stressed than ever before in American history. Over 61% of teachers said their work was always or often stressful; that number was only 30% just two years prior (Stice, 2017). Special interest groups have succeeded in de-professionalizing the teaching profession (American Federation of Teachers, 2017). *Numerous teachers have now been frustrated and are leaving the profession before retirement age; they are burning out and fewer people are becoming certified teachers now*.

State and national governments are placing increasing demands on teachers and school districts academically, socially, and emotionally. Schools often take on the role of the parent, assuming responsibilities that educational institutions were never designed to support. As a whole, society has become progressively more critical of teachers' classroom performance, demanding better results with fewer resources (Leachman, 2017). The integral role schools play in communities across the nation became clearer when states began to shut down school buildings during the COVID-19 pandemic, starting in March 2020. Schools "provide

indispensable student-welfare services, like free meals, health care, and even dentistry. They care for children while parents work" (Sawchuk, 2020, para. 4).

Despite this bleak situation, many schools and educators continue to thrive in the classroom. In the United States, some teachers continue to teach in the classroom over careers that span 30 or 40 years, spending their entire working life in the K–12 classroom. However, the number of people who have such lifelong teaching careers is dwindling. Recent graduates tend to remain in the teaching profession only for a few years before deciding to pursue other careers outside of education (Podolsky et al., 2016).

For the most part, the research community has ignored mattering, but it can have a significant impact on how teachers and others view the teaching profession. Mattering is a person's need to feel significant to other people; it is the extent to which people feel they make a difference in society and to other individuals (Flett, 2018). The first chapter of this study explores teachers' dissatisfaction with their profession and examines the concept of mattering and its relevance to K–12 teachers.

Statement of the Research Problem

Teachers are becoming stressed and leaving the workforce at an alarming rate (Podolsky et al., 2016). The K–12 classroom teaching profession is highly demanding and can be a high-stress environment. Most people leave the teaching profession due to inadequate preparation (in teacher training programs or once hired), lack of support by administration and colleagues, challenging working conditions, and dissatisfaction with compensation and salary. Some teachers find better career opportunities in other professions. They also feel frustrated with the current work environment, scarcity of resources, and lack of support from lawmakers. Teachers have suggested increases in their salaries as a means to rectify the present situation, as some

believe that a higher salary equates to higher prestige and will mitigate some of the stress placed on them.

The lack of adequate compensation exacerbates inadequate preparation, lack of support, and challenging work conditions. The combination of these elements creates an environment that makes it desirable for teachers to seek better opportunities outside of education. A teacher's sense of purpose and passion for education will only keep them teaching for so long before they decide to leave the profession altogether (Podolsky et al., 2016).

Unfortunately, pay raises could be only a short-term solution if not coupled with other improvements in the teaching environment. Teachers must feel a sense of belonging within their building or district, a sense of purpose in teaching, and validation—from external sources—of the work that they are doing. The idea of a $100,000 teacher salary for all may exacerbate an already complex problem (Denver Classroom Teachers Association, 2019). A more substantial salary may increase satisfaction in the short term, but the monetary reward is unlikely to bring about lasting effects (Pink, 2009). There is not just one solution to all of the issues that teachers face today (Strauss, 2016).

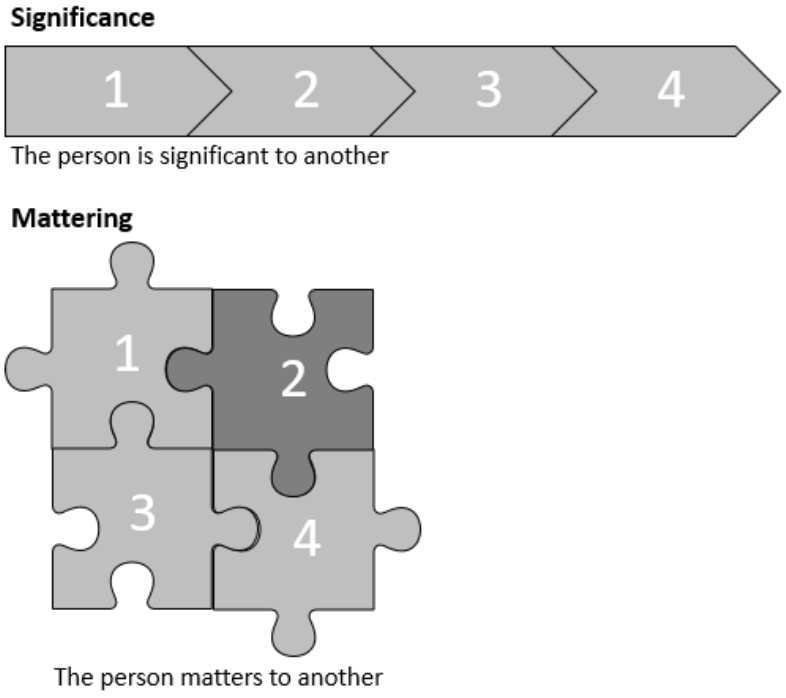
Leaders must understand the root causes of teacher dissatisfaction and stress if they are to make a real difference in how teachers view and experience their careers. Education leaders and teachers must focus on ensuring that the right conditions are present to help teachers feel satisfied with their choice of profession. For teachers to experience satisfaction in providing education, with all of the daily complexities and difficulties that the profession entails, they must feel that the work they are doing matters. Teachers need to feel significant and realize that their work matters to the people around them.

Purpose of the Study

The purpose of this factor analysis study is to develop a theoretical framework for foundational aspects (building blocks) of mattering for K–12 teachers. Mattering is more than a sense of belonging or a sense of purpose; it is the feeling that one's actions are significant, and that one would be missed if they were gone (Rosenberg & McCullough, 1981). Mattering extends beyond a transactional experience and the sense of being significant to someone; Figure 1 presents a visual representation of the difference between significance and mattering.

Figure 1

Significance versus Mattering



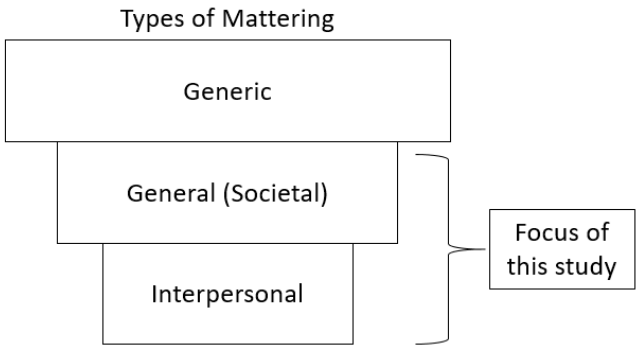
In Figure 1, significance is necessary to have the central pieces present to complete the arrow. The order in which the pieces are arranged makes no difference. Mattering is the

necessity of having the exact pieces in their exact places. The number 2 piece cannot fit into the puzzle in any other way. If the piece were removed or if it were to be replaced with a different shape, the puzzle would be incomplete. For a customer, a cashier is significant and would be missed if they were gone, but this does not mean that the cashier truly matters to that customer. Mattering is transformational; someone who matters to another makes a difference in the life of that person, and although they might be replaced, there is something that only the original person can accomplish in a particular way.

This study examines the individual's sense of mattering at an individual and general level. Mattering is when an individual feels that they are significant to another individual or group of people. Generically, mattering is often used in phrases such as "you matter" or "everyone matters," yet mattering is also an internal feeling. This study examines the sense of mattering as used in a general way (societal mattering) and to a specific individual (interpersonal mattering). Using the phrase "you matter" without explicitly directing it toward any particular person does not engender a sense of real importance or significance to people to whom the phrase is directed. The generic term "matter" is little more than a trite saying and has little significance to one's feelings, as in the case of a politician making a televised broadcast to all teachers and telling them that "they matter." Figure 2 illustrates the three types of mattering.

Figure 2

The Three Types of Mattering



Research Questions

This study is to identify the foundational elements (building blocks) for a teacher to feel that they matter as a professional. The focus will be on the sense of mattering to other adults rather than their feeling of mattering to students. The primary research question is: "What are the building blocks of a teacher's sense of mattering in the K–12 setting?" Additionally, the demographic and background questions will allow the analysis of variations that may be present in one group and not another. The secondary research question is: "What are the factors of mattering for K–12 teachers?"

Significance of the Study

This study can advance the understanding of K–12 teachers' satisfaction. As teacher retention becomes an increasingly significant focus for school leaders, knowing the elements that are necessary for teachers to feel that they matter becomes critical. Few studies have examined the topic of mattering in K–12 classrooms and focused on how it relates to teachers. Flett (2018) stated that the research community has largely ignored the study of mattering, contending that more time and resources have been used to explore concepts such as belonging and purpose

when, due to its relevance, mattering should be the focus. Mattering is more than having a sense of belonging or purpose. People commonly interpret mattering as belonging, but one can belong to a group without really mattering there. Others mistake mattering as a sense of purpose; again, it is possible to have a purpose in life without the feeling of being mattered (Flett, 2018).

This information could lead to a better understanding of how teachers can be helped to feel more satisfied and fulfilled in their careers. If the building blocks that make up a person's sense of mattering are lacking for teachers, then school leaders can focus on those areas to create an environment that is more hospitable to them. District and school leaders will be able to use their knowledge to make teachers aware of factors that cause dissatisfaction in their careers. For example, teachers might believe the culture of a building needs to change in order to bring more satisfaction when, in reality, they need external validation or affirmation. It is essential for all parties involved in education to understand mattering and determine how it can impact the educational environment. It is observable that mattering is not something on which many educational leaders focus their energy. Having a clear understanding of how a teacher comes to the feeling of a sense of mattering will allow leaders to examine their practices in a new light. Given the numerous contemporary issues facing education, it is paramount that the important, but mostly ignored, concept of mattering is illuminated.

Teachers and school leaders, who identify the elements of mattering that are absent from a school, will be able to target those areas that are lacking to help teachers feel more satisfied with their career. Additionally, a teacher can focus on ensuring that the right combinations of the elements of mattering are present to help them feel more satisfied with their choice of profession. Therefore, the aim of this factor analysis research project is to identify the essential elements, the building blocks, of mattering.

Research Design

The research design is an exploratory and confirmatory factor analysis. Very little is known about what gives educators a sense of mattering in a K–12 classroom. Based on a thorough literature review, an initial mattering model was formed, as discussed later in this document. A survey consisting of a series of questions will be sent to practicing K–12 teachers, to elicit how they feel regarding their sense of matting to others.

Assumptions

Certain assumptions exist based on prior knowledge and experience, and as a result of the background work performed for Chapter 2, a survey will be sent to educators across the United States. The author understands that the initial model will likely need to be changed, modified, or be completely different from the model derived from the factor analysis. The data collection process is further explained in Chapter 3.

Limitations

Potential limitations include lack of responses from disillusioned teachers, who do not believe that contributing to such research will make a difference. Lack of responses could create skewed results, as teachers who are currently satisfied with their profession are the ones most likely to respond. Teachers that are already disillusioned with the teaching profession are unlikely to want to spend time improving the profession if they are ready to change careers. The researcher will attempt to obtain a large sample size to mitigate this effect.

Additional elements may exist that are not included in the building blocks of mattering for K–12 educators construct initially developed from the literature review. Other dimensions might need to be addressed in the future to gain a full understanding of mattering in the K–12

realm. The survey questions are limited to the elements identified in the literature review, so participants cannot include other elements that they feel may lead to a sense of mattering.

The study focuses on the sense of mattering to other adults in the school or society in general rather than their sense of mattering to students. It could be that a great deal of a teacher's overall sense of mattering is derived from their students.

A final limitation is that there is no established survey instrument that measures mattering for K–12 educators, and indeed, there are very few that exist for any population. The existing survey instruments and the limitations of each will be discussed in Chapter 2.

Delimitations

This study does not examine whether the feeling of mattering reduces teacher stress, job dissatisfaction, teacher retention issues, or teacher recruitment concerns. The survey does not ask participants about the causes of these issues, which may overshadow the feeling of mattering in any situation. These issues could have an impact on the results due to variables more powerful than mattering. For instance, the sense of mattering may not be sufficient to overcome the current disillusionment of many teachers.

In this study, the term "mattering" refers to both interpersonal and societal (general) mattering. In the initial mattering construct created, a sense of purpose is in the interpersonal mattering realm, validation is in the societal mattering realm, and a sense of belonging can be both interpersonal and societal mattering. Thus, because of the interconnectedness of interpersonal and societal mattering in this construct, this study does not differentiate between the two. Combining both types of mattering could lead to further research to distinguish between the interpersonal and societal mattering in the K–12 setting and how the two types of mattering may impact educators differently.

Definitions

The following definitions provide clarification and consistency in this study. Some of the terms are well known but can have different meanings in different contexts. Other terms are defined to provide clarity in the term being used in a broad generic way or in a very specific way.

Affirmation is the feeling of support one has while performing a particular activity, and one's belief that one is following the correct course of action (Chapman & White, 2019).

Belonging is a person's internal feeling or belief that they belong to a particular group or culture (Godin, 2008).

Compensation is the act of receiving something of value for services rendered, typically in monetary form (Chapman & White, 2019).

The Element is when one is doing the thing that they love, and in doing it, one feels like their most authentic self. Time passes differently, slow yet fast. One feels more alive, more centered, and more vibrant (Robinson & Aronica, 2009).

Flow is the ability to turn routine tasks into something enjoyable typically at work but can be during any aspect of one's life (Csikszentmihalyi, 2009).

A Great Group is a collection of people with similar interests, who create something much more significant than any of them could have created individually (Robinson & Aronica, 2009).

Ikigai is a Japanese term for the reasons one gets up in the morning, a reason for being. It is closely tied to one's purpose in life (Mitsuhashi, 2018).

Job Crafting is actively shaping a person's job to make it a better fit for that person's motives, strengths, and passions. It is the act of crafting and designing one's job instead of passively accepting the job as it is and not changing anything (Mitsuhashi, 2018).

Mattering is the "extent to which people make a difference in the world" around them (Elliott et al., 2004, p.1). It "reflects a person's need to feel significant" to other people (Flett, 2018, p. 31). There are different types of mattering: interpersonal, societal (Jung, 2015), and generic (Rosenberg & McCullough, 1981). Interpersonal (sometimes called general) refers to mattering to specific others. Societal mattering is the feeling of making a difference to the broader society. For this research, mattering refers to both interpersonal and societal mattering; there is no distinction between the two.

Moai is a Japanese word meaning an informal group of people with common interests who look out for one another (Garcia, 2017).

Purpose is an internal feeling that directs a person to pursue a particular activity, often referred to as a "calling" or being "called" to do something (Mitsuhashi, 2018).

A "Tribe is a group of people connected to one another, to a leader, and/or to an idea" (Godin, 2008, p. 1).

Validation is the belief that one's actions are valuable to society and that people recognize one's contributions (Chapman & White, 2019).

Overview of the Literature Review

The literature review reveals several relevant aspects of the study of mattering and why it is essential to pursue additional knowledge and understanding of this concept. The review first addresses some of the current challenges faced by the United States education system before the three proposed dimensions for the building blocks of mattering in the K–12 setting are considered: purpose, belonging, and validation. Finally, the review examines the research on the current understanding of mattering and describes the conceptual framework used in this study.

Methodology

The methodology used in this study is based on exploratory and confirmatory factor analysis, and includes a four-part survey sent to practicing K–12 teachers in multiple states. Part I of the survey consists of demographic information, such as the teacher's age bracket, gender, years of service in education, student grade level (elementary, secondary, or mixed levels), student poverty level, school setting (urban, rural, or suburban), and state. Part II includes questions from the "work mattering scale" to determine a teacher's current sense of mattering in the workplace. Part III asks a series of questions that align to elements identified with the concept of purpose, belonging, or validation, along with other potential elements not currently categorized under the three primary concepts. Part IV gives the participant the opportunity to submit their email for potential follow-up studies and allows them to request a copy of the final research results.

Summary

Keeping high-quality teachers in the classroom is imperative in providing high-quality instructions. Educational leaders, policymakers, and the general public must be aware of what is required to keep good teachers teaching. Few studies have focused on the topic of mattering, and fewer still have researched mattering as it relates to teachers in the K–12 classroom setting. One study on mattering in the area of K–12 education focused on school counselors but closely examined counselors' feeling of mattering to students and observed whether counseling mattered (Curry & Bickmore, 2012). The second study focused on physical education teachers' feeling that the subject of physical education mattered to colleagues that taught other subjects (Richards et al., 2017). Without the critical component of mattering, school leaders and policymakers might focus on wrong ways to alleviate teacher retention, stress, and dissatisfaction.

Chapter 1 provided a summary of the building blocks of mattering and the mattering model in K–12 education and why it is significant. The focus of the study and research questions were listed in addition to a summary of the methodology that will be used to conduct the study. Chapter 2 provides a literature review of several topics of importance in relation to mattering. The issues identified in the literature review include contemporary problems in education, educator motivation, a sense of purpose, a sense of belonging, external affirmation and validation, and mattering. Chapter 3 explains the methodology that will be used in the study, the participants in the study, identification of factors, the survey instrument, and data analysis procedures.

Chapter 2

REVIEW OF THE LITERATURE

People enter the teaching profession for a myriad of reasons, such as the search for personal fulfillment, the desire to work with young people to make a difference in their lives, and the opportunity to engage with an enjoyable subject area (Hughes, 2012; Watson et al., 2010). Other researchers have provided similar reasons for why people want to teach, including "personal fulfillment; practical considerations; a desire to contribute; lack of alternatives; and influence from others" (Howes & Goodman-Delahunty, 2015, p. 22). One of the few studies on mattering in education focused on school counselors, in which Curry and Bickmore (2012) stated that "mattering might contribute to personal needs by helping the counselor feel accepted as part of the school team, bolstering self-confidence through the belief that one's work is appreciated, and by decreasing feelings of stress" (p. 113).

Contemporary Challenges in American Education

The American education system faces many challenges. These issues have arisen from external factors such as government policy, public opinion, and changes in the family institution, as well as internal factors such as school structure, leadership, and interpersonal relationships with co-workers. All of these factors affect the culture and climate of a school and the way teachers and students feel about their school in general.

Almost half (46%) of new teachers move to new positions outside the classroom or resign within five years. The most cited reasons for teachers to leave the profession include overall job dissatisfaction, loss of autonomy, and lack of feedback from supervisors (Aragon, 2016). According to a survey conducted by Scholastic and the Bill and Melinda Gates Foundation and authored by Mayer and Phillips (2012), teachers agreed that, with regard to factors that lead to the retention of good teachers, monetary rewards (i.e., salary and bonuses) are less important than other factors, including working in a positive environment, access to quality classroom resources, and strong building and district leadership. The study also indicated that improving these conditions often requires additional funding and resources.

Some of the most pressing issues facing K–12 educators today include low salaries, teacher shortages, increased job stress, students with adverse childhood experiences (ACEs), increased government mandates, and less funding for education. These issues are interconnected and create multiple challenges that teachers must attempt to overcome daily. While the following review is not an exhaustive list of the challenges that teachers face, it serves as an introduction to some of the complexities of the current U.S. educational system.

Teacher Salary

Historically, teaching in a United States public school setting has rarely been a high-paying profession (Goldstein, 2015). Educational historian Dana Goldstein (2015) stated that this is due to the feminization of the teaching profession that began in the early 1800s. Teaching was not viewed as a career, but rather as a philanthropic vocation, indeed, more like missionary work rather than a professional occupation. Women were the building blocks of an inexpensive labor force in the 1800s, and women still comprise approximately 76% of the teaching force in the

United States. The idea that teachers are called to the profession by virtuous ideals or philanthropy continues to keep teaching salaries low.

Despite the historic precedent of low teacher salaries, it is a growing concern among teachers, school leaders, and elected officials. Over a 21-year period (1996 to 2017), the weekly wage of public school teachers decreased by an average of $27 (adjusted for inflation) (Allegretto & Mishel, 2018). While this might not seem like a tremendous amount of money, during the same period the weekly wages of other occupations increased by an average of $137. Allegretto and Mishel (2018) called this discrepancy in wages the "teacher wage penalty." The teacher wage penalty refers to the difference between what a teacher earns and what others with the same educational background make in the private sector. The teacher wage penalty grew from 5.5% in 1979 to 18.7% in 2017. The Great Recession (2007–2009) necessitated cutting education budgets, which in turn impacted teacher salaries. School budgets and teacher salaries have not yet risen to 2007 (pre-recession) levels, reflecting the policy decisions made by state officials.

When comparing salaries from member countries in the Organization for Economic Cooperation and Development (OECD), most salaries of college graduates are comparable between teaching and non-teaching professions. However, U.S. educators are paid 30% less than other college graduates (OECD, 2017). In 30 states, the average teacher with a family of four qualifies for government assistance, and their children are eligible for the federal free and reduced cost school lunch program (Boser & Straus, 2014). Moreover, teacher wages have continued to decline relative to other college-educated workers since the early 1990s, when teacher attrition was much lower (Allegretto & Mishel, 2016). Higher teacher wages not only

mean that teachers are paid more money; research has shown that districts with more competitive compensation for teachers show stronger gains in student achievement (Baker, 2017).

Public opinion seems to be leaning in favor of teachers with regard to their salaries. According to the 12th annual Education Next (EdNext) survey of public opinion, the percentage of people who believe that teacher salaries should be increased rose by 13% from 2017 to 2018 (Cheng et al., 2019). This increase may seem high, but the overall percentage is still only 49%. In some states, however, the percentage of people who believed that teacher wages should be increased was as high as 63%. After Allegretto and Mishel (2018) published their report, the National Education Association president, Lily Eskelsen Garcia, stated that:

> It is time to show respect to those professionals who dedicate their lives to students and building the future of our communities. Professional work deserves professional pay. For too long, non-educator politicians have been ignoring the voices of educators who dedicate their lives to kids in communities across the nation. (National Education Association, 2019, p. 1)

Teacher Shortage

In the narrowest of terms, "teacher shortage" refers to "insufficient production of new teachers, given the size of student enrollments and teacher retirements" (Sutcher et al., 2019, p. 4). However, Sutcher et al. (2019) also argued that teacher staffing problems include other factors, such as teacher turnover and location of the school district; it is harder to attract and retain teachers in some areas of the United States than in others.

Teacher shortages are not a new phenomenon; staffing difficulties have been present in the United States since the mid-1930s (Sherratt, 2016). However, over the past few decades, the number of teachers has continued to dwindle while the market has continued to grow. The Great

Recession not only hurt immediate teacher salaries but also made the profession less desirable. Teacher retention and recruitment continues to be a challenge and has yet to return to 2007 (pre-recession) teacher levels (Allegretto & Mishel, 2016). In 2016, estimates showed that the nationwide teacher shortage would increase to 112,000 teachers by 2018 (Sutcher et al., 2016). In reality, the teacher shortage was actually much more serious; a September 2019 report by the Bureau of Labor Statistics showed that the "teacher employment gap," the gap between actual education employment and the employment needed to keep up with growth, had increased far beyond the 2016 estimate: The United States currently has a teacher shortage of approximately 307,000 people (Gould, 2019), and some school districts rely on a cadre of teachers from other countries. These districts are attempting to overcome the shortage of teachers by employing international teachers. Over the past ten years, the number of Filipino teachers residing in the United States on J1 visas rose from 21 to nearly 800 (Yan et al., 2019).

According to Indiana State University's annual survey of school superintendents (Loughlin, 2019), Indiana's teacher shortage continues. Of the 115 Indiana districts participating in the survey, 92% reported a teacher shortage in their district in 2019 (Zalaznick, 2019). This is a typical representation of the shortage over the past five years. Due to this critical shortage, 94% of the districts in Indiana employed teachers on an emergency basis, and 28% used full-time substitute teachers (Loughlin, 2019).

Darling-Hammond et al. (2016) identified several factors besides salary that impact the number of people entering the teaching profession. Budget cuts lead to layoffs, deteriorating working conditions, and increased class sizes, all of which contribute to a dwindling pool of candidates. Not surprisingly, the number of people entering teacher education programs is insufficient to sustain current and future education needs. Between 2010 and 2014, there was a

16% decrease in the number of college-bound high school seniors who were interested in pursuing a career in education. By 2014, only 5% of the students in the survey were interested in a teaching career (Darling-Hammond et al., 2016).

Teacher Stress

The teaching profession ranks as one of the highest in terms of occupational stress (Jarvis, 2002). Teacher stress is "the experience of unpleasant negative emotions resulting from aspects of their work as teachers, triggered by a perception of threat in dealing with the demands made upon them" (Kyriacou, 2011, p. 27). Kyriacou also stated that teacher stress is "the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression resulting from some aspect of their work as a teacher" (p. 27). Some of the more commonly identified stressors for teachers include too much work (or being overworked), ambiguity of responsibilities, conflict among peers, little professional recognition, being left out of decision-making, little communication with administration, and student behavioral issues (Watson et al., 2010). In 2013, 51% of teachers surveyed reported being under high stress for several days each week (Metropolitan Life Insurance & Harris Interactive, 2013).

Kyriacou and Sutcliffe (1978) suggested that stress for teachers typically presents as anger or depression. According to Kyriacou (2011), when the three following conditions are present, teacher stress occurs:

1. The teacher has to deal with demands;
2. The teacher does not feel that they can deal with those demands in an effective manner;
3. There will be a negative outcome if the demands are not handled satisfactorily (Kyriacou, 2011).

Recent research has addressed the many issues that children bring with them to school that add to the stressful environment for teachers. One such example is adverse childhood experiences (ACEs), which place further strain on teachers because they feel ill-equipped to handle the increased emotional needs of such students in their classrooms. The ACE assessment was developed in 1998 to examine the relationship between common causes of death and childhood trauma (Felitti et al., 2019). Over the past several years, more information has come to light on the lasting impact of ACEs on both children and adults. ACEs include experiences that can lead to lasting trauma and toxic stress, which can impact children's brain development and physical, emotional, social, mental, and behavioral health and well-being. These adverse experiences are not usually isolated events but are instead a series of events that accumulate over time (Bethell et al., 2017). Teachers typically lack the training and resources to address the effects of these traumatic childhood experiences adequately. ACEs are expected to worsen due to the prolonged shut down of schools across the country caused by the COVID-19 pandemic of 2020-2021.

To deal with ACEs, the focus on student social and emotional learning (SEL) has increased. Schools are expected to provide SEL supports and address the needs of the whole child. Schools should adopt practices that support a wide range of student needs, including additional mental health supports (Bailey & Hess, 2020). Schools should consider increasing the number of "counselors, social workers, school psychologists, and nurses" (Bailey & Hess, 2020, p. 11).

As stated earlier, during the Great Recession, school budgets in the United States were cut. These cuts led to staffing cuts (which, in turn, led to larger class sizes) and less money to invest in classroom supplies and materials (Darling-Hammond & Podolsky, 2019). Cuts to these

programs have made it more difficult for teachers to address student psychological issues in their classrooms. The 2016 National Survey of Children's Health estimated that almost half of all children (aged 0–17) living in the United States had experienced at least one of the identified ACEs (Felitti et al., 2019), while Bethell et al. (2017) estimated that approximately 20% of children in the United States had experienced two or more ACEs.

Government Mandates

School districts and teachers must balance local concerns and issues with the growing list of government mandates. Often these are unfunded mandates with little support in implementation. In 2019, Michael Brown, Director of Legislative Affairs for the Indiana Department of Education, sent an eight page memo to school principals and superintendents outlining required training for school employees. Mandatory training included CPR, suicide prevention, information on bloodborne pathogens, bullying prevention, child abuse and neglect reporting, signs and indicators of human trafficking, criminal organization activity, seizure training, and test security and integrity training. In addition to these general items, training was also outlined for specific groups or individuals in each building, including "Stop the Bleed" (primary trauma care), seclusion and restraint, lockout/tag-out, concussion, heat preparedness, and internal control standards. Each district was also required to have at least one reading specialist trained in dyslexia, a homeless liaison, and a school safety specialist (Brown, 2019). The Indiana General Assembly passed 30 new bills impacting education in 2017, 36 in 2018, and 42 in 2019 (Indiana State Teachers Association, 2017a; Indiana State Teachers Association, 2017b; Indiana State Teachers Association, 2019).

In addition, many states have explicit curriculum requirements with specific elements that must be taught in certain grade levels or courses. Many state legislators have passed, or are

considering passing, a law requiring all schools to teach cursive writing to specific grades (Yount, 2019). In 2019, Indiana passed a law that requires the naturalization test (i.e., the examination that one must take to become a naturalized citizen of the United States) to be administered to all high school students (Murphy, 2019). In Florida, the State Board of Education passed a rule requiring schools to educate teachers and students about child trafficking prevention (Florida Department of Education, 2019). At the national level, the Every Student Succeeds Act (ESSA) has created additional mandates for schools and school districts. The Indiana ESSA plan includes academic assessments, programs for low-performing schools, educator evaluation, and student support (Indiana Department of Education, 2018).

The number of mandates facing educators today has created an environment that makes it challenging for them to find job satisfaction. Management thinker Dr. W. Edwards Deming stated that "All anyone asks for is a chance to work with pride" (Conzemius & Morganti-Fisher, 2015, para. 4). Business leaders have identified the education system as an example of a model that is unlikely to result in satisfaction among its practitioners. State mandates that created a quantitative focus to measure the quality of a school lead to a miserable work environment. McLeod (2016) stated, "One need look no further than our public school system to see how focusing exclusively on numbers can suck the soul out of even the most well-intended professional" (p. 36).

Inadequate Funding

Many states cut their education budget during the late 2000s due to the Great Recession (Darling-Hammond et al., 2016). According to the Center on Budget and Policy Priorities, in 2016, 29 states were still spending fewer dollars per student than before the recession when adjusted for inflation (Leachman, 2017). Similarly, the study by Allegretto and Mishel (2018)

showed that 25 states were still spending less on education in 2016 than before the recession. Allegretto and Mishel suggested that, although states cut taxes to relieve the tax burden on citizens during the recession, the tax cuts remained, long after the recession ended. Although the tax cuts may have affected Indiana's ability to generate revenue, the state tax revenue rebounded since the recession and as of 2019 had produced $2.3 billion in government cash reserves (Associated Press, 2019). In Indiana, local school districts rely on referenda to make up for the state's shortfall in funding. These referenda use valuable time, money, and energy that could be more effectively used by the school system in other ways. In 2018, twelve Indiana school districts held referenda, and in May 2019, there were ten. Districts perceive referenda as the only way to compensate for decreased funding without cutting staff, closing after-school programs, eliminating art and music classes, and ending intervention programs (Herron, 2019).

Per-pupil spending is directly and positively associated with improved student outcomes. Spending money for more teachers to have smaller classes and additional instructional support increases student performance gains (Baker, 2017). Inadequate funding leads to high dissatisfaction among teachers. The Phi Delta Kappa annual poll found that 54% of teachers who said the public schools in their community have too little money have "seriously considered leaving" the profession of teaching (PDK Poll, 2019, p. 7). In the same poll, the most common reason that teachers considered leaving the profession was inadequate pay and benefits. The 2019 poll marked the 18th consecutive year in which a lack of funding has been cited as the biggest problem facing public education; 60% of parents and 75% of teachers indicated that their community school was not adequately funded.

Teacher's Sense of Purpose

People need a sense of purpose in their work to be satisfied with their jobs, and the occupation of teaching is no exception. According to Costin and Vignoles (2019), having and working toward a goal in life gives people a sense of purpose. In *Grit*, Angela Duckworth (2016) defined purpose as the desire to contribute to the well-being of others, while Daniel Pink stated that having a strong sense of purpose will lead people to try to extend and expand their abilities (Pink, 2009).

Similarly, Sinek (2009) described purpose as a cause or belief that one has. Sinek referred to this as the "*why."* Finding purpose allows individuals to perform at their highest levels. A sense of purpose "is the most authentic expression of your innermost nature, or your true self. It represents our inner truth that seeks expression through a myriad of activities as life is happening to us" (Dhiman, 2007, p. 30). Purpose in life is a defining element in a person's well-being (Ryff & Singer, 2000).

A sense of purpose is essential if one is to become the best version of oneself and is vital to a person's well-being. People strive for perfection and are driven to fulfill their potential, whatever that may be (Joseph, 2019). Aristotle introduced the concept of *eudemonia.* Eudemonic well-being is the condition of having a sense of life purpose and growth (Flett, 2018). There is some disagreement as to whether or not a person's purpose can change during a lifetime. Tovar et al. (2009) stated that regardless of what one does in life, one's purpose never changes. Others have argued that a person's purpose changes as their life circumstances change (Mitsuhashi, 2018).

Passion and purpose are closely connected. Duckworth (2016) stated that passion is not just something that a person cares about, but rather something that someone cares about

consistently over time. It is something to which a person directs their attention. Passion is a feeling or activity that someone is obsessed with daily and thinks about day and night; a person's actions are continually driving them toward their passion (Duckworth, 2016). Finding one's passion and purpose is typically not a straightforward process. Author and founder of Sseko Designs, Liz Forkin Bohannon, encouraged people to stop trying to find their passion. Passion and purpose are discovered over time and through life experiences. Purpose is not something one finds; instead, it is something that is built (Bohannon, 2019).

Psychiatrist Victor Frankl developed an approach that stems from existential psychotherapy called logotherapy. Logotherapy rests on the premise that human beings are motivated by a "will to meaning"; we thrive when have a sense of purpose and meaning (Logotherapy Institute, 2019). All humans are driven to create purpose and meaning in their lives (Smith, 2012). Frankl (2006) contended that people have the freedom to derive meaning from what they experience and how they react to those experiences, and freedom of will is the idea that humans have control over how they react to obstacles.

Purpose in Work

People can find meaning in their work by perceiving the value of that work (Smith, 2012). When individuals find meaning in their work, productivity and the ability to solve work-related problems increase (Pink, 2009; Sinek, 2009). Purpose gives people the ability to overcome obstacles and challenges (Duckworth, 2016). Finding purpose in work allows people to define meaning, and helps to maintain a sense of engagement (Flett, 2018). A survey by the WorkHuman Research Institute (2017) found that employees search for meaning in their work, and that frequent, value-based recognition is one of the best ways to meet this need. However, employees in many companies do not clearly understand why they do what they do on a daily

basis. The fact that they do not understand the purpose of their work means that they do not engage in highly productive activities or find deep satisfaction in their jobs (Sinek, 2009).

Purpose allows a person to identify with activities associated with the work. As a person identifies tasks with their purpose, even undesirable or mundane activities become acceptable because they are connected to motivation (Gagne et al., 2010). Teachers need to understand why they must do certain things, especially those things they do not enjoy doing. A teacher's day is filled with mundane tasks that must be completed as a part of the job. As a teacher identifies activities associated with the work, they develop integration, which is "identifying with the value of an activity to the point that it becomes part of a person's habitual function and a part of the person's sense of self" (Gagne et al., 2010, p. 629). Thus, teaching becomes an essential part of who they are as a person. This is more than intrinsic motivation; goals and values drive integration, whereas intrinsic motivation is driven by the emotions experienced while engaging in an activity. A teacher may not enjoy particular tasks such as recess duty, but if they can identify that the task is an integral part of education or that it helps to achieve the goals of education, it becomes more manageable.

Akin to this, Sinek (2009) discussed the "Golden Circle," which he described as a set of three rings. The outermost ring (or circle) is "*what*" companies or employees do. Employees within the organization understand what the work is and what must be done to accomplish the job's tasks. The second ring is "*how*" companies or employees do the work. The second ring is slightly more nuanced than the first, but it is still relatively apparent to those engaged in the work. The innermost circle is the "*why*" or the purpose of the work. Sinek termed this innermost circle the "Golden Circle"; it is the part of the three rings that many companies or employees do not consider or understand. Companies fail to reach their potential and are disengaged or

unfulfilled because they don't focus on the Golden Circle. When a person has assimilation, the person has found their "*why*" in the Golden Circle.

Purpose in Leadership

The job of the leader in an organization is to communicate the purpose of the work to employees. Employees are drawn to leaders who can communicate what they believe. Indeed, "Their ability to make us feel like we belong, to make us feel special, safe and not alone is part of what gives them the ability to inspire us" (Sinek, 2009, p. 55). The average person spends 80,000 to 90,000 hours at work over a lifetime. With so much time spent at work, employees and their leaders need to be engaged in their work. In the United States, 51% of managers are not engaged, and 14% are actively disengaged (Murray, 2017). When employees start believing in their leaders and feel that they share their sense of purpose (i.e., the employees' values align with those of their employers because leaders have adeptly and adequately communicated those values), trust begins to form. When trust is established, great leaders emerge. Educational leaders that build trust oversee teachers that are motivated more by purpose than by salary. Great leaders give people a sense of purpose that is not tied to external incentives (Sinek, 2009).

Employees are most engaged in their work when the mission or purpose of the organization makes them feel that their job is important and gives them opportunities to learn and grow. This means that leaders need to communicate the purpose of the organization clearly and consistently in order for employees to be effective (Murray, 2017). Leaders must continuously examine and access the organization's mission and vision. The mission must authentically be in the "hearts and minds" of the employees (Jarmillo, 2019, p. 6a). Leaders who prioritize outcomes such as profits or test scores over purpose deemphasize the qualities that

make an organization great (McLeod, 2016). By allowing the focus of the organization to separate from its purpose, leaders erode the purposeful meaning that employees seek.

Ikigai is a Japanese philosophy that encompasses one's purpose in life. There are two ways of examining *ikigai*. The first views *ikigai* in relation to work, as the point at which one's mission, passion, profession, and vocation converge (Garcia, 2017). In other words, it is what one obtains when they are focused on doing things at which they are skilled, that they love, that the world needs, and that they are paid for. By contrast, Mitsuhashi (2018) described *ikigai* as something more than work-related; it is about happy living and finding joy daily. *Ikigai* is whatever gets people up and going every day. A paycheck, job security, or a pension is insufficient to keep employees at the same company for their entire working life; humans embrace a sense that life involves more than making money (Jarmillo, 2019). Thus, *ikigai* may or may not have anything to do with work (Mitsuhashi, 2018). As stated earlier, Sinek (2009) argued that one's purpose does not change throughout one's lifetime; however, according to Mitsuhashi (2018), a person may have more than one *ikigai* at any given time, and their *ikigai* may change over time. Like Duckworth (2016), Mitsuhashi (2018) viewed *ikigai* as a way for a person to move forward in life toward something that they value.

Leaders often believe that their job is to retain people by making them feel comfortable and satisfied with their jobs. What leaders often fail to realize is that satisfied employees are not the same as engaged employees. Employees need to feel challenged in their careers and to pursue meaningful work because individuals who are merely satisfied in a role are neither growing nor striving for something greater. This means that leaders must connect the mission to the work needed to achieve it (Jarmillo, 2019).

Self-Actualization and Work

Abraham Maslow is best known for his theory on the hierarchy of needs. The hierarchy of needs describes the realization of self-actualization as the ultimate goal that one can achieve (Dhiman, 2007). However, Maslow's theory has been criticized. Specifically, Freiberg (1999) claimed that there is no evidence that the accomplishment of one level in the hierarchy of needs will trigger the desire to move up a level, or that needs are divided into distinct categories. Regardless of the debate around levels in the hierarchy or the path by which people obtain self-actualization, the desires to reach those elements and feelings of self-actualization exist. People desire a life experience that has been described as activities and feelings of wholeness, perfection, completion, justice, aliveness, richness, simplicity, and beauty (Dhiman, 2007).

Instead of focusing on hierarchies and obtaining self-actualization, it would befit people to concentrate instead on two distinct types of needs. Maslow described these two types of needs as "Deficiency Needs," which he also referred to as "D-Needs," and "Belonging Needs" or "B-Needs" (Freiberg, 1999; Maslow, 1970). The B-Needs are growth needs that are ingrained in every human but cannot fully come to light until D-Needs have been met. The ultimate goal in life may be to reach self-actualization, but few obtain it (Freiberg, 1999).

While Maslow's focus on obtaining the highest level in his hierarchy of needs (self-actualization) and his writings on B-Needs were not related explicitly to work, there were strong ties between self-actualization and the concept of one's occupation. Several authors (Barker, 2018; Csikszentmihalyi, 2009; Robinson & Aronica, 2009) have discussed how elements of self-actualization can be realized through meaningful, purposeful work. These authors did not specifically focus on the terms "self-actualization" and "B-Needs," as identified by Maslow, but the similarities and connections between these ideas are apparent. Ultimately, when people do

things that they love, they can feel that they are the people they are meant to be; they have a "true sense of self – to be who [they] feel [they] truly are" (Robinson & Aronica, 2009, p. 21). Teachers must find meaning in their work because, as McLeod (2016) stated, "It is not work itself that kills our spirit. It's meaningless work" (p. xi).

Another way to examine self-actualization non-hierarchically is to consider it through the lens of eudemonism, as mentioned earlier. Eudemonism is the realizing of human potential, which is connected and similar to self-actualization. Eudemonic activities are not hierarchical and can be different for different activities and people. Workplace well-being is a result of eudemonic activities, including self-actualization and personal achievement (Zheng et al., 2015). Zheng et al. (2015) stated that workplace well-being must be viewed separately from a person's overall well-being. People can have a distinctly different experience at work, and although overall well-being and work well-being may be related, it is essential to distinguish between the two.

Mihaly Csikszentmihalyi (2009) described the concept of "flow" as a state of total immersion in what one is doing. Flow is when concentration on the task at hand is effortless. When one is in a state of flow, it is easy to lose track of time and the self (Csikszentmihalyi, 2009). Robinson and Aronica (2009) used the term "The Element" to describe flow. When someone is in The Element, "they are doing the thing they love, and while doing it, they feel like their most authentic selves. They find that time passes differently and that they are more alive, more centered, and more vibrant than at any other time" (p. 21). Performing activities that we love fills us with energy, even when we are physically exhausted (Robinson & Aronica, 2009). Finding flow is important to a person's well-being. According to Barker (2018), to find flow, one needs to identify and use "signature strengths." These strengths are the keys to

happiness. The more hours per day a person spends doing what they are good at, the less stressed they feel, and the more they laugh, smile, and feel that they are being treated with respect (Barker, 2018).

According to researcher Owen Schaffer (2013, p. 4) of DePaul University, the seven requirements for achieving flow are as follows:

- Knowing what to do;
- Knowing how to do it;
- Knowing how well one is doing;
- Knowing where to go (where navigation is involved);
- Perceiving significant challenges;
- Perceiving significant skills; and
- Being free from distractions.

People do not necessarily need to be engaged in something that they love to achieve this state; a person can turn a routine task into something that they enjoy doing. The key to happiness is the ability to transform even tedious, uninteresting tasks into something enjoyable (Csikszentmihalyi, 2009). Achieving flow through Signature Strengths, even in mundane tasks, leads to the most satisfying experiences in people's lives (Pink, 2009). When a person is in the state of flow, people live in the moment so much that time and place seem to disappear. People are so deeply engaged in what they are doing that they lose themselves in the task.

Teachers' Sense of Belonging

Belongingness is the human need to be an accepted member of a group (Godin, 2008). Humans are social animals and need to feel a part of a community, regardless of whether they are introverts or extroverts (Anderson, 2010). The environmental and behavioral exchanges that

occur in the workplace are essential to the development of a person's sense of mattering (Curry & Bickmore, 2012). "People need to feel accepted for who we are and to be known for our strengths" (Anderson, 2010, p. 31). However, the senses of belonging and belongingness develop differently among the various members of a group of people. Belongingness takes on different nuances because the concept is approached from different perspectives. As organizations become places in which communities develop, employees crave a sense of belonging (WorkHuman Research Institute, 2017).

Godin described a sense of belongingness in terms of a tribe, which is a group of people connected to one another, to a leader, and to an idea. One of the most powerful survival mechanisms that humans have is the need to belong, which essentially means being part of a tribe. It is human nature to desire to contribute to a group of like-minded people (Godin, 2008). Chip and Dan Heath examined how individuals come together and bond when the group struggles together (Heath & Heath, 2017). Whether it is a connection to an idea or a bond made over some hardship or challenge, a sense of belongingness among individuals is critical to the success of an organization and the individuals within it. Such groups need not belong to an official or structured organization; this concept is represented in Okinawan culture as *Moai*, an informal group of people with common interests who look out for one another (Garcia, 2017). *Moai* originated among rural farmers who gathered together to share ideas and best practices as well as help each other during harvest seasons (Garcia, 2017).

However, it would be erroneous to equate belonging to a tribe with belonging to a culture. Godin discussed the difference in his book *Tribes*. Culture is much more complicated than a tribe. Godin stated that "a group needs only two things to be a tribe: a shared interest and a way to communicate" (2008, p. 1). He used the example that a tribe can exist online, whereas

culture cannot. Robinson and Aronica (2009) also distinguished between belonging to a tribe and belonging to other kinds of collectives:

> Membership of a fan group is not the same as being in a tribe. Such membership can create the opposite effect. Tribe membership helps people become more themselves, leading them toward a greater sense of personal identity. We can easily lose our identity in a crowd. (Robinson & Aronica, 2009, p. 128)

Belonging in an Organization

Belonging is essential to the success of an organization. In *Organizing Genius: The Secrets of Creative Collaboration*, the authors (Bennis & Biederman, 2007) discussed "Great Groups." These are people who become more than the sum of their parts and can create something better than any one of them could as an individual (Robinson & Aronica, 2009). A member of a Great Group forms bonds with other members. These bonds, in turn, lead to feelings of unity and validation (Heath & Heath, 2017). According to W. Edwards Deming, "a bad system will beat a good person every time" (Deming Institute, 2020, quotes section). An organization is more significant than any one person and is difficult to change. If a person does not have a sense of belonging, they will either change to fit in, be miserable, or find a different organization.

The sense of belonging helps not only the organization but also the people within the organization to achieve greater goals than they would without a sense of belonging. As stated by Robinson and Aronica (2009):

> Finding your tribe offers more than validation and interaction. It provides inspiration and provocation to raise the bar on your own achievements. In every domain, members of a

passionate community tend to drive each other to explore the real extent of their talents. (p. 118)

It is possible to create an environment that is conducive to people creating connections and developing a sense of belonging with one another. When people create shared meaning, they create this type of environment. According to Heath and Heath (2017), creating connections occurs in three stages. In the first stage, a synchronized moment for the people involved is created. In the second stage, participants are invited to take part in a shared struggle. Finally, in the third, the actions of the group are connected to a shared meaning. The leader of an organization is also an essential part of participants realizing a sense of belonging. Leaders can attract people with their ideas. When a leader has a great idea, people "cannot resist the rush of belonging and the thrill of the new" (Godin, 2008, p. 3).

Creating a sense of belonging is not solely the responsibility of an organization's leaders; organizational support also comes from co-workers, as social networks grow within the work environment. Organizational support is the employees' "belief concerning the extent to which the organization values their contribution and cares about their well-being" (Hayton et al., 2012, p. 235). When an employee perceives organizational support to be strongly positive, such support will lead them to have stronger psychological well-being. Strong social networks within an organization shape and define that organization. As the management structure of an organization becomes less top-down oriented, and employees have more say, the importance of its social networks to the overall success of the organization and well-being of its employees increases (Hayton et al., 2012). Pink (2009) called this concept "synchronization." According to Pink, groups need to synchronize on three levels. First, they must synchronize with the boss or supervisor; then groups synchronize with the tribe; and finally, groups synchronize with

emotions and feelings, the figurative "heart" (Pink, 2009). Thus, synchronization is essential to the development of a person's sense of belonging.

Synchronizing refers to a group's timing (Pink, 2009). The first principle of synchronizing is syncing with the boss. The boss, as someone who is separate from the group and typically above the group, sets the pace of work and change. The boss maintains standards for employees and focuses on the collective mind of the group. After an individual synchronizes with the boss, the synchronization becomes the external standard that sets the pace of their work. Individuals then synchronize with the tribe (i.e., with one another). Synchronizing with each other requires a strong sense of belonging. Synchronizing with each other makes one feel good, and feeling good at work improves the productivity of a group. Pink (2009) goes on to state that “working in harmony with others, makes it more likely we will do good” (p. 199). Finally, synchronizing with the heart is the last principle of group timing. When people are in sync with one another they feel good and, in turn, perform better.

Once a person feels synchronized with their job, they can engage in "job crafting." According to Mitsuhashi (2018), job crafting is an action a person takes to make the job they are doing fit their strengths. Job crafting allows people the flexibility to modify a job while still achieving the overall requirements of the job. Teachers need to have the ability to craft their jobs while maintaining consistency across the school or district. As stated earlier in this paper, teachers face an increasing number of mandates and constraints that make job crafting difficult. The ability to job craft has a positive impact on the way that employees view their jobs. The company Cornerstone OnDemand discovered that people who used Firefox or Chrome browsers at work instead of Internet Explorer stayed in their jobs longer and had higher performance evaluations than their peers. The company's Chief Analytics Officer, Michael

Housman, determined that this was due to employees actively downloading a browser that would help them to do their job more effectively and efficiently. Downloading a different browser was not a requirement of the job, but was something the employees did independently to improve their productivity and better suit their needs than the default browser (Pinsker, 2015).

There are many different ways to job craft. People can craft the "what," "who," and "why" of their job. According to Chase Mielke (2019), one can job craft the "what" by developing new tasks, repeating old tasks, or outsourcing undesirable tasks. Job crafting the "what" has also been referred to as task crafting (Wrzeniewski & Dutton, 2001). A person can job craft the "who" by recharging. Extroverts can recharge by being social, while an introvert might recharge by taking some quiet time. One can also job craft the "who" by mentoring someone. Finally, one can job craft the "why," which is also known as cognitive crafting. Cognitive crafting or job crafting the "why" involves shifting the way that someone perceives tasks (Mielke, 2019). Cognitive crafting is closely associated with Csikszentmihalyi's (2009) concept of flow.

Reframing the perception of mundane and tedious work is an important element of job crafting (Mitsuhashi, 2018). Job crafting can help employees to create meaning in their work. Harvard Professor Teresa Amabile stated that meaningful work is the thing that people want most from their jobs. Meaningful work is more significant than a salary or being promoted (Barker, 2018). Employees deserve to be in a place where they feel supported and energized every day (Watson, 2015).

Barker (2018) observed that not everyone gains a sense of belonging from the same place or the same group of people; where some people feel that they belong, others might not. People need to seek out places where they feel that they belong. Barker described this as choosing the

right pond; a person must select the right environment to provide for their needs, and those environments differ among people.

A healthy work environment will determine how much a person enjoys their profession (Watson, 2015). Chapman and White (2019, pp. 233–234) defined a healthy work environment as one that includes seven elements:

- Quality team members;
- Effective communication skills and procedures set to facilitate regular communication;
- Trusting relationships;
- Common vision and goals among team members;
- Standardized processes and procedures, including standards to be met and ongoing monitoring of performance;
- Healthy methods for correction and conflict resolution;
- Clear lines of responsibility, including accountability and rewards for results.

Teachers will be happier and healthier if they have meaningful connections with one another (Anderson, 2010). Over 50% of teachers who completed the Teaching and Learning International Survey (TALIS) reported to have rarely or never engaged in team-teaching with colleagues (OECD, 2014). However, in a typical week, teachers spend almost half of their waking hours in school, so it is crucial that they feel accepted in that setting. Teaching relies on strong relationships. The more a teacher feels a sense of belonging, the more positively engaged they are likely to be (Anderson, 2010). A school leader has a significant impact on a teacher's sense of community (Kirkhus, 2011), and a supportive, collegial environment is critical to teacher retention. According to the Primary Sources Survey (Mayer & Phillips, 2012), four of the top factors that affect teacher retention involve other school personnel. Teachers desire more

time to collaborate with one another. There is a disparity between how much time a teacher wants to spend collaborating and the amount of time that they actually have to do so. Teachers' job satisfaction and feeling of belonging are positively related to feeling that they share the prevailing norms and values of their school (Skaalvik & Skaalvik, 2015).

Teachers who enjoy their work and work environment are more likely to be productive and less likely to seek new employment or a new career. A lack of collegial support results in feelings of isolation, but collaboration among teachers encourage a sense of belonging (Rogerson, 2004). An active teacher community that takes collective responsibility for students in their building can also have a positive effect on teacher retention and performance (Kirkhus, 2011).

Teachers' Sense of Validation and Appreciation

While purpose and belonging are primarily internal feelings and perceptions, validation is an external stimulus. People need frequent validation and recognition that their actions matter in the context of the goals of their organization to find meaning in their work (WorkHuman Research Institute, 2017). Showing appreciation to someone involves a behavioral attitude and an internal feeling attitude that is difficult to fake for long periods of time (Chapman & White, 2019). When someone senses "'ulterior motives' in another's 'supportive' behavior, [they] are hardly likely to believe that [they] matter to him or her; [they] will recognize that [they] are merely an object, a means to the other's selfish ends" (Elliott et al., 2004, p. 339).

The need to feel valued and appreciated is a universal human trait (Chapman & White, 2019). The individuals performing the work must feel valued, as people need to know that their efforts are recognized and appreciated (Laskowski-Jones, 2019). Cortisol levels in an individual (which trigger the fight-or-flight response) rise to high levels when people are faced with "threats

to one's social acceptance, esteem, and status" (Schwartz, 2011, p. 1). Being appreciated by others is a way to feel that one is important and makes a difference in others' lives. It is validating and meaningful to a person to hear that something that they have accomplished is good or that they are appreciated as a person (Logotherapy Institute, 2019).

After physical survival, the next most significant need for humans is to feel validated, appreciated and affirmed (Covey, 2016). The sense of value is important to humans, since "to feel valued is almost as compelling a need as food" (Schwartz, 2011, p. 1). William James (1890) referred to "self-seeking" as "our desire to please and attract notice and admiration" (p. 308). James continued, "The noteworthy thing about the desire to be recognized by others is that its strength has so little to do with the worth of the recognition computed in sensational or rational terms" (1890, p. 308). Feeling genuinely appreciated makes one feel happier, safer, and more content. When people feel safe, they are free to do their best work (Schwartz, 2012). The struggle to feel valued in the workplace is one of the least acknowledged and most essential issues in an organization. This means that when an employee does not feel appreciated, this influences their behavior, consumes their energy, and affects their decision-making (Schwartz, 2011).

Researchers such as Pink (2009) and Sinek (2009) have argued that external validation or rewards have a demotivating effect in the long term and can do more harm than good. Often, people will use rewards as a way to motivate individuals, but those rewards may undermine a person's intrinsic motivation, thereby creating the opposite effect (Reeve, 2017). "Money is not a sustainable motivator. People want money," but they also want "meaning" (McLeod, 2016, p. xii). People want to be paid for the work that they do and would like to make more money, but

the primary factor in job satisfaction is how much they feel appreciated for the work that they do (Chapman & White, 2019).

Professions such as medicine and law are high-status and high-prestige occupations, whereas teaching is considered a low-status occupation (Ingersoll & Collins, 2018). The status of a profession includes aspects such as licensing, induction programs, professional development, specialization, authority over decision-making, compensation, and occupational social standing (Ingersoll & Collins, 2018). Although the teaching profession has many of these characteristics, it remains a low-status profession when compared to other professions (Lankford et al., 2014). If the public perception of a teacher's job were more favorable, then teachers would likewise have a more favorable view of their profession. Teachers have proven to be stronger academically than graduates with other degrees, and over the past several decades the quality of teaching has increased while the public perception of teaching has decreased.

Motivation techniques cannot be a substitute for validation. Motivation through aspirational messages and trite sayings on a poster is sufficient for those who have superficial goals or a level of insecurity that prevents them from reaching challenging goals on their own (Sinek, 2009). For simple activities that do not require complex thought or reasoning, transactional extrinsic rewards are effective. However, the more complex the task, the less effective transactional actions become; indeed, they can have the opposite effect, making individuals less effective (Pink, 2009). Teaching requires problem-solving, creativity, and complex planning. Validation through extrinsic rewards, however, is counterproductive. Rewards help people to be more productive when there is a clear path to finishing a task. In complex tasks that do not have a clear endpoint or are difficult to measure quantitatively, using rewards will have a negative impact.

Employers must avoid inappropriate use of appreciation; it must be authentic and not given in order to manipulate or with a selfish motive (Chapman & White, 2019). Authentic appreciation comes from leaders and co-workers and can lead to a more supportive work environment. Appreciation focuses on the value of employees. The U.S. Department of Labor found that 64% of Americans who left their jobs stated that they did so because they did not feel appreciated (Robbins, 2000). When employees do not feel appreciated in the workplace, negativity increases. Lackluster performance, tardiness, and a lack of connection with work start to emerge when employees do not feel valued (Chapman & White, 2019). In *The Principles of Psychology*, William James (1890) wrote:

> Humans have an innate propensity to be noticed and noticed favorably by our kind. No more fiendish punishment could be devised, were such a thing physically possible, than that one should be turned loose in society and remain absolutely unnoticed by all the members thereof. If no one turned round when we entered, answered when we spoke, or minded what we did, but if every person we met cut us dead, and acted as if we were non-existing things, a kind of rage and impotent despair would ere long well up in us, from which the cruellest bodily tortures would be a relief; for these would make us feel that however bad might be our plight, we had not sunk to such a depth as to be unworthy of attention. (p. 293)

Chapman and White (2019) identified five languages of appreciation in the workplace: words of affirmation, quality time, acts of service, tangible gifts, and physical touch. Appreciation does not have to focus solely on the employee and need not only benefit the employee. Sincere appreciation of the work that employees perform emphasizes what is right for the organization and what is good for individual employees.

In 2014, the OECD (2014) released the results of the TALIS. The survey indicated that approximately 30% of teachers believed that teaching was a valued profession in society (OECD, 2014). A 2018 study comparing the Finnish and U.S. school systems found a stark contrast in the way that teachers are viewed in wider society. When respondents were asked to agree or disagree with the statement, "I think the teaching profession is valued in society," only 33% of teachers in the United States agreed or strongly agreed, while almost 60% of Finnish teachers agreed or strongly agreed (Hemphill, 2018). Another survey conducted by Phi Delta Kappa (PDK Poll, 2019) found that 50% of the teachers in the U.S. said that their community valued them "a great deal or good amount," while 31% of the teachers felt that they were ascribed "just some" value (p. 6). Teachers who felt less valued were more likely to support striking for higher pay and were less likely to give an "A" grade to the school where they worked (PDK Poll, 2019). In the United States, teachers need to have politicians who respect and value their expertise (Mayer & Phillips, 2012).

Teachers' Sense of Mattering

Mattering is an important concept that has gained little attention in literature and research (Jung, 2015). Flett (2018) argued that although the concept of mattering is essential to a person's well-being, the academic community has ignored it. There are three reasons why mattering has gained little traction in academia. First, the findings of researchers Connolly and Myers (2003) and Rayle (2006) did not support mattering in the workplace context. However, Jung (2015) stated that there had been so few empirical studies on interpersonal mattering that one cannot rule out the role it plays in the workplace context. Previous studies demonstrated relationships between interpersonal mattering and other aspects of personal well-being, so continued research should be encouraged. The second reason the research community has mainly ignored mattering

is that there are limited tools available to researchers; most of the existing mattering scales have focused on adolescent or college-age students and cannot be easily transferred to workplace mattering or adults. Finally, the term "mattering" is not well known, and many researchers may not know that it exists. If a topic is poorly known, then people will not know to research the topic. Jung argued that as employers try to increase employee job satisfaction and retention, employers and organizations should evaluate mattering and design ways to increase it in the workplace.

Mattering is the belief that another person cares about what one wants, thinks, and does, or is concerned with one's fate (Rosenberg & McCullough, 1981); it is the perception that one is significant to another person or other people (Rayle, 2006). Elliott et al. (2004) stated that mattering is the "perception that, to some degree and in a variety of ways, we are a significant part of the world around us" (p. 339). Mattering is "central to our sense of who we are and where we fit in to be able to say that others think about us, seek our advice, or would care about what happens to us" (Elliott et al., 2004, p. 339). People matter to others for different reasons (Rosenberg & McCullough, 1981), and educators are no different. Teachers, like any other people, need to have a sense that they matter. "Mattering" is a person's need to feel significant to other people (Flett, 2018). Teachers that have a strong sense of mattering feel that they make a difference in the world. People, including teachers, need to know that what they do matters (Flett, 2018).

Mattering is closely related to other constructs. It is often mistaken for belongingness, yet has several distinguishing characteristics (Flett, 2018). Mattering is distinct because it captures the impact that others have on a person and reflects a person's need to be valued by the people in their life. People's beliefs influence them in terms of how they are seen and regarded by others.

Mattering also reflects core questions that people ask themselves, such as “Who really cares about me?”, “Who would miss me if I was not around?”, and “Do people realize how much they matter to me?” (Flett, 2018, p. 5).

According to Rosenberg and McCullough (1981), mattering consists of three main feelings: attention, importance, and reliance. Elliott et al. (2004) substituted the word “dependence” in place of “reliance” but did not explain the modification. Attention is “the feeling that one commands the interest or notice of another person” (Rosenberg & McCullough, 1981, p. 164). “Importance” is the feeling that we are “important to the other person or are objects of his concern” (p. 164). Finally, a person feels that they matter when others depend on them for some reason. The perception of mattering is critical, and the indicators of mattering are unimportant if the person does not feel that they matter (Elliott et al., 2004; Rosenberg & McCullough, 1981). In other words, doing something to make someone feel like they matter is irrelevant if the action does not translate to an increase in the sense of mattering to that person.

Prilleltensky (2014) took a somewhat different approach, arguing that mattering is what makes life worth living. Mattering is the belief that one is important to others. Prilleltensky (2014) identified two components of mattering. The first is the moment when one recognizes that “what we have to say has meaning and that we are acknowledged in the room, in our family, at work, and in the community” (p. 151). The second component of mattering is when one senses that what one is doing in the world has an impact. Thus, while Rosenberg and McCullough (1981) equated mattering with importance, attention, and dependence, Prilleltensky (2014) looked at mattering through moments of recognition and impact. For this study, Prilleltensky’s definition of mattering would correspond with the validation dimension of the Mattering Model for K–12 Educators construct introduced in this paper.

Flett (2018) stated that groups of people could likewise feel a sense of mattering. People who feel as though they matter and are appreciated by other members of the group will be invigorated and engaged. Conversely, the opposite of mattering, the feeling of not mattering, is predictive of depression (Taylor & Turner, 2001). People typically hold two conflicting views of their lives: One is that they are unique individuals who have a great deal of value, and the other is that they do not hold any special significance in the world, considering the billions of people who have existed and potentially will exist over millions of years (George & Park, 2016).

"General" mattering is the idea that a person matters to society in general and is not tied to mattering to a specific group of people (Rayle, 2006). Elliott et al. (2004) termed general mattering "awareness," or the idea that one matters because others realize that one exists. George and Park (2016) discussed mattering in existential terms by focusing on the perception that one feels that one's life is of profound and lasting importance through time. In contrast to general mattering, "interpersonal" mattering is mattering to specific people (Rayle, 2006). Elliott et al. (2004) referred to interpersonal mattering as a relationship between a person and the ones who matter to that person. There are two types of relationship mattering: importance and reliance. Importance mattering is when a person feels that they are of interest and concern to others, whereas reliance mattering is when a person feels that they matter to others when others come to them to satisfy their needs or desires.

Mattering in the Teaching Profession

In the workplace, employees need to feel a sense of being valued by both their supervisors and colleagues. Without this feeling, workers feel like a commodity and become dissatisfied with their work (Chapman & White, 2019). Rosenberg and McCullough (1981) called mattering a "compelling social obligation and a powerful source of social integration" (p.

165). Mattering has been positively correlated with mental health, so it should help with various work-related stresses (Amundson, 1993).

In 1977, psychologist Albert Bandura of Stanford University coined the term "self-efficacy" to help explain his social cognitive theory (Bandura, 1977). Bandura stated that "An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes" (p. 193). Goddard et al. (2000) described "collective teacher efficacy" as the perception that a group of teachers will have an impact on students.

Teachers need to feel like they matter. Laura Soldner, a developmental literacy teacher, discussed several aspects of teaching that she enjoyed, including a sense of discovery, a quest for self-improvement, and the ability to engage in scaffold development. She identified a sense of mattering and the need to matter as the most important reasons why she continued to teach year after year. Soldner attributed "a sense of mattering" to a teacher's sense of teaching efficacy (Soldner, 2002).

Only two studies on mattering have been conducted in the area of K–12 education (Table 1). The first is a qualitative study by Curry and Bickmore (2012) on school counselors. Three themes emerged from their research that played key roles in counselors' feeling that they mattered: The administration supporting the counselor, student connections, and relationships with other stakeholders.

The second study focused on physical education teachers. Richards et al. (2017) focused on physical education teachers because that particular group felt less valued than teachers in other subject areas. The purpose of their study was to provide a valid and reliable survey to measure physical education teachers' perception of mattering. This study found that physical

education teachers felt that they mattered more to their colleagues than to the discipline of physical education.

Table 1

Previous Studies on Mattering Related to Education or Social Services

Study Authors	Subjects	Participants	Scale Used
Curry and Bickmore (2012)	School Counselors	388	School Counselor Mattering Survey
Richards et al. (2017)	Physical Education Teachers	460	Perceived Mattering Questionnaire – Physical Education

Note. Information from Curry and Bickmore (2012), Richards et al. (2017)

Limited attempts have been made to assess the validity of mattering measures (Flett, 2018). Research by Rosenberg and McCullough (1981) used a secondary analysis of datasets that were not explicitly designed for mattering (Elliott et al., 2004). Taylor and Turner (2001) used a mattering index with levels of validity and reliability that were questionable (Elliott et al., 2004). Rayle (2006) developed a mattering scale for school counselors, but the study was limited to 388 participants (Jung, 2015).

Table 2 outlines the existing measurements for mattering in various contexts. Two measurements relating directly to the field of education were used in one study each (see Table 1). The two measurements focus on physical education teachers and school counselors. The remainder of the existing measurements does not target individuals in the education field; there are no existing measurements that focus on K–12 teachers.

Table 2

Existing Measurements for Mattering

Authors	Scale Name	Questions	Group Examined
Elliott et al. (2004)	Mattering Index	24	General
France (2011)	Unified Measure of University Mattering	15	College Transfer Students
France and Finney (2010)	University Mattering Scale	24	College Students
Marcus (1991)	General Mattering Scale	5	General
Marshall (1997)	Mattering to Others Questionnaire	11	Adolescents
Rayle (2006)	School Counselor Mattering Survey	22	School Counselors
Richards et al. (2017)	Perceived Mattering Questionnaire – Physical Education	8	Physical Education Teachers
Schlossberg et al. (1990)[a]	The Mattering Scales for Adult Students in Post-Secondary Education	45	Adult College Students
Tovar et al. (2009)	College Mattering Inventory	29	College Students

Note. Information collected from Elliott et al. (2004), France (2011), France and Finney (2010), Marcus (1991), Marshall (1997), Rayle (2006), Richards et al. (2017), Schlossberg et al. (1990), Tovar et al. (2009), and Flett (2018).

[a]Schlossberg et al. (1990) intermingled mattering with belonging (Flett, 2018).

Related Theoretical Frameworks

There are several theoretical frameworks that are related to the concept of mattering. The Existence, Relatedness, and Growth (ERG), Motivator-Hygiene, Goal-Setting, and Regulatory Focus theories help inform this literature review.

Existence, Relatedness, and Growth (ERG) Theory

Alderfer and Guzzo (1979) modified Maslow's hierarchy of needs to create the ERG theory, which focuses on existence, relatedness, and growth. It states that to understand the behaviors of individuals within an organization, one must first understand human needs. Experiences within organizations can be understood in terms of the operation of those human needs. The existence category consists of the necessary material requirements of human existence, similar to the physiological and safety needs of Maslow. Existence needs include physiological needs such as food and water, and material needs are things such as payment for work, fringe benefits, and safety. The second category, relatedness, focuses on interactions with others and aligns closely with Maslow's social needs and esteem (external). People want to have relationships with others and want to share similar thoughts and mutual feelings. The third component of Alderfer and Guzzo's theory is growth, which is similar to Maslow's self-actualization (Schneider & Alderfer, 1973). People want to be creative, productive, and have an impact on their environment. When a person satisfies their growth needs, they have a "greater wholeness or fullness as a human being" (Alderfer et al., 1974. p. 3).

The ERG theory makes a distinction between enduring and episodic desires. Enduring desires change slowly over time, while episodic desires change quickly in response to events. These desires, both enduring and episodic, are how external forces satisfy or frustrate an individual (Alderfer & Guzzo, 1979).

Alderfer and Guzzo (1979) concluded that, when examining organizations, one must examine both psychological and sociological aspects: "It makes no more sense to reduce structural phenomena to their psychological consequences than it does to overlook the effects of social and organizational phenomena on individuals" (p. 359). The authors went on to state that

"individual differences in strength of enduring desires may in part be a function of systematic differences in group experiences" (Alderfer & Guzzo, 1979, p. 359).

Herzberg's Motivatoin-Hygiene Theory

Herzberg's Motivation-Hygiene theory is sometimes referred to as the Theory of Job Attitudes, or the Two-Factor Theory (Alston, 2017). The Motivation-Hygiene Theory suggests that job satisfaction has two sources: motivators (satisfiers) and hygiene (dissatisfiers) (Kurian, 2013). Motivating factors include achievement, recognition, and responsibility. These factors are associated with self-actualization on the job. The dissatisfiers (hygiene) include pay, benefits, working conditions, and organization policies (Myers, 1964).

Goal-Setting Theory

The Goal-Setting Theory asserts that peak performance of an individual requires clear goals that the employee can reach. The goals set the direction of the employee's energy, persistence, and commitment (Van den Broeck et al., 2019). Goals need to be specific, difficult to achieve, and have feedback. However, goal setting appears to work better for simple tasks such as reaction time, compared to complex tasks such as scientific work (Van den Broeck et al., 2019).

Regulatory Focus Theory

The Regulatory Focus Theory differentiates between a promotion focus and a prevention focus. People with a promotion focus "seek to reduce discrepancies between their actual and ideal selves" (Van den Broeck et al., 2019, p. 10). Prevention-focused people aim to reduce the difference between their "actual" and "ought-to" selves as they fulfill their obligations and responsibilities. In the workplace environment, promotion focus relates positively to job satisfaction, while those with a prevention focus have more anxiety and negativity.

These theories relate to mattering by examining human needs, motivations, and job satisfaction. They explicate what is needed in order for a person to feel that they have meaningful significance in their job.

Conceptual Framework

The initial conceptual framework presented in Chapter 2 is a graphical representation of the elements identified in the literature review. The framework shown in Figure 3 represents how the concepts presented could inform the essential elements of mattering for K–12 teachers.

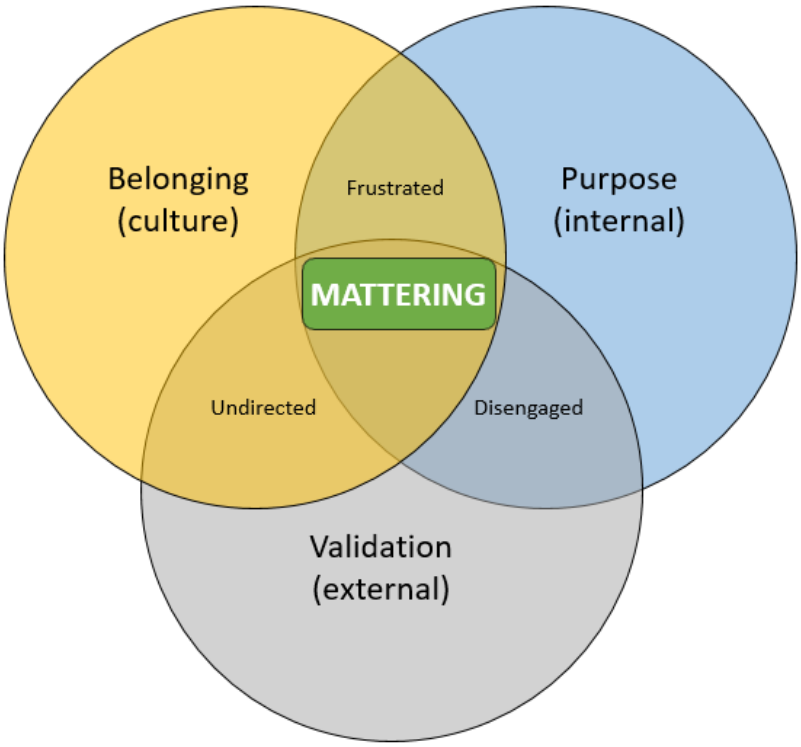
Description of the Mattering Model in K–12 Education

The conceptual framework for the mattering model in K–12 education, as it is used in this research, focuses on classroom teachers. There are two types of mattering: societal and interpersonal (Jung, 2015). For this study, both types are used in conjunction. Mattering reflects a person's need to feel significant in the eyes of other people (Flett, 2018); it is the degree to which people feel they make a difference in the world around them. Without a sense of mattering, teachers become disengaged, frustrated, and directionless, which leads to job dissatisfaction and stress. Curry and Bickmore (2012) stated that when people feel like they do not matter, the results can be low self-esteem, feelings of isolation, and depression. Significantly, most people leave the teaching profession due to inadequate preparation, lack of support, challenging working conditions, dissatisfaction with compensation, and better career opportunities elsewhere (Podolsky et al., 2016). These elements can be placed in one of three categories: a sense of belonging, a sense of validation and affirmation from an external source, and a sense of purpose from within. Inadequate preparation, lack of support, and challenging work conditions undermine the sense of belonging that a person has within their culture, while dissatisfaction with compensation falls within the external validation and affirmation category.

Finally, better career opportunities appeal to the purpose and passion of a person in their given occupation.

Figure 3

The Mattering Model in K–12 Education



The three elements of the mattering model in K–12 education are a sense of belonging, a sense of purpose, and external affirmation/validation. These three essential elements must be present for teachers to feel that they matter in relation to their work. If one of these elements is missing, then teachers are likely to leave the profession or feel unfulfilled in their current job.

The first element is belonging. Teachers need to have the feeling that they belong to a group of people. Belonging relates to the culture in a particular building or school district. Teachers need to feel connected to their colleagues and that they are a part of a larger

group. This means that schools can mitigate the many challenges that teachers face if teachers are given the opportunity to work as a team. Similarly, if the culture has built-in support for new teachers, the teachers will feel better prepared. However, the teachers must feel that they belong to the culture in order to benefit from it as a whole. If someone does not feel that they are part of the culture, then they will not experience the support needed to be successful. Even if the culture does not value teamwork, if a teacher feels that they belong to that group, the lack of support will be mitigated because the teacher will have the support of the culture as a whole. Belonging also means that teachers feel that they would be missed if they were gone. When this element is absent from the mattering construct, teachers become disengaged from their colleagues and the work of teaching.

The second element is a sense of purpose, or the internal feeling that teachers have regarding their profession and choice of work. Teachers need to feel that their work is purposeful, that they have been called to the profession, or they have a particular passion for education. When this element of the construct is missing, teachers lack direction. When teachers leave education because there are better career opportunities elsewhere, their passion or purpose is unlikely to be directly tied to teaching or education. In this instance, purpose includes passion and the sense of mission. Passion relates to who a person is and what they believe is important. A person's passion is the action of carrying out one's mission. It also includes the Japanese philosophy of *ikigai* (Mitsuhashi (2018). When examining the sense of purpose, one also needs to consider the concepts of the golden circle, the element, and flow introduced earlier in this chapter.

The third element is external validation, which is closely associated with appreciation but requires more than what appreciation can typically give. Validation requires meaningful action

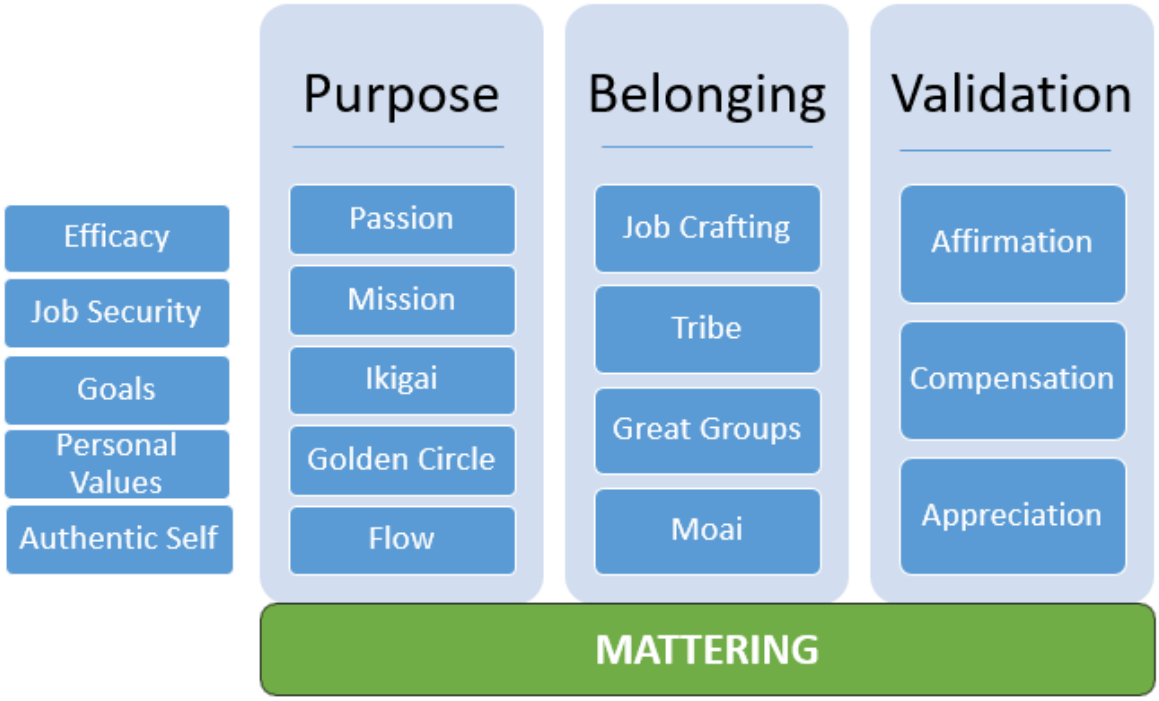
based on the expertise, views, and values of educators. For mattering to occur, external validation must come from outside of the school (or organization), or in other words, from an external entity. Teachers seek external affirmation and validation from society at large through recognition and appreciation. Teachers must feel that their work is valued outside of the institution, not only because people say it is valued, but it is valued in terms of actions as well. A politician saying they value teachers expertise, then do not include teachers in education policy development, make the politicians words and actions contradict one another. When affirmation and validation are missing from the construct, teachers become frustrated with their profession and work. Validation includes compensation, appreciation, and affirmation.

There are several additional concepts that were identified as potential building blocks of mattering for K–12 teachers but were left off the initial construct. These concepts will be included in the exploratory phase of the factor analysis to determine if they should be included in subsequent mattering models. The concepts include efficacy, job security, goals, personal values, and authentic self.

Figure 4 summarizes the various concepts addressed in the literature review that informed the initial building blocks of mattering for K–12 educators. These concepts will be reviewed during the data analysis process as potential labels or tags. The data analysis process is discussed further in Chapter 3.

Figure 4

Concepts Related to the Building Blocks of Mattering Construct



Summary of the Literature

The literature review identified some of the contemporary challenges facing classroom K–12 teachers. Based on the concept of mattering, a sense of purpose, belonging, and validation was explored to identify potential concepts to include in the initial K–12 teacher mattering construct. Then the review examined mattering and a teacher's sense of mattering, followed by a summary of several related theoretical frameworks.

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

Chapter 3 contains an explanation of the research design and methodology. It includes the research questions, null hypothesis, variables, and data collection process. As discussed in Chapters 1 and 2, it is critical for educational leaders to be able to identify elements of mattering to assist teachers with stress and career dissatisfaction. The purpose of this factor analysis quantitative study was to develop an instrument that helps identify potential foundational elements of mattering for K–12 teachers.

Few studies have examined mattering in the K–12 setting, and no study has specifically examined teachers' sense of mattering to other adults; therefore, the foundational elements (the building blocks) of mattering have not been identified in this setting. This study employed a survey to gain a better understanding of teachers' sense of mattering, using factor analysis.

Design of the Research

The foundation of this quantitative factor analysis study was built upon a systematic collection of data from K–12 classroom teachers. The purpose of this research was to develop a new construct to explain the foundational aspects (building blocks) of mattering for K–12 teachers. Mattering is more than a sense of belonging or a sense of purpose; it is the feeling that one's actions are significant, and that one would be missed if they were gone (Rosenberg & McCullough, 1981). The study was conducted in December 2020, in an effort to determine the

building blocks of mattering in the K–12 setting. Data collected from a survey, administered through the Qualtrics surveying website, was used to collect responses to a series of questions on the teacher mattering topic. Qualtrics XM is a web-based tool that is used to conduct survey research and data collection.

After conducting a review of related literature, three themes were selected as possible foundational elements (building blocks) of mattering in the classroom. The first element was "purpose," which was operationally defined as an internal feeling a person has that directs them to want to pursue a certain activity. The second element was "belonging," which was operationally defined as an internal feeling that a person believes they belong to a certain group or culture. Finally, the third element is "external validation," which was operationally defined as the belief one has that what they are doing is valuable to society and that people recognize the contribution they are making. Some variables identified in the literature review were not categorized in the initial three elements but were potential categories that needed to be explored in the factor analysis. Variables such as efficacy, job security, meaningful goals, personal values, and being their authentic self may also play a role in creating a feeling of mattering in K–12 teaching.

Several external variables were also identified, which could also influence mattering in teachers. These variables were the number of years a person has taught, the primary level at which they teach, their gender, location and description of the school they teach at, percentage of students qualifying for free and reduced lunch in the school in which they teach, their ethnicity, the state in which they teach, and the type of school they teach at. Once the factor analysis was complete, a new construct was created, based on the identified factors.

Methodology

The factor analysis included two main phases: the exploratory factor analysis phase and the confirmatory factor analysis phase. Both phases were used to examine the factor structure of the data collected. Exploratory factor analysis was used to construct the theory (Matsunaga, 2010) and build upon or modify the initial construct created from the review of the literature. The second phase, confirmatory factor analysis, was primarily for theory confirmation. The survey data collected was used for both phases.

Research Questions

The primary research question is: "What are the foundational elements (building blocks) of a teacher's sense of mattering in the K–12 setting?" Additionally, the demographic and background questions allowed the analysis of variations that may be present in one group and not in another. The secondary research question is: "What are the factors of mattering for K–12 teachers?"

Hypotheses

Null Hypothesis

H_0: There are no factors of mattering for teachers.

Participants

K–12 public school teachers from across the United States were contacted via email in November and December 2020. Participants had a wide range of backgrounds in terms of their years of experience, the grades that they taught, their gender, the location of their school (i.e., rural, urban, or suburban), their school's poverty levels, and the state in which they taught. Teachers were sent an invitation through an email to participate.

There were approximately 3,151,000 K–12 teachers in the U.S. in 2015 (Bustamante, 2019). To obtain a large sample size of at least 1,000 participants, exponential non-discriminative chain-referral sampling (i.e., snowball sampling) was used to recruit additional participants, and the initial subjects would subsequently refer additional subjects by sharing a link to the survey. Demographic information collected from the survey was used to ensure that the results are analyzed in proportion and that one group was not overrepresented in the sample. By using snowball sampling, the researcher can contact a limited number of, otherwise inaccessible, respondents, who will recruit others to participate in their particular demographic area. The researcher attempted to obtain a sample from at least 15 states.

Instrumentation

The survey (Appendix A) was sent to practicing K–12 teachers. An attempt was made to obtain at least 1,000 responses from available contacts. However, there were 1,399 recorded participants, out of which 239 participants did not complete the survey, and a total of 1,110 participant responses were used for the data analysis. The sample was taken from K–12 educators across the United States. All participants were K–12 classroom teachers. The initial participants recruited were as diverse as possible. Nevertheless, there was no guarantee that the sample was a representative of the overall population (Dudovskiy, 2016).

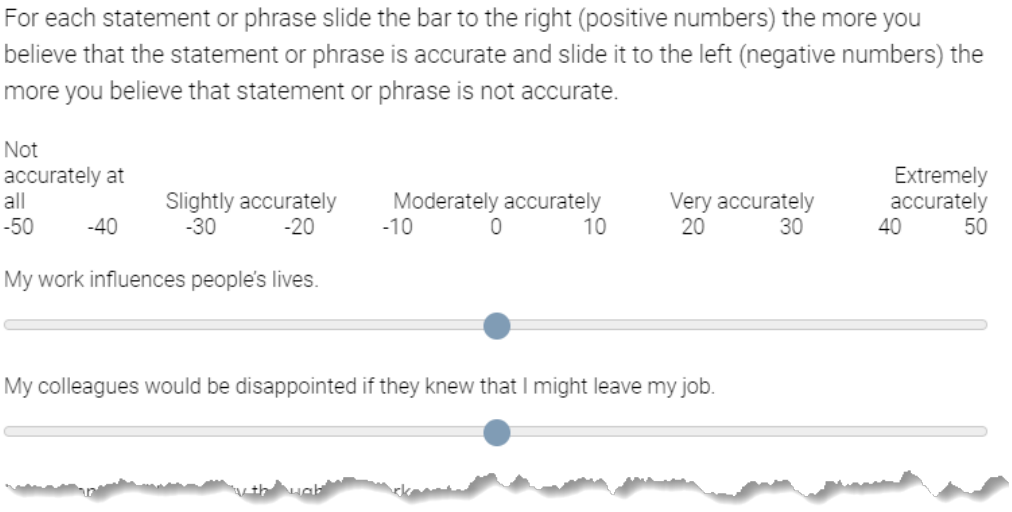
The demographic questions assisted in ascertaining whether a particular group was overrepresented. Teachers answered each question using a 100-point slide scale: -50 (disagree very much) to +50 (agree very much). To reduce the number of factors and items, the data from the survey was analyzed through the exploratory factor analysis process. Additionally, data collected from this survey was used to identify themes and connections that emerge around mattering. The survey consisted of three parts. In Part I, the participants were asked some short

demographic background questions; these were to be used to analyze any variations among the survey participants' answers. Nine demographic and background questions were included in the survey. These questions addressed the number of years a person has taught, the primary level at which they teach, their gender, the location and type of the school (i.e., rural, urban, or suburban), the percentage of students qualifying for free and reduced lunch at the school in which they teach, and the state in which the school is located.

Part II examines participants' feeling of mattering in the K–12 setting. This section of the survey uses the "work mattering scale" (Jung, 2015). Participants were asked to slide the scale between -50 and +50, and they were given the instructions, "For each statement or phrase, slide the bar to the right (positive numbers) the more you believe that the statement or phrase is accurate, and slide it to the left (negative numbers) the more you believe that statement or phrase is not accurate." Figure 5 shows an example of the survey slide scale used.

Figure 5

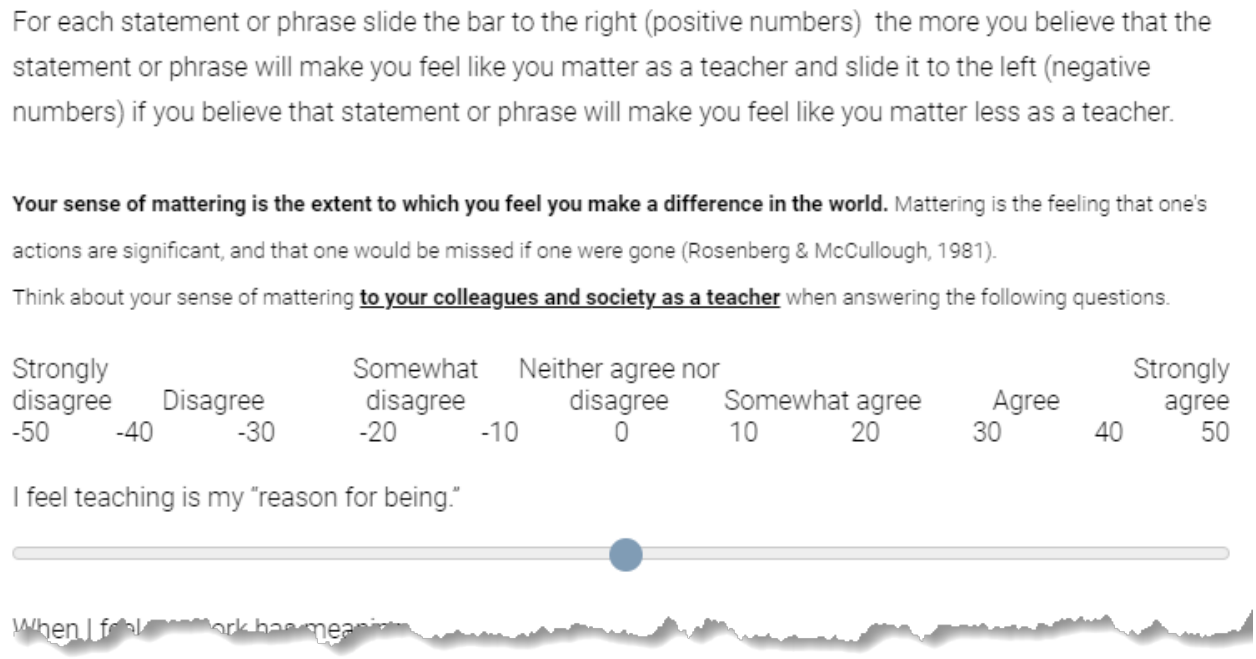
Survey example of the slide scale



Part III of the survey asked a series of 102 questions relating to various factors of the building blocks of mattering for K–12 teachers. The questions were randomly placed in this part. Again, respondents were asked to answer the questions using a sliding scale from -50 to +50. Figure 6 shows the instructions on the top of each page. Each page also included the definition of mattering as defined by Rosenberg & McCullough (1981) for participants to refer to, if needed.

Figure 6

Survey example of the items related to mattering



Recruitment

Teachers were contacted to participate in the proposed study, in the fall semester of the 2020–2021 school year. State departments of education were contacted in an attempt to obtain contact information of classroom teachers in that state. The teachers were contacted by email and asked to participate in the proposed survey (Appendix A). The contents of the email explained

the purpose of the study (Appendix E), outlined the informed consent process (Appendix D) as approved by the Indiana State University Institution Review Board, and provided a link and directions detailing the procedure for accessing the survey at the Qualtrics XM website.

The survey's results were used to identify descriptive information about the building blocks of mattering in the K–12 setting. Additionally, these results will be analyzed to examine the survey responses for patterns and categories to confirm, reject, or modify the initial theoretical constructs of the building blocks of mattering.

Data Collection

The research questions were established and constructs were created from the literature review. Before the exploratory factor analysis was conducted, the content validity of the survey questions was examined. Content validity is the extent to which the items on a survey are representative of the entire domain that the survey seeks to measure (Salkind, 2010). Cronbach's alpha was utilized to measure the scale reliability.

Exploratory Factor Analysis Phase

The following steps were taken to complete the exploratory factor analysis:

1. Develop a list of survey questions.
2. Distribute survey questions.
    a. Conduct an item analysis to remove faulty or highly correlated questions from the survey (dropping items higher than .80).
    b. Examine standard deviations of the survey questions (dropping items lower than 0.50).
    c. Examine correlations of the survey items to remove faulty survey questions (multi-collinearity).

3. Examine the eigenvalues to determine the amount of variance for each item. Eigenvalues are the total variance that can be explained by a given principal component (UCLA, 2020).
4. Conduct a parallel analysis.
5. Run a scree test to determine the number of factors to retain. A scree test is used in conjunction with the eigenvalue and parallel analysis to determine the number of factors to keep. A scree plot shows the eigenvalue and the number of factors on a downward curve. The point where the slope levels off indicates the number of factors that should be generated by the analysis (Rahn, 2020).
6. Use factor rotation to minimize the complexity of the factor. The goal of rotation is to improve the interpretability of the factor solution by reaching a simple structure (UCLA, 2020, para. 23).
7. Determine the criteria for factors and maintain the factors that align with those criteria. The loading must be at the .600 level with no cross loading higher than 0.34.
8. Run internal correlations on the factors.
9. Name new factors based on the analysis.
10. Revise survey questions based on the pilot analysis.

Confirmatory Factor Analysis Phase

Once the exploratory factor analysis was completed and new factors were named, a confirmatory factor analysis was conducted, using the Classical and Bayesian Instrument Development (CBID) software. The raw survey participant data of the retained items were used. Each item was associated with the corresponding factor for the analysis.

The following indicators were used to determine if the confirmatory factor analysis was successful.

1. The root mean square error of approximation (RMSEA) is lower than .06.
2. The Tucker-Lewis index (TLI) and the comparative fit index (CFI) are higher than .95.
3. The standardized root mean square residual (SRMR) is less than .10.
4. The Cronbach's alpha is greater than .60.

Controlling for Bias and Other Potential Errors

All researchers have known and unknown biases that must be accounted for during the data collection process. In addition, all methods have inherent biases and limitations (Green et al., 1989). The researcher must "suspend their own attitudes, beliefs, and suppositions in order to focus on the participants' experience of the phenomenon and identify the essences of the phenomenon" (Neubauer et al., 2019, p. 13). A researcher must be aware of their own emotions and cognitions in order to conduct unbiased research, since the emotions and experiences of the researcher have the potential to distort the data analysis (Tufford & Newman, 2010).

Since a preliminary construct for the building blocks of mattering in this context was constructed by the researcher, controlling for bias is of the utmost importance. A "premature commitment often leads the analyst to ignore important new insights and relationships that may greatly enrich her developing story or theory" (Baptiste, 2001, para. 40).

Summary

Chapter 3 contained an explanation of the research methodology, including the study design, research questions, participants, variables, data collection methods, and study instrumentation. The purpose of this study was to create a theoretical framework for the foundational elements or building blocks of mattering for K–12 teachers. It examined the extent

to which purpose, belonging, and validation lead to mattering and identify other areas to be considered in the model.

Chapter 4 summarizes the findings of the data collected from the survey, including a detailed analysis of the descriptive data collected and the analyses needed to answer the research questions of this study. A new model of the building blocks of mattering for K–12 educators was created and compared to the initial model.

CHAPTER 4

RESULTS

Chapter 4 describes the data analysis results gathered from teachers who completed the survey on the building blocks of their sense of mattering in the K–12 classroom. The research questions, data cleaning process, and description of findings for the research questions are included in this chapter. The purpose of this data analysis is to identify the answers to these two questions: "What are the building blocks of a teacher's sense of mattering in the K–12 setting?" and "What are the factors for the sense of mattering in K–12 teachers?"

Data Analysis

Participant data from Qualtrics XM survey were entered into SPSS 27 for statistical analysis. The data was examined to ensure that it was usable, reliable, and valid to proceed with statistical analyses. A total of 1,399 participants started the survey, and 1,110 respondents completed it. Survey respondents represented 14 different states and originated from demographically diverse backgrounds, as illustrated in Tables 3–9.

Table 3

Years of Experience

	N	%
1-5 years	153	13.8%
6-10 years	220	19.8%
11-20 years	313	28.2%
More than 20 years	422	38.0%
Missing	2	0.2%

Table 4

Primary Assignment

	N	%
Elementary (K - 5)	287	25.9%
Secondary (6 - 12)	709	63.9%
Mixed levels (K–12)	111	10.0%
Missing	3	0.3%

Table 5

Gender

	N	%
Male	357	32.2%
Female	744	67.0%
Prefer not to answer/Other	5	0.5%
Missing	4	0.4%

Table 6

Location of School

	N	%
Rural/Small town	368	33.2%
Suburban/Large town	499	45.0%
Urban/Large city	241	21.7%
Missing	2	0.2%

Table 7

Percent of Free and Reduced Lunch Students

	N	%
0 - 25%	236	21.3%
26 - 50%	305	27.5%
51 - 75%	256	23.1%
More than 75%	308	27.7%
Missing	5	0.5%

Table 8

Race

	N	%
White	1029	92.7%
Black or African American	26	2.3%
American Indian or Alaska Native	7	0.6%
Asian	11	1.0%
Native Hawaiian or Pacific Islander	1	0.1%
Other	33	3.0%
Missing	3	0.3%

Table 9

Type of School

	N	%
Public traditional	1041	93.8%
Private Religious	44	4.0%
Charter	23	2.1%
Missing	2	0.2%

In 2017–2018, the National Center for Education Statistics (NCES, 2019b) reported that 37.3% of teachers had less than 10 years of experience and 22.8% had over 20 years of experience. Based on this information, the survey participants tended to be more experienced

than the universe. The sample overrepresented secondary teachers, males, and those identified as white. It also included a large representation of teachers in public schools (NCES, 2019a). Based on teacher estimates from NCES, fewer teachers from urban areas participated in the survey than from rural and suburban areas. The breakdown for the percentage of students eligible for free or reduced price-lunch was consistent between the sample and the universe.

Preliminary Analyses

The preliminary analysis conducted prior to rotating the factor matrix comprised several steps. First, the initial reliability was examined by calculating the Cronbach's alpha to ensure scale reliability. Second, inter-correlations were examined between survey items. Finally, assumptions underlying exploratory factor analyses (EFA), such as normal distribution, were examined to determine the proper method of factor analysis.

A total of 102 slide-scale items on the initial building blocks of the survey of the sense of mattering in teachers in the K–12 classroom were examined. Descriptive statistics (see Appendix F) were computed to check the normality of item distributions and to verify whether the items fulfilled the assumption criteria underlying factor analysis. Based on skewness, only three items were considered symmetrical (between -0.5 and 0.5). The researcher determined that the skewness and kurtosis properties of each item indicated that the distribution was abnormal; therefore, a principal axis factoring model was considered the preferable method for the EFA (Fabrigar et al., 1999). If the data had been normally distributed, the maximum likelihood factor method would have been preferred (Costello & Osborne, 2005).

To determine whether the 102 items represented an internally consistent measure, the researcher computed reliability statistics for the overall scale, generating a Cronbach's alpha of .980. In the item-overall scale correlations, there was no item that would significantly improve

the Cronbach's alpha if deleted (see Appendix G). An analysis of the inter-item Pearson product correlations demonstrated six items (three pairs). Each pair had a correlation over .800 between the two items. This was an indication of multi-collinearity. Items 16 and 22 (.811), 41 and 43 (.866), and 75 and 77 (.853) were examined. There is "no statistical means for deciding which item of a pair to remove"; it is, instead, based on the researcher's interpretation of the items, as to which one should be removed (Samuels, 2017, p. 2). The researcher removed items 22, 43, and 77 from the factor analysis. From this point, only 99 items remained from the initial survey.

In verifying the assumptions prior to the rotated solution, the results of the Bartlett's test of sphericity, $B(4851) = 63480.383$, $p < 0.000$, and a Kaiser-Meyer-Olkin measure of sampling adequacy (KMO = .973) were computed. A KMO value between 0.8 and 1 indicates that the sampling is adequate and that the factor analysis is appropriate (Glen, 2016).

Communalities were examined for any item < 0.200 (Samuels, 2017). The lowest initial communality items were number 74 (0.398), and the lowest extracted communality was item 14 (0.329). See Appendix J for the list of all initial and extracted communalities.

Next, eigenvalues, scree test, and a parallel analysis were examined to determine the number of factors to be retained. Costello and Osborne (2005) note that examining eigenvalues alone is one of the least accurate methods and the scree plot relies on the researcher observing where the bend in the plot occurs. There were 16 factors with an eigenvalue > 1. The scree plot (Figure 7) demonstrates a slightly larger curve in the elbow at nine factors. For the parallel analysis, a randomly generated identity matrix is created. Each eigenvalue of the principal axis factoring was compared against the eigenvalues for the corresponding factor in a randomly generated data set. The percentile of eigenvalues for the parallel analysis was set at the 95th percentile with 100 random correlation matrices (Patil et al., 2017). Factor 11 on the parallel

analysis yielded an eigenvalue of 1.446, while the eigenvalue of Factor 11 on the initial analysis was 1.444. Therefore, it was determined that the parallel analysis yielded 10 possible factors (see Table 10). Eigenvalues for all factors from the principal axis factoring are found in Appendix I and those for the parallel analysis are found in Appendix J.

Figure 7

Initial Scree Plot

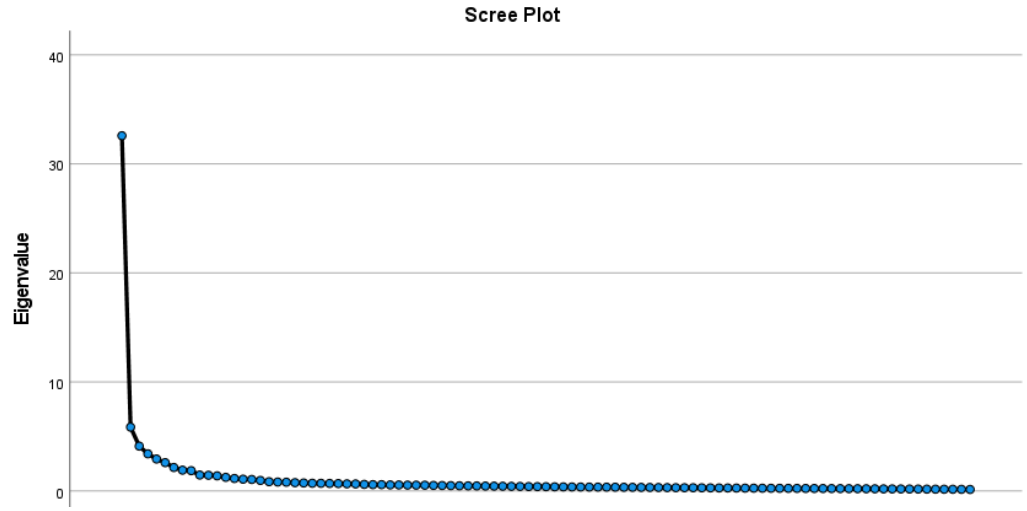


Table 10

Eigenvalue Comparison between Principal Axis Factoring and Parallel Analysis

	Eigenvalues	
Factor	Principle Axis Factoring	Parallel Analysis
1	32.586	1.691
2	5.859	1.644
3	4.116	1.617
4	3.410	1.588
5	2.935	1.565
6	2.602	1.543
7	2.157	1.521
8	1.912	1.500
9	1.866	1.482
10	1.465	1.463
11	1.444	1.446
12	1.391	1.428
13	1.254	1.412
14	1.149	1.397
15	1.085	1.380
16	1.058	1.366

Initial Dimension Reduction

A principal axis factors analysis based on eigenvalues greater than 1 with a Varimax rotation was conducted. Small coefficients with an absolute value below 0.32 were suppressed. Table 11 demonstrates the result of the initial dimension reduction, which resulted in 16 factors and 99 items.

Table 11

Rotated Factor Matrix[a] 16 factors, 99 items

Item	Factor															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
44	0.777															
46	0.771															
50	0.758															
48	0.755															
42	0.747															
37	0.716															
49	0.702															
31	0.675															
36	0.672															
41	0.668															
34	0.668															
38	0.667															
47	0.654															
35	0.653															
30	0.639															
33	0.573														0.379	
45	0.555															
32	0.544														0.435	
54	0.521							0.334								
95	0.438			0.411												
7		0.737														
6		0.736														
9		0.714														
10		0.675														
4		0.628														
8		0.623														
5		0.622														
3		0.598														
1		0.566														0.386
16		0.558														
2		0.499														0.484
15		0.487														
13		0.466														
12		0.379														

Item	Factor															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17		0.373					0.340									
14																
67			0.674													
63			0.626													
69			0.617													
70			0.582													
65			0.578													
64			0.563													
62			0.464													
68			0.457													
72			0.453													
61			0.410			0.339										
82			0.377													
81			0.372													
99				0.787												
102				0.759												
98				0.734												
100				0.719												
101				0.672												
97	0.421			0.521												
96	0.338			0.465										0.423		
94				0.440										0.377		
92				0.358										0.341		
26					0.718											
23					0.708											
24					0.704											
28					0.699											
25					0.690											
27		0.341			0.454											
60						0.708										
58						0.677										
71						0.633										
57						0.596										
80						0.571										
59						0.475										
73						0.471										
20							0.733									
18							0.719									

Item	Factor															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
19							0.703									
21					0.405		0.540									
29					0.391		0.461									
11							0.400									
51								0.681								
52								0.640								
55								0.598								
56								0.577								
53								0.563								
84									0.821							
83									0.718							
85									0.707							
86									0.626							
87									0.391							
79										0.785						
76										0.728						
75										0.639						
74										0.559						
78										0.412						
88											0.614					
89											0.549					
91							0.328				0.433					
90	0.333										0.427					
40	0.331											0.617				
39	0.534											0.552				
93				0.459										0.482		
66																0.395

Note. Missing information indicated that the factor loading was <.34,

Extraction Method: Principal Axis Factoring.

a. 16 factors extracted. 9 iterations required.

Upon examining the initial factor rotation, the researcher observed strong factor loading on 10 factors. Strong factor loading for a factor was above .600 on three or more items.

Therefore, to refine the analysis, the researcher determined to eliminate any items with a factor load of less than 0.600, cross loads greater than 0.340, or any factors with three or fewer items. This process eliminated 49 of the 99 items. Once the items were eliminated, the principal axis factoring was conducted with the remaining 51 items. The second rotation yielded 10 identified factors. However, several more items were found to have a cross load greater than 0.340 or a factor load of less than 0.600. A total of 11 additional items were removed, and the factor analysis was conducted a third time. Appendix O shows when each item was removed in the data analysis process.

Final Dimension Reduction

The third and final iteration resulted in satisfactory factor loading and limited cross loads to loads less than 0.340. The final result identified eight factors with 40 total items. Table 12 shows the third and final rotated factor matrix, with the loading for each item. Factors six, seven, and eight are the least stable with only three items each. The researcher determined that the factor loading of these items was strong enough (0.833 to 0.618) for them to remain viable factors. Additionally, the scree plot (Figure 8) shows a bend at factor eight, which confirms that keeping eight factors is warranted. The final factor transformation matrix is in Appendix L, and the final total variance explained is located in Appendix M. After the final analysis, 40 of the 102 items remained. The survey items were removed at various stages of the data analysis process.

Table 12

Final Rotated Factor[a] Matrix

Item	Factor							
	1	2	3	4	5	6	7	8
44	0.803							
46	0.795							
48	0.786							
50	0.767							
42	0.767							
49	0.726							
47	0.697							
41	0.680							
30	0.656							
36	0.654							
34	0.653							
7		0.758						
6		0.734						
9		0.727						
4		0.640						
5		0.623						
10		0.620						
26			0.757					
23			0.733					
24			0.732					
28			0.726					
25			0.712					
99				0.801				
102				0.776				
98				0.757				
100				0.719				
101				0.670				
84					0.866			
83					0.739			
85					0.698			
86					0.618			
20						0.789		
18						0.731		
19						0.716		
79							0.833	

Item	Factor							
	1	2	3	4	5	6	7	8
76							0.737	
75							0.618	
51								0.749
52								0.659
55								0.639

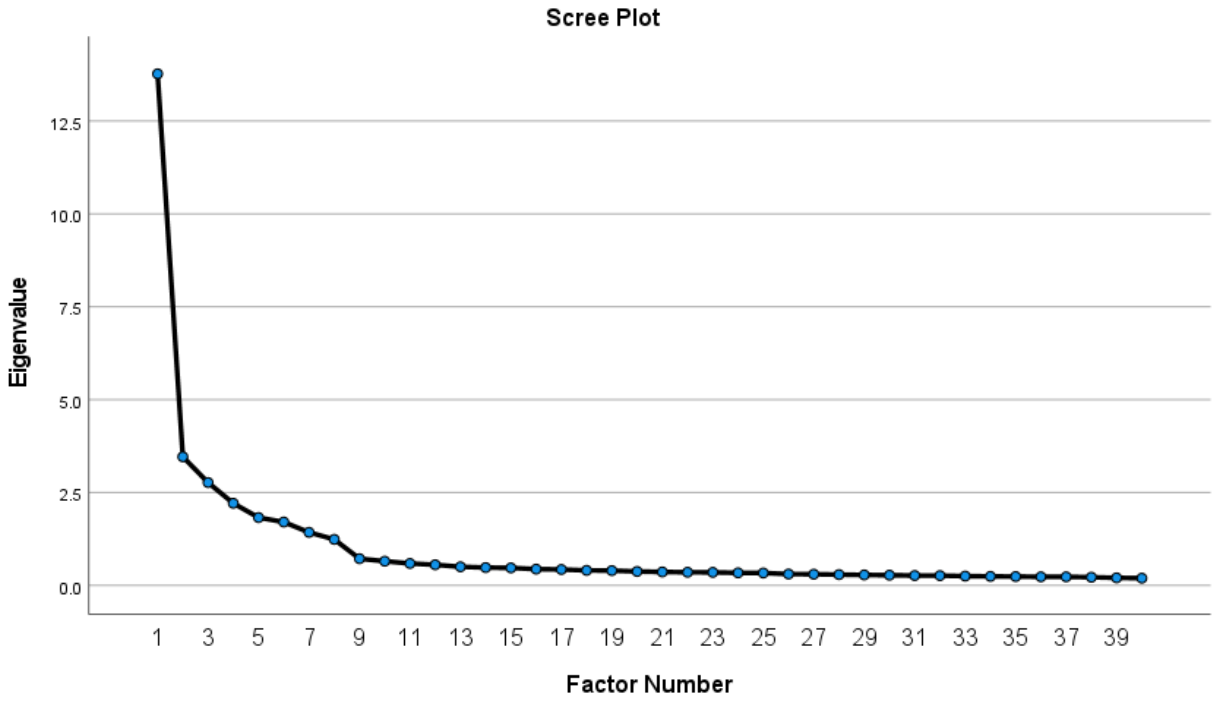
Note: Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Figure 8

Final Scree Plot



Naming of Factors

Once the number of factors and items for each factor were identified, the item numbers and the corresponding phrases were examined. Figure 9 shows the eight factors and the survey items associated with each factor. Appendix N identifies the number that corresponds to each item on the initial survey.

Figure 9

Factors and corresponding items

Factor 1	• When I feel that my colleagues really care about me • When I enjoy being around my colleagues • When my colleagues look out for me • When I can rely on my colleagues to help me • When my colleagues help me • When things get tough and we all pull together • When there is a sense of community in the organization • When I feel have a lot in common with my colleagues • When feel I "belong" among my colleagues • When I feel a sense of synergy working with my colleagues
Factor 2	• When I know "why" I am a teacher • When I believe I was called to do this job • When I feel a "pull" toward teaching • I feel teaching is my "reason for being" • When I feel my work has meaning • When I am the best version of myself as a teacher • Just being a teacher makes me feel like I matter
Factor 3	• When I don't have to pretend to be a different person at work • When I don't have to have a different "image" a work • When I can be the same person at home that I am at work • When I can be my "authentic self" at work • When I don't have to compromise my feelings at work
Factor 4	• When I lose track of time while teaching

	• When I lose track of time teaching or preparing because I am so involved in the activity • When time seems to "fly by" during the day • When I get totally immersed in what I am doing • When I wonder where the time went because I am enjoying what I am doing
Factor 5	• When I have more job security than most jobs • When I feel teachers have a fairly stable job compared to the rest of society • Knowing that I have a steady paycheck • When I have protection from arbitrary termination
Factor 6	• I will do tasks I don't like if I know it will serve a higher purpose with the organization • When I don't mind doing tasks that I am asked to do because it helps the organization reach its goals • I do tasks that I don't like when I know it helps the overall goal
Factor 7	• The more I am paid, the more I feel like I matter • When I get a raise • If teachers were valued more, they would be paid more
Factor 8	• When I am able to make adjustments to my work to be more productive • When I can make changes to my job to make things run smoother • When I am empowered to change daily routines to meet my needs as a teacher

The phrases corresponding to Factor 1 were identified in the literature review revolving around the concepts of Tribes and Moai; collectively, this factor was identified as "community." Community is job-focused teamwork that cultivates energy and belonging. Factor 2 relates to the concept of ikigai and mission discussed in Chapter 2; this factor was identified as "purpose." Purpose is the feeling of fulfilling one's mission and passion. Factor 3 was not in the initial proposed construct, but its variables were identified as having potential and needed to be explored. This third factor was labeled "authenticity." Authenticity is the ability to be the same person at work and at home. Factor 4 relates to the concept of "flow." Flow is the enjoyment of

an activity so much that a person loses track of time. Factor 5 was “job stability.” Job stability is knowing that the job is secure and unlikely to disappear or change radically. Factor 6 was identified as “assimilation,” the understanding that some tasks are unpleasant but necessary; therefore, the task has value. Factor 7 was “compensation,” which means pay that is fair and equitable based on experience and educational attainment. Finally, Factor 8 was “job crafting,” the capability to subtly change the work environment to satisfy individual needs.

The eight factors are thematically related in three distinct categories: intrapersonal, interpersonal, and external. Intrapersonal factors are related to a person’s relationship with others. Intrapersonal factors spring from within the individual. External factors, for the most part, are controlled by extrinsic forces that a person has little direct control over.

Once the factors were identified and named, the researcher created a new conceptual model for the foundational elements of the sense of mattering in K–12 teachers. This new conceptual model was created as a direct result of the EFA. Figure 10 presents an image of the new foundational elements of the sense of mattering construct. This construct is more robust than the initial building blocks of the sense of mattering construct presented in Chapter 1. It provides a clearer and more accurate portrait of the essential elements needed for a K–12 teacher to harbor a sense of mattering. The Foundational Elements of Mattering for K–12 Teachers Scale is found in Appendix Q.

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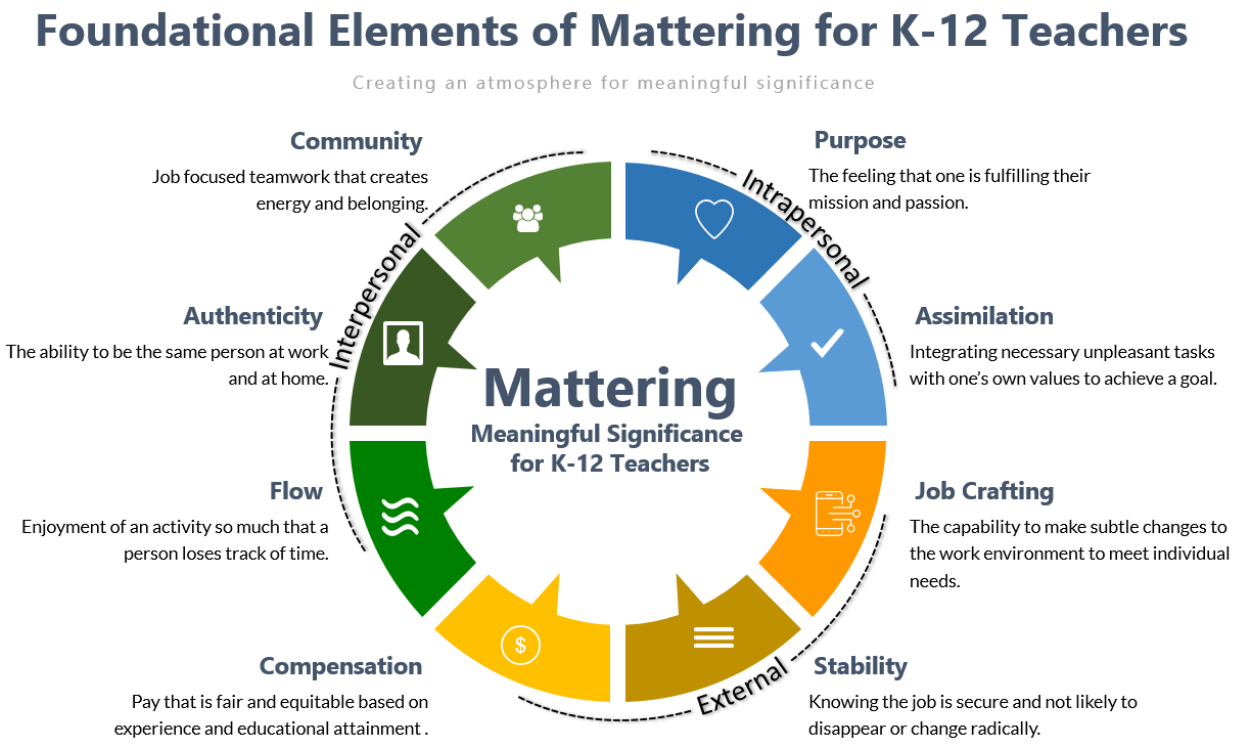
Figure 10

Foundational Elements of Mattering Construct



Confirmatory Factor Analysis

The confirmatory factor analysis (CFA) is used to test the expectation of how items will factor against the data (Levine, 2005). It allows the theory to be tested by the analysis, and the degree of model fit can be quantified (Thompson, 2004). CFA is "an under-used and often misunderstood statistical tool. CFA provides useful information about scale dimensionality and validity" (Levine, 2005, p. 335). It does not require additional data. This analysis process provides data on "the number of constructs, measures, and which item assesses the same construct, but not the substantive meaning of a construct" (Levine, 2005, p. 336).

A preliminary CFA was conducted using the Classical Bayesian Instrument Development (CBID) software. The responses are not assumed to be normally distributed. CBID utilizes the R package *lavaan* (Bott et al., 2018). The raw survey participant data of the retained items were used. Each item was associated with the corresponding factor for the analysis. The researcher uses the term "preliminary" because of the use of the same data for the exploratory factor analysis (EFA) and CFA rather than a separate data set for the confirmatory phase. EFA and CFA should "lead to the same conclusions when applied to the same data" (Van Prooijen & Van Der Kloot, 2001, p. 780). If the exploratory and confirmatory analyses lead to different conclusions using the same data, the methodology in the EFA is flawed. If an EFA cannot be confirmed by a CFA using the same data, it will not be able to confirm the results using different data (Van Prooijen & Van Der Kloot, 2001, p. 780).

The root mean square error of approximation (RMSEA) evaluates how closely the model fits the data. Matsunaga (2010) states that although some argue that an RMSEA of .08 is acceptable, the number should be .06 or lower. The RMSEA was 0.040, which is within the acceptable range. The second fit index examined was the Tucker-Lewis index (TLI) and the comparative fit index (CFI). For a model to be considered adequate, the fit index should be .95 or higher. The TLI was .951 and the CFI was .955; again, both were in the acceptable range. The third and final fit index was the standardized root mean square residual (SRMR), indicating the average value of the residuals between observed and predicted covariances. The SRMR value should be less than .10 (Matsunaga, 2010). It was .037, again, within the acceptable range. The overall Cronbach's alpha was .950, and for each of the factors, it ranged from .947 to .816. The entire output for the CBID CFA is located in Appendix P.

Summary

An initial construct was developed based on a literature review. Survey items were created based on the initial construct and other potential variables that may relate to a teacher's sense of mattering. The EFA uncovered eight factors and names. The foundational elements of the sense of mattering for K–12 teachers (Figure 10) were created based on the identified factors. The eight factors were divided into three themes: intrapersonal, interpersonal, and external. The intrapersonal theme includes the factors of community, authenticity, and flow. The interpersonal theme includes the factors of purpose and assimilation. Finally, the external theme includes the factors of compensation, stability, and job crafting. The factors identified during the EFA process had a strong coefficient of loading, and a preliminary CFA confirmed the factors against the data.

Chapter 5

DISCUSSION OF FINDINGS

There are fewer and fewer people going into the teaching profession, and a consistent but growing teacher shortage in the United States. Those that pursue a teaching career often leave the profession within five years of being hired. Retaining high-quality teachers is extremely important for any school district. A tremendous amount of time and money is wasted on recruitment and onboarding due to the high teacher turnover rate. Districts across the country note shortages in key areas and a trend that will likely continue into the near future. Exploring ways to keep and retain high quality teachers is critical for a successful school system. Much has been written about how to help teachers be more satisfied with their careers and help districts retain them. However, despite these efforts, the teacher shortage continues and more people are leaving the teaching profession every year due to dissatisfaction with their career choice.

Mattering is the feeling that one is significant and would be missed if they were gone (Rosenberg & McCullough, 1981). Very little has been written about the concept of mattering and what implications the sense of mattering may have on teacher satisfaction. The purpose of this paper is to examine mattering as it relates to K–12 classroom teachers. Perhaps a critical key to teacher satisfaction and career longevity is a teacher's sense of mattering.

Identifying the building blocks or foundational elements of mattering is an essential piece to understanding how mattering fits with teacher career satisfaction. These foundational elements are critical in understanding how educational leaders and other key stakeholders can provide an atmosphere where teachers feel more satisfied and are less likely to leave the profession. This paper sought to identify the foundational elements of mattering and create a theoretical construct that could be used as a basis for improving the overall climate in the teaching profession.

A thorough literature review revealed that little has been written regarding mattering in the teaching profession. There are many concepts that have been exhaustively addressed and are closely associated with mattering, such as belonging, passion, mission, and values. However, the literature has fallen short of thoroughly investigating what power a sense of mattering may have on teachers' career satisfaction. An initial construct was developed based on the existing literature and served as a starting point for survey development. Seventeen potential factors were identified that can lead to a sense of mattering for K–12 classroom teachers. The 17 factors were summarized within three main themes: purpose, belonging, and validation. A survey of 102 items was created and an exploratory factor analysis was completed by 1,110 participants.

The exploratory factor analysis revealed eight factors and the number of items for the survey was reduced to 40. The eight factors were named and include:

1. Community: job-focused teamwork that creates energy and a sense of belonging.
2. Authenticity: ability to be the same person at work and at home.
3. Flow: enjoyment of an activity so much that a person loses track of time.
4. Purpose: feeling that one is fulfilling their mission and passion.

5. Assimilation: integrating necessary but unpleasant tasks with one's own values to achieve a goal.
6. Job crafting: capability to make subtle changes to the work environment to meet individual needs.
7. Job stability: knowing the job is secure and not likely to disappear or change radically.
8. Compensation: pay that is fair and equitable based on experience and educational attainment.

These eight factors were arranged into three different themes: interpersonal, intrapersonal, and external. The interpersonal factors relate to a person's relationship with others. The factors included in this theme are community, authenticity, and flow. The extent to which a person interacts with others is an important component of mattering for K–12 teachers. Community is the most obvious of the interpersonal characteristics as it requires interaction with others. Authenticity was included as an interpersonal characteristic though it is an internal feeling. Some may argue that authenticity belongs in the intrapersonal arena. However, authenticity relates to the level of comfort one has to be themselves around others. The third factor in the interpersonal theme is flow. Again, it can be argued that this is an intrapersonal trait. It was determined to best fit as an interpersonal theme because several studies have found that the state of flow is best when experienced with others (Walker, 2008).

The intrapersonal theme includes the factors that come from within the individual. They are purpose and assimilation. Purpose is the most apparent of the two as an intrapersonal characteristic. Fulfilling one's mission and passion is a unique and individual pursuit. Assimilation is a bit more difficult to define succinctly. Assimilation is a mix of regulation

through identification and integrated regulation. These two terms derive from the self-determination theory proposed by Deci and Ryan (1985), who state that regulation through identification is “a conscious valuing of a behavioral goal or regulation, such that the action is accepted or owned as personally important” (p. 72). Deci and Ryan (1985) are also of the view that integrated regulation “occurs when identified regulations are fully assimilated to the self, which means they have been evaluated and brought into congruence with one’s other values and needs” (p. 73). Deci and Ryan (1985) recognize identification and regulation as extrinsic motivation. However, because one has to internalize the activity, the concept of assimilation was incorporated into the intrapersonal category.

The external theme includes factors that are controlled by external forces, which an individual has little direct control over. The factors associated with the external theme include compensation, stability, and job crafting. Compensation and job stability are clearly external forces. The amount of compensation a teacher receives is based on school district contracts. The amount of money a district has to fund teacher salaries are based on federal, state, and local funding sources. Job stability is tied to funding, population shifts, and school leadership decisions. The concept of job crafting is a bit more nebulous. Job crafting is the ability to make changes to the work environment to meet individual needs. This can be an intrapersonal characteristic; however, the researcher determined that it falls among external factors. Supervisors, administrators, or those that set policy create conditions that allow job crafting to occur. It is true that one needs to recognize when they are empowered to make changes, but often, they need to be given that ability by someone else.

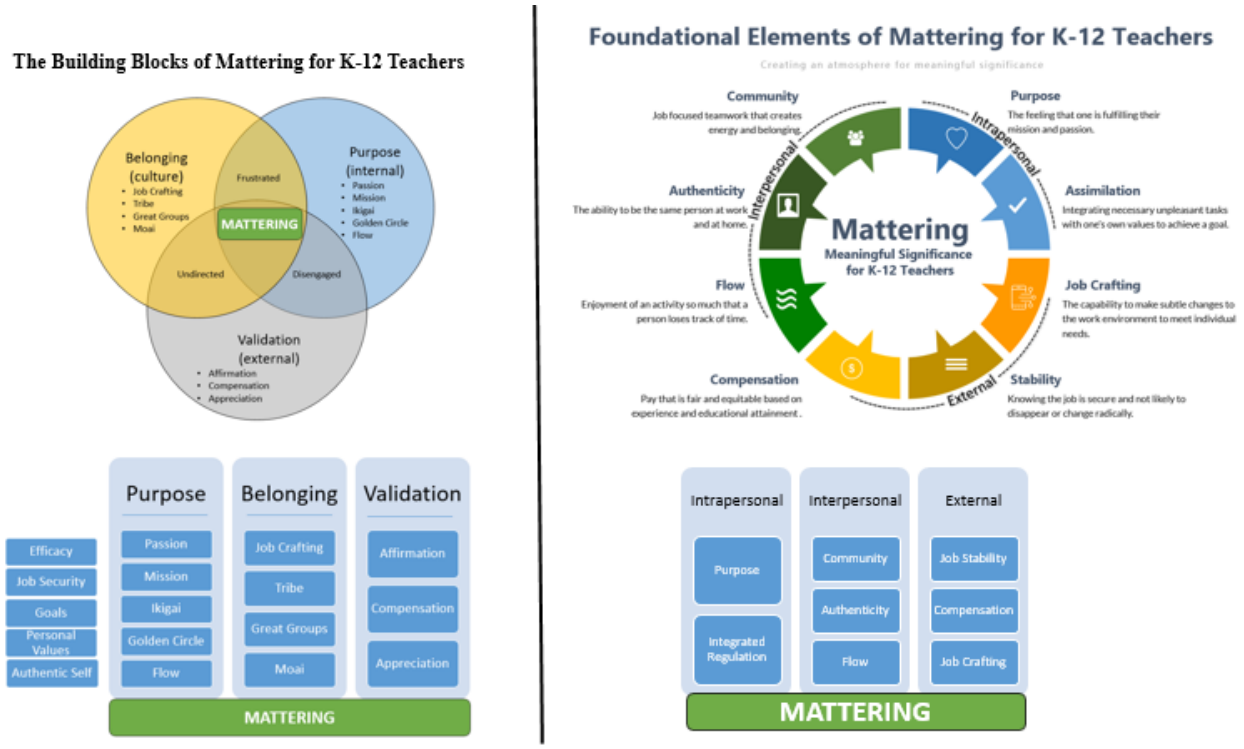
As one can see, the categorization of the factors is more of an art than a science. The researcher used the wording of the items for each factor to assist not only in the naming of the factors, but also in categorizing them. The themes for the categorization will inevitably be up for debate by future researchers.

Conclusions

The evolution of the mattering model is evident (Figure 11) when comparing the initial construct, developed during the literature review process, to the final construct, developed after the exploratory factor analysis. However, it is also apparent that several key elements have been retained, although the final iteration looks much different from the initial construct. The three themes of belonging, purpose, and validation in the initial construct are transformed into interpersonal, intrapersonal, and external. On the surface, it may appear that there is relatively little change from the three main themes; however, when examining the various factors, it becomes clear that there are important and significant differences. The construct becomes more nuanced. For example, belonging transforms into interpersonal characteristics of being a part of a community, working together to achieve flow, and having the ability to be the same person at work as they are at home (the authentic self). Purpose becomes a factor within the intrapersonal category. Validation in the initial construct is completely changed. By completing the exploratory factor analysis, the researcher was able to create a more robust construct using fewer factors. This will lead to more clarity when discussing the concept of mattering for K–12 teachers.

Figure 11

Initial construct vs final construct



Indeed, the factors can be arranged into different themes and several iterations were examined prior to settling on the current categorization. For example, one can argue that authenticity can be an interpersonal trait. However, after examining the items from the survey as well as the literature on authentic self, the researcher determined that showing one's authentic self at work had more to do with the comfort level one has around colleagues, to be able to be authentic. Calling the foundational elements of mattering for K–12 teachers "final" is somewhat of a misnomer, as new information will inevitably lead to new iterations. As more information is revealed about the concept of mattering, the construct is sure to evolve.

Implications for Educational Leaders

Identifying the foundational elements of mattering for teachers gives school and district administrators the ability to target these areas to increase teacher career satisfaction. Some key factors are impacted by the actions and policies set forth at the school or district level. There are ways in which educational leaders can create conditions for a stronger sense of mattering among K–12 classroom teachers.

Interpersonal Factors

School leaders can create conditions in the school setting that allow groups of teachers to work as a community. Much is written about professional learning communities (PLCs) and collective teacher efficacy regarding the positive impact on student achievement. The focus is on student achievement, as it should, but there is an additional layer to PLCs that could enhance a sense of mattering. Typically, the focus is not on how PLCs or collective efficacy can make teacher feel and improve teacher satisfaction. For decades, there has been a push for teachers to open doors and work together, with a focus on increasing student achievement. The term "community" in professional learning community is distinctly different from the "community" used in the mattering construct, albeit having a strong sense of community certainly enhances the effectiveness of a PLC and vice versa. A PLC is "an ongoing process in which educators work collaboratively in recurring cycles of collecting inquiry and action research to achieve better results for the students they serve" (DuFour et al., 2010, p.11). *Community* in the mattering construct creates energy and belonging within the group. One should not assume just because a school or district practices the PLC process, they automatically have a strong sense of community.

Additionally, teacher evaluation systems that rate teachers against each other or place teachers in competitive evaluations that impact pay can have a negative effect on community building. These evaluation systems are the antithesis of creating community and authenticity. School leaders must find ways to implement evaluation systems that create conditions for community.

A reflection on the hiring practices of schools and districts is also impacted when examined through the lens of mattering. If teachers are going to have a sense of community and authenticity, they have to be able to work together. However, often, teachers are involved in the late stages of hiring new teachers or are not involved at all. Teachers spend more time with each other than administrators spend with them, so it would be prudent to have teachers involved directly and early in the hiring process. The current teacher shortage makes this even more difficult, as sometimes there is only one candidate for a needed position. A sense of community does not mean a homogeneous group of people by race, ethnicity, or opinions. Communities are best served when it is made up of a diverse population with people from across the spectrum.

School districts that have a clear mission and stated core values that they practice on a daily basis can also help teacher candidates in the area of authenticity. When districts, and schools within them, clearly articulate and act upon the direction of the district, teachers will be able to determine if they can be their authentic selves within that structure. This requires educational leaders to keep the core values of the district at the forefront of decision making processes.

Csikszentmihalyi (2009) states that flow best occurs when there is a balance between the

skills one has and the challenge at hand. Educational leaders identifying needed skills then providing effective professional development to improve the skill to match the challenge will help teachers' sense of flow. Another critical component of flow is that people need to have a feeling of control over the task. Again, educational leaders can create a climate that empowers teachers to have a certain amount of control over various tasks.

Intrapersonal Factors

A large number of books have been written and research conducted on a person's sense of purpose. Fulfilling one's mission and passion in life is important to overall life satisfaction. Educational leaders can help teachers carry out their sense of purpose by keeping students the focus of decisions. This may seem obvious, yet too often districts make decisions without clearly articulating to teachers how this will ultimately help students. There are people that pursue teaching careers then realize after they start teaching that it is not the right career for them. School leaders need to find ways to help these teachers find other career paths or encourage a re-examination of the individual's mission and passion. Teachers that do not have a passion for teaching may not be ineffective, but they will most certainly be miserable, which will have a negative impact on other teachers.

Administrators can also focus on assimilation by helping teachers understand why certain tasks need done and the benefit of doing the task on the overall goals of the school. Before teachers can internalize a task as an important part of their job, they need to understand the reasons behind the task itself. This goes beyond just stating what the ultimate outcome will be by completing the task, but how the task helps teachers in achieving it. For example, a principal can explain to a teacher who does not like recess duty why it is important for student supervision.

However, this does not go far enough to engender assimilation. The administrator should discuss how teachers can interact with students in a different way during recess, which can lead to building relationships with and among the students and teacher. This will have an impact on how the student behaves in the classroom and the overall relationship with each student. Fewer student behavior problems translate to more time and energy on the more enjoyable aspects of teaching and learning.

External Factors

District leaders should identify potential efficiencies that can lead to more funds for teacher salaries. Investing in energy saving technologies and participating in purchasing groups are two ways that a district could possibly save money. Additionally, compensation includes benefits such as providing free or low cost health clinics and mental health services for teachers. A robust wellness program is an additional benefit while also reducing health insurance costs.

By proactively planning for population shifts, district leaders can mitigate the necessity of an involuntary reduction in force. Reducing staff through attrition by retirement rather than forced layoffs, helps teachers feel they have a stable job. Ensuring equitable and fair evaluation systems also helps teachers feel a sense of job stability as they will not be too concerned with arbitrary firing or unexpected loss of their job.

School leaders should also welcome ideas on ways in which teachers can job craft. Teachers may want to tweak something, but they do not feel empowered to do so. Administrators need to be open and discuss the concept of job crafting with teachers. It may even be necessary for districts to explicitly create conditions that require a teacher to job craft in some way. Depending on a teacher's past history with former districts or leaders, they may be hesitant to

attempt tweaking any task for fear of reprimand. If school leaders have clear guard rails on expectations, job crafting can be a powerful tool for teachers while staying focused on the overall goals of the organization.

Administrators also have the ability to create conditions where teachers will be able to job craft. Again not only do administrators need to create these conditions, they must also discuss these opportunities with teachers to make sure teachers take advantage and feel empowered to make those subtle changes in the workplace. One example of creating a job crafting condition is a district allowing teachers the choice between a Mac or a PC for their teacher laptop. Some prefer Macs, while others prefer PCs. It is definitely a point of personal preference (just ask any Mac or PC user if they would want to switch platforms). For continuity and efficiency, many districts require teachers to have one or the other; there is no choice. Districts that choose a hardware agnostic philosophy by allowing teachers the ability to choose their platform can significantly help teachers to job craft. Of course, having both platforms in use in the district will create a different set of issues. Given that this type of choice could help teachers with overall satisfaction, it may be worth the time and cost.

Another example of creating conditions for job crafting is to allow teachers flexible hours on certain days. If students are not in the building (either before or after school), and there are no meetings scheduled, a teacher can flex that time and work earlier or later to fit their personal needs and schedule. Even allowing teachers a 15 to 20-minute flex and beginning and end times could have a real impact on their ability to job craft.

Implications for Key Stakeholders

For the purpose of this discussion, the key stakeholders include politicians and other officials outside the school district that make decisions that impact schools. State and national leaders tasked with creating legislation and policy have a major impact on how districts are able to operate.

Interpersonal Factors

Key stakeholders can assist with the interpersonal factors by creating more time within the day for teachers to work together. Working together creates community. Although this is primarily the responsibility of school and district leaders, policies and mandates are put in place that detract from teachers' ability to work together. In 2019, an eight-page memo (Brown, 2019) was sent to Indiana school districts, outlining the mandatory training for teachers. Many of the trainings are required annually.

In addition, the Indiana General Assembly passed 108 education-related bills between 2017 and 2019 (Indiana State Teachers Association, 2017a; 2017b; 2019). These constant shifts in education policy create conditions that make it difficult for teachers to spend time building community with one another because so much time has to be spent keeping up with changes in state law and policy.

State lawmakers can support and fund effective diversity training for school personnel to address the authenticity factor. This type of training may help with teachers that do not feel comfortable being their authentic self at work because they will be judged harshly if they are different from others. Teachers may feel they no longer need to code switch between work and home. This type of training can also help with generational, gender, and ethnic differences. As an

added benefit, teachers might better understand the cultural differences of their students both economically and racially.

Programs and funding for teachers that want to hone skills to meet the ever-changing challenges faced in the classroom would assist with flow. In order for flow to occur there needs to be a balance between the challenge and the skill level. If a person does not have the skill to meet the challenge, they cannot reach flow. Also, policy makers need to ensure that the educational measures are aspirational yet achievable and within the control of those who are judged by it. For example, stating that 100% of high school students will graduate with an academic honors diploma is certainly aspirational but there are so many factors outside the control of the school personnel that it becomes unachievable. When politicians talk about increased accountability in the schools, it becomes synonymous with increased demands and mandates often with unrealistic expectations. State and national accountability standards change to meet the whims of those in power creating an ever moving target that is nearly impossible to hit with consistency and fidelity.

Intrapersonal Factors

Stakeholders can have a dramatic impact on the intrapersonal factors as well. Teachers need time for reflection and rejuvenation to stay focused on their purpose. This can take many forms, including pursuing further education, job swapping, or fellowships. For these programs to work, stakeholders will have to create policies that encourage such programs along with the funding to accomplish it.

Pursuing graduate studies should be encouraged through financial incentives. Currently, there is little to be gained financially by pursuing a graduate degree and staying a classroom

teacher. The cost of pursuing post-baccalaureate degrees can be disincentivizing. Yet, for some, studying beyond a bachelor's degree can help solidify a sense of purpose. Teacher job swapping would give teachers the ability to teach in a demographically different district or area of the state for a semester or year to gain valuable insight into their teaching practice. Allowing teachers to complete a semester or year-long fellowship can also help them reflect on their sense of purpose.

Prior to passing additional required mandates for teachers, policy makers need to identify how the implementation of the mandate has a connection to the overall goal for teachers. Policy makers should examine existing mandates to ensure that they are necessary and is best implemented by a teacher and not some other agency or organization.

External Factors

Teachers must have fair and equitable compensation. The teacher pay penalty is a real issue. In 2017, the wage discrepancy between teachers and other professions was over 18% based on experience and education. School districts across the country are expected to do more with less money year after year (Allegretto & Mishel, 2018). Strained budgets have a big impact on the salaries of teachers. Politicians and government officials must find ways to adequately fund districts so those district can have fair compensation for teachers.

Elected officials can create policies that ensure teachers have a sense of job stability. Districts facing declining budgets often must look to laying off teachers as a way to keep the district running. By adequately funding schools, teachers might be less concerned about losing their job. Districts should examine teacher evaluation systems that have a negative impact on high-performing teachers, such as a failing school and needing to fire half of the teaching staff. It is only in a small number of extremely toxic environments where this the most prudent action to

increase student achievement.

Key stakeholders can impact the ability of a teacher to job craft through local control of the district. Whenever possible, policy makers should allow local districts to implement academic programs in flexible ways. When policies are rigid, with no room for modification, the ability to tweak activities to carry out the policy becomes difficult.

Implications for Teachers

Understanding the foundational elements of mattering is extremely important for classroom teachers. The construct was created specifically for K–12 teachers, so it would make sense that the implications are the greatest for this group of people. As more is learned about mattering for K–12 teachers, the implications identified will inevitability grow.

Interpersonal Factors

Teachers need to have a sense of community with those around them and feel connected with the school community. Each building has a unique climate and personality. Teachers may be miserable in their job, not because they do not like teaching, but because they lack the sense of community within the group and have an unfulfilled need to belong. Teachers should not be afraid to seek environments where they can feel this sense of community. However, they may be reluctant to seek other teaching jobs because they have not identified that the issue is their feeling unconnected to the community. They rather believe that it is the profession itself they are dissatisfied with, leading to leaving the profession prematurely.

Teachers need to feel they have the ability to be authentic while at work. There will always be some element of cultural and linguistic code-switching that occurs between one's private and professional life. The amount of code-switching one does during the day can take a

psychological toll on individuals (McCluney et al., 2019). Teaching can be emotionally and physically draining without layering the need to act differently to fit in. This could also be a reason why it is difficult for schools to recruit minority teachers. The teachers may see the work environment of a school as a place where they cannot be their authentic self.

Finally, teachers need to be in an environment where they can enjoy doing activities with others to the point where they lose track of time and find themselves in a state of flow. The simplest way to do this is to work with those that you enjoy being around. Additionally, teachers need to identify areas where there is a challenge due to a skill gap and pursue professional development opportunities to help remedy the situation. In other words, if the teacher finds that they have difficulty completing aspects of the job because they lack certain skills, they need to actively pursue ways to decrease the gap in their ability.

When teachers can identify the elements of mattering, they can also identify which pieces may be missing in their career. By being able to ascertain what might be missing, they can pursue remedies to increase their career satisfaction.

Intrapersonal Factors

Before and during pre-service undergraduate work, students must be able to identify teaching as a way to fulfill their sense of purpose. Not everyone is meant to be a teacher. Even the most successful teachers have particular areas where they are better suited; for example, deciding to teach at the elementary or secondary level. Elementary and secondary schools have radically different student environments that appeal to different people in different ways.

Teachers need to understand assimilation and determine how it impacts their attitude to certain activities that they may not particularly like to do. Once undesirable activities are

integrated and teachers understand the tasks are necessary to meet their ultimate goal, it makes the task less unpleasant. In some instances, this means creating a paradigm shift in thinking about how certain tasks relate to the overall goals.

External Factors

The external factors are, by definition, the factors that teachers have little direct control over. There are still ways in which the teacher can advocate modifications in this area. The most obvious is to advocate for fair and equitable pay along with sensible evaluation systems.

The discussion around appropriate teacher compensation is at the forefront of many state and local education discussions. Teachers are well aware of the teacher pay gap and understand the gap increases each year. They must continue to advocate for fair and equitable pay with state and local officials to create solutions that work.

It is also important for teachers to continue to advocate for fair evaluation systems. There is job stability emerges when teachers do not feel that they will be arbitrarily fired or are under constant threat of a retrenchment. Stability also comes from teachers' ability to stay at the same school and teach at the same grade level if they so desire. Obviously, this is not always feasible as population shifts require shifts in personnel. Teachers need to be proactive in working with educational leaders to mitigate unwanted shifts in teaching assignments.

Teachers must also be able to identify when they are able to make changes in their work environment. Frequently, teachers have the opportunity to job craft, but they do not realize they are empowered to do so. When teachers see an area that they feel can be modified, they must feel comfortable and confident enough with the school and district leadership to ask for such modifications.

When teachers can identify the elements of mattering, they can also identify which pieces may be missing in their career. By being able to understand what might be missing, they can pursue remedies to increase their career satisfaction. Teachers should reflect on which aspects of the essential elements of mattering are most important and focus on those factors as a starting point.

Limitations

This study had several limitations. First, and most obvious, is that the data collection occurred during the COVID-19 pandemic. It is too early in the pandemic to determine the long-term impact it will have on education and teachers. Over the past year, the role of teachers has radically changed and continues to evolve as the pandemic continues.

It is impossible to determine with complete accuracy how the post-pandemic teaching profession will be different from the pre-pandemic period. The COVID-19 pandemic has altered almost every aspect of society in some way. Our educational system and the teaching profession have not been spared the radical changes that have taken place in a relatively short amount of time. Some of the pandemic-engendered modifications will have ripple effects, while others may be a tidal wave. Until we have the luxury of examining this historically, it is difficult to say with certainty what the pandemic ramifications will be on the educational institution.

Another limitation is that the confirmatory factor analysis was completed with the same data used for the exploratory factor analysis. For more robust results, the survey will need to be administered to a new sample population. Although the same data can be used (Levine, 2005), it can cause issues with the CFA results (Fokkema & Greiff, 2017).

By using the same data, the CFA can produce rather strong model fit indices. This is also known as overfitting, which yields inflated estimates of model fit (Fokkema & Greiff, 2017). The purpose of the CFA exercise in this research was to ensure that the EFA was properly conducted. As expected, the CFA results confirmed the results of the EFA. If the CFA did not confirm the results, that would indicate inadequate applications of EFA, which could have led to wrong factor solutions (Van Prooijen & Van Der Kloot, 2001). By using the CFA data from this research (Appendix P), future researchers will be able to compare the fit (or lack of fit) with new data.

Recommendations for Future Research

There is still much to be learned about teachers' sense of mattering. The construct presented in this paper serves as a launching point rather than an end. There are various avenues future researchers can take when exploring a teacher's sense of mattering. The first and most obvious recommendation for future research is to conduct a more extensive confirmatory factor analysis of the retained items. This will serve as a confirmation that the original exploratory analysis was accurate. From that point, the possibilities for future research can go in various directions.

A possible quantitative or qualitative research topic revolves around mattering construct itself. There can be other factors that should be included in addition to the eight factors identified in this study. Additionally, one could examine if teacher career longevity has an impact on the factors leading to mattering. Are there variables that need to be included for novice teachers or perhaps there are factors that only impact veteran teachers? Other items that may have an impact on the construct include demographic differences, such as male or female, or teaching in a school

in high-poverty area. Are there differences in factors between secondary teachers and elementary teachers? The teacher mattering construct was developed indiscriminately and intended for all teachers. It could be that depending on the unique situations of various schools, the mattering construct may alter as per the environment.

Another quantitative study could develop a scale to rate how much an organization is conducive to teacher mattering. This rating tool would allow school leaders to reflect on their school practices and develop ways to assist with teacher mattering. Along the same line, examining policies that are prevalent in a district that increase a teacher's sense of mattering or, for that matter, decrease their sense of mattering is another possible research topic. A scale created for teachers to be able to rate their sense of mattering and the areas they can improve upon as a reflection tool would also be helpful.

A researcher may want to use qualitative analysis to examine a person's various life events, to see if there is an impact on what factors are involved in mattering for them. For example, does a single teacher have different mattering factors than a married teacher or a teacher with kids or without kids? In other words, life events outside of education have an impact on people, so do these alter the mattering construct in any way? Various factors of mattering can ebb and flow with importance and significance in different life stages.

Another interesting avenue of study would be to examine if the factors identified translate to other professions. An exploratory factor analysis can be replicated using the same items (slightly altered to fit the occupation). The literature review borrowed concepts found specifically in the nursing profession, so it would be interesting to investigate if the construct will transfer to nurses. The survey items can be modified to fit a variety of professions, including

nursing, firefighting, or other public sector careers. There are certainly parallel characteristics with various public sector occupations and the teaching profession. It would be logical for the foundational elements of mattering in these careers to reflect the same concepts.

In some ways, this study created more questions than answers. Because of the paucity of previous research on mattering in the K–12 domain, there are many ways in which this topic can be explored further. This study serves as a starting point for those investigating the concept of mattering in the future. This topic warrants both qualitative and quantitative methodologies to explore mattering for K–12 teachers in depth.

Summary

A teacher's sense of mattering is an important part of their career satisfaction. Career satisfaction can lead to career longevity and to more satisfying experiences in the classroom. The foundational elements of mattering for K–12 educators have yet to be researched and need to be discovered. A thorough review of the literature revealed that very little research has been conducted on mattering for K–12 classroom teachers. Seventeen variables were identified and a survey of 102 questions was created. By conducting an exploratory factor analysis, the researcher was able to use empirical data to identify the main factors. It is more than mere conjecture, but steeped in the scientific method. Using quantitative data analysis is an important part of ensuring that the factors were discovered through data rather than guesses or hunches.

The factor analysis revealed eight factors. The eight elements that were identified in this study serve as a launching point for a better understanding of how a sense of mattering impacts classroom teachers. The statistical analysis revealed that the factors identified have strong factor loading. The survey was reduced from 102 items to 40 items. This will make the use of the

survey items more useable as it will be shorter and more manageable for future research. A new mattering construct was created based on the analysis, which was titled *The Foundational Elements of Mattering for K–12 Teachers*.

There is still much to be explored in the area of mattering for K–12 classroom teachers. A focus on the sense of mattering can be a turning point in helping teachers have more career satisfaction. As we encounter more teacher shortages and fewer teachers going into the teaching profession, it is critical that we find ways to make teaching a more appealing profession. If teachers truly feel like they matter and what they do matters, they will feel more satisfied with their chosen career. It is important for the research surrounding mattering for K–12 classroom teachers to continue as there is much to be learned about how this concept can help improve the educational system for all.

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APPENDIX A: THE BUILDING BLOCKS OF MATTERING SURVEY

The Building Blocks of Mattering Survey

Part I: Background Information

1. Including this school year, I have ____ years of experience teaching.
    a. 1-5 years
    b. 6-10 years
    c. 11-20 years
    d. More than 20 years

2. Including this school year, I have ____ years of experience teaching.
    a. 1-5 years
    b. 6-10 years
    c. 11-20 years
    d. More than 20 years

3. Primary Teaching Assignment (what best describes your teaching level)
    a. Elementary (K-5)
    b. Secondary (6-12)
    c. Mixed levels (K–12)

4. Gender
    a. Female
    b. Male
    c. Prefer not to answer/Other

5. Location where I teach:
    a. Rural/Small town
    b. Suburban/Large town
    c. Urban/Large city

6. Percent of free/reduced lunch students where I teach:
    a. 0 - 25%
    b. 26 - 50%
    c. 51 - 75%
    d. More than 75%

7. Ethnicity
    a. White
    b. Black
    c. Hispanic
    d. Asian

e. Pacific Islander
f. American Indiana/Alaska Native
g. Multi-Racial
h. Not listed

8. State where you work

9. Type of school (choose the best description)
    a. Public traditional
    b. Private Religious
    c. Charter

Part II: Current State of Mattering - Work Mattering Scale

Slide scale (-50 to +50)

1. I think that society values the work I do.
2. I feel my work meets a societal need.
3. I am connected to society through my work.
4. People say that my work influenced their life.
5. My work influences people's lives.
6. My coworkers/colleagues would be disappointed if they knew that I might leave my job.
7. I feel like I matter to my colleagues/coworkers.
8. My coworkers/colleagues value my ideas and suggestions.
9. My boss/supervisor would be disappointed if they knew that I might leave my job.
10. My coworkers/colleagues appreciate my support and help.

Part III: Ideal State

Slide scale (-50 to +50)

1. When I feel my work meets a societal need, I feel like I matter.
2. When I feel connected to society through my work, I feel like I matter.
3. When I feel like teaching matters, I think about teaching even on my days off.
4. When my work has meaning, I feel like I matter.
5. When I feel like I matter, I am the best version of myself.
6. When I believe I was called to do this job, I feel like I matter as a teacher.
7. When I know why I am a teacher, I feel like I matter.
8. Just being a teacher makes me feel like I matter.
9. When I feel a "pull" toward teaching, I feel like I matter.
10. I feel teaching is a "reason for being."

11. When I have an understanding of why I have to do certain things in my work, I feel like my work matters.
12. When I have a sense of why my job is important, I feel like I matter.
13. When I think about teaching as part of my legacy, I feel like I matter.
14. Teaching is important to society.
15. When I feel passionate about my job, I feel like I matter.
16. When I feel like I matter, teaching is an essential part of who I am.
17. When I feel like I matter in my job, I don't mind doing tasks that I am asked to do because it helps the organization reach its goals.
18. When I feel like I matter in my job, I do tasks that I don't like when I know it helps the overall goal.
19. When I feel like I matter in my job, I will do tasks I don't like if I know it will serve a higher purpose with the organization.
20. When I feel like I matter in my job, I seek out additional opportunities to grow because it will help me do my job better.
21. When I feel like I matter in my job, there are tasks that I don't enjoy doing, but I know it will help me do my job, so I don't mind doing them.
22. When I feel like I matter, teaching is an essential part of who I am.
23. When I feel like what I am doing matters, I lose track of time.
24. When I feel like what I am doing matters, time seems to go faster.
25. When I feel like what I am doing matters, I often wonder where the time went.
26. When I feel like what I am doing matters, the day seems to fly by.
27. When I feel like I matter as a teacher, I don't mind Mondays because I have a whole week to teach.
28. When I feel like what I am doing matters, I get totally immersed in what I am doing.
29. When I feel like what I am doing matters, I can enjoy doing the most tedious tasks.
30. When I feel I belong with my colleagues, I feel like I matter.
31. When I have a lot in common with my colleagues, I feel like I matter.
32. When I feel that my colleagues really care about me, I feel like I matter.
33. When I agree with my colleagues on fundamental issues related to teaching, I feel like I matter.
34. When I enjoy being around my colleagues, I feel like I matter.
35. I feel like I matter to my colleagues when there is a sense of community in the organization.
36. When my colleagues look out for me, I feel like I matter.
37. I feel like I matter when things get tough and we all pull together.
38. I feel like I matter when my colleagues help me.
39. When I can rely on my colleagues to help me, I feel like I matter.
40. In my school, I feel I matter when everyone looks out for each other.
41. I feel like I matter to my coworkers/colleagues when they appreciate my support and help.
42. When I accomplish more working with colleagues rather than working alone, I feel like I matter to the group.
43. When I can do more work together, I feel like I matter to the group.

44. I feel synergy working with my colleagues, I get the sense that I matter to the group.
45. When I feel that my colleagues and I are equal partners, I feel that I matter to the group.
46. When I feel like I work with a great team, I feel like I matter to the team.
47. When I feel like I matter to my colleagues/coworkers, I feel better about my job.
48. When my coworkers/colleagues value my ideas and suggestions, I feel like I matter to the group.
49. If I really mattered to my coworkers/colleagues, they would be disappointed if they knew that I might leave my job.
50. If I really mattered to my boss/supervisor, they would be disappointed if they knew that I might leave my job.
51. When I am able to make adjustments to my work to be more productive, I feel like I matter to my supervisor.
52. When I can make changes to my job to make things run smoother, I feel like I matter to my supervisor.
53. When I feel like I matter, I look for ways to do my job better.
54. I feel like I matter when my colleagues and I share ideas on how to improve.
55. When I am empowered to change daily routines, I feel like I matter to my supervisor.
56. When I have the flexibility to personalize my surroundings to help me do my job, I feel like I matter.
57. I feel like I matter when those outside education value my expertise.
58. I feel like I matter when people in society understand teaching fills a societal need.
59. I feel like I matter when people who don't know exactly what I do but still understand I have an important job.
60. When society values the job I do, I feel like I matter.
61. When teaching is respected, I feel like I matter.
62. When I feel like my work influences people's lives, I feel like I matter.
63. When people outside of education take my advice about education, I feel like I matter.
64. The amount of pay shows how much society values educators.
65. If teachers were valued more, they would be paid more.
66. When I get a raise, I feel like I really matter.
67. If teachers mattered to society, they would be paid more.
68. When I am given gifts as a teacher, I feel like I matter.
69. The more I am paid, the more I feel like I matter.
70. When society at large appreciates the work I do as a teacher, I feel like I matter.
71. When people have a good understanding of what teachers do, I feel like I matter.
72. When people that I don't know thank me for the job I am doing as a teacher, I feel like I matter.
73. When people say that my work influenced their life, I feel like I matter.
74. When my efforts are recognized, I feel like I matter.
75. When someone makes me feel important as a teacher, I feel like I matter.
76. When I am connected to society through my work, I feel like I matter.
77. When someone genuinely appreciates the work I do, I feel like I matter.

78. When I am able to successfully do what is expected of me as a teacher, I feel like I matter.
79. When I have a positive impact on students, I feel like I matter.
80. When I believe I can positively influence student outcomes, I feel like I matter.
81. When I am effective at my job, I feel like I matter.
82. When I do something at my job, and I am successful, I feel like I matter.
83. I feel like it matters when teachers have a fairly stable job compared to the rest of society.
84. Job security makes me feel like I matter.
85. Knowing that I have a steady paycheck makes me feel like I matter.
86. Protection from arbitrary termination makes me feel like I matter.
87. Participating in collective bargaining agreements make me feel like I matter.
88. When I am able to set meaningful goals, I feel like I matter.
89. When I am able to set challenging goals, even if I fall short, I feel like I matter.
90. When goals are used in a way to grow rather that control, I feel like I matter.
91. Creating professional goals helps me create meaning in my work.
92. It matters when my supervisor understands and supports the goals I have created.
93. It matters when the values of the organization align with my values.
94. When my supervisor understands and respects my personal values, I feel like I matter.
95. When my values align with my colleagues, I feel like I matter.
96. When my values align with my organization, I feel like I matter.
97. When my colleagues respect my personal values, I feel like I matter.
98. It matters when I can be the same person at home that I am at work.
99. When I don't have to pretend to be a different person at work, I feel like I matter.
100. It matters that I can be my "authentic self" at work.
101. It matters when I don't have to compromise my feelings at work.
102. When I don't have to have a different "image" a work, I feel like I matter.

APPENDIX B: WORK MATTERING SCALE

Work Mattering Scale (Jung, 2015)

Factor 1: Societal Mattering

1. I think that society values the work I do.
2. I feel my work meets a societal need.
3. I am connected to society through my work.
4. People say that my work influenced their life.
5. My work influences people's lives.

Factor 2: Interpersonal Mattering

1. My coworkers/colleagues would be disappointed if they knew that I might leave my job.
2. I feel like I matter to my colleagues/coworkers.
3. My coworkers/colleagues value my ideas and suggestions.
4. My boss/supervisor would be disappointed if they knew that I might leave my job.
5. My coworkers/colleagues appreciate my support and help.

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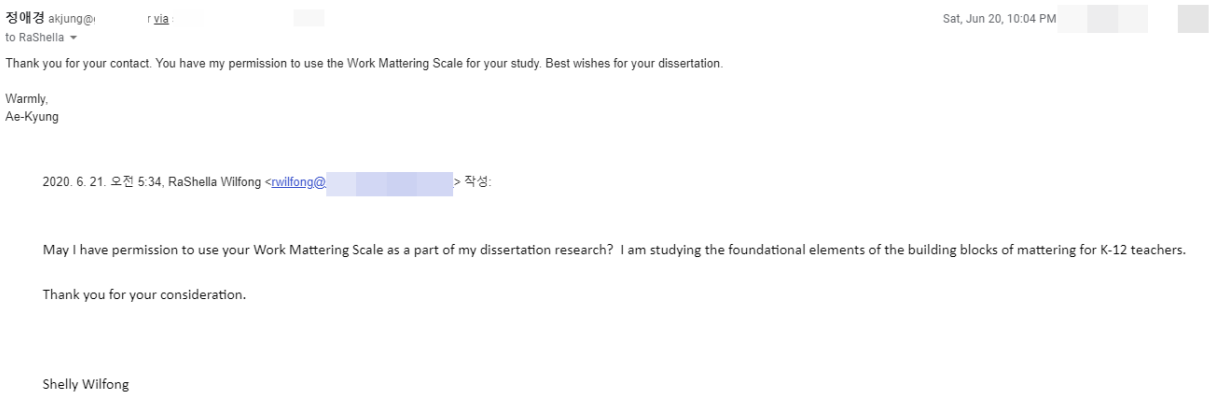

정애경 akjung@ r via Sat, Jun 20, 10:04 PM
to RaShella

Thank you for your contact. You have my permission to use the Work Mattering Scale for your study. Best wishes for your dissertation.

Warmly,
Ae-Kyung

2020. 6. 21. 오전 5:34, RaShella Wilfong <rwilfong@ > 작성:

May I have permission to use your Work Mattering Scale as a part of my dissertation research? I am studying the foundational elements of the building blocks of mattering for K-12 teachers.

Thank you for your consideration.

Shelly Wilfong

APPENDIX C: SURVEY (PART III) QUESTION CATEGORIES

Items in bold italics are reworded questions from the (Work Mattering Scale, Jung, 2015)

Purpose

Mission (Existence, Relatedness, and Growth Theory)	1. When I feel my work meets a societal need, I feel like I matter. 2. When I feel connected to society through my work, I feel like I matter. 3. When I feel like teaching matters, I think about teaching even on my days off. 4. When my work has meaning, I feel like I matter. 5. When I feel like I matter, I am the best version of myself.
Ikigai (Existence, Relatedness, and Growth Theory)	1. When I believe I was called to do this job, I feel like I matter as a teacher. 2. When I know why I am a teacher, I feel like I matter. 3. Just being a teacher makes me feel like I matter. 4. When I feel a "pull" toward teaching, I feel like I matter. 5. I feel teaching is a "reason for being."
Golden Circle - Why (Existence, Relatedness, and Growth Theory)	1. When I have an understanding of why I have to do certain things in my work, I feel like my work matters. 2. When I have a sense of why my job is important, I feel like I matter. 3. When I think about teaching as part of my legacy, I feel like I matter. 4. Teaching is important to society. 5. When I feel passionate about my job, I feel like I matter. 6. When I feel like I matter, teaching is an essential part of who I am.
Identification (Existence, Relatedness, and Growth Theory)	1. When I feel like I matter in my job, I don't mind doing tasks that I am asked to do because it helps the organization reach its goals. 2. When I feel like I matter in my job, I do tasks that I don't like when I know it helps the overall goal. 3. When I feel like I matter in my job, I will do tasks I don't like if I know it will serve a higher purpose with the organization. 4. When I feel like I matter in my job, I seek out additional opportunities to grow because it will help me do my job better. 5. When I feel like I matter in my job, there are tasks that I don't enjoy doing, but I know it will help me do my job, so I don't mind doing them. 6. When I feel like I matter, teaching is an essential part of who I am.
Flow (Existence, Relatedness,	1. When I feel like what I am doing matters, I lose track of time. 2. When I feel like what I am doing matters, time seems to go faster.

and Growth Theory)	3. When I feel like what I am doing matters, I often wonder where the time went. 4. When I feel like what I am doing matters, the day seems to fly by. 5. When I feel like I matter as a teacher, I don't mind Mondays because I have a whole week to teach. 6. When I feel like what I am doing matters, I get totally immersed in what I am doing. 7. When I feel like what I am doing matters, I can enjoy doing the most tedious tasks.

Belonging

Tribes (Existence, Relatedness, and Growth Theory)	1. When I feel I belong with my colleagues, I feel like I matter. 2. When I have a lot in common with my colleagues, I feel like I matter. 3. When I feel that my colleagues really care about me, I feel like I matter. 4. When I agree with my colleagues on fundamental issues related to teaching, I feel like I matter. 5. When I enjoy being around my colleagues, I feel like I matter. 6. I feel like I matter to my colleagues when there is a sense of community in the organization.
Moai (Existence, Relatedness, and Growth Theory)	1. When my colleagues look out for me, I feel like I matter. 2. I feel like I matter when things get tough and we all pull together. 3. I feel like I matter when my colleagues help me. 4. When I can rely on my colleagues to help me, I feel like I matter. 5. In my school, I feel I matter when everyone looks out for each other. ***6. I feel like I matter to my coworkers/colleagues when they appreciate my support and help.***
Great Groups (Existence, Relatedness, and Growth Theory)	1. When I accomplish more working with colleagues rather than working alone, I feel like I matter to the group. 2. When I can do more work together, I feel like I matter to the group. 3. I feel synergy working with my colleagues, I get the sense that I matter to the group. 4. When I feel that my colleagues and I are equal partners, I feel that I matter to the group. 5. When I feel like I work with a great team, I feel like I matter to the team. ***6. When I feel like I matter to my colleagues/coworkers, I feel better about my job.*** ***7. When my coworkers/colleagues value my ideas and suggestions, I feel like I matter to the group.*** ***8. If I really mattered to my coworkers/colleagues, they would be disappointed if they knew that I might leave my job.***

	9. If I really mattered to my boss/supervisor, they would be disappointed if they knew that I might leave my job.
Job Crafting (Existence, Relatedness, and Growth Theory)	1. When I am able to make adjustments to my work to be more productive, I feel like I matter to my supervisor. 2. When I can make changes to my job to make things run smoother, I feel like I matter to my supervisor. 3. When I feel like I matter, I look for ways to do my job better. 4. I feel like I matter when my colleagues and I share ideas on how to improve. 5. When I am empowered to change daily routines, I feel like I matter to my supervisor. 6. When I have the flexibility to personalize my surroundings to help me do my job, I feel like I matter.

Validation (extrinsic)

Affirmation (Herzberg Motivator Hygiene Theory)	1. I feel like I matter when those outside education value my expertise. ***2. I feel like I matter when people in society understand teaching fills a societal need.*** 3. I feel like I matter when people who don't know exactly what I do still know I have an important job. ***4. When society values the job I do, I feel like I matter.*** 5. When teaching is respected, I feel like I matter. ***6. When I feel like my work influences people's lives, I feel like I matter.*** 7. When people outside of education take my advice about education, I feel like I matter.
Compensation/ Salary (Herzberg Motivator Hygiene Theory)	1. The amount of pay shows how much society values educators. 2. If teachers were valued more, they would be paid more. 3. When I get a raise, I feel like I really matter. 4. If teachers mattered to society, they would be paid more. 5. When I am given gifts as a teacher, I feel like I matter. 6. The more I am paid, the more I feel like I matter.
Appreciation/ Bestowed Status (Herzberg Motivator Hygiene Theory)	1. When society at large appreciates the work I do as a teacher, I feel like I matter. 2. When people have a good understanding of what teachers do, I feel like I matter. 3. When people that I don't know thank me for the job I am doing as a teacher, I feel like I matter. ***4. When people say that my work influenced their life, I feel like I matter.*** 5. When my efforts are recognized, I feel like I matter.

	6. When someone makes me feel important as a teacher, I feel like I matter. 7. When I am connected to society through my work, I feel like I matter. 8. When someone genuinely appreciates the work I do, I feel like I matter.

Efficacy (Goal Setting Theory)	1. When I am able to successfully do what is expected of me as a teacher, I feel like I matter. 2. When I have a positive impact on students, I feel like I matter. 3. When I believe I can positively influence student outcomes, I feel like I matter. 4. When I am effective at my job, I feel like I matter. 5. When I do something at my job, and I am successful, I feel like I matter.
Job Security (Herzberg Motivator Hygiene Theory)	1. I feel like it matters when teachers have a fairly stable job compared to the rest of society. 2. Job security makes me feel like I matter. 3. Knowing that I have a steady paycheck makes me feel like I matter. 4. Protection from arbitrary termination makes me feel like I matter. 5. Participating in collective bargaining agreements make me feel like I matter.
Goals (Goal Setting Theory)	1. When I am able to set meaningful goals, I feel like I matter. 2. When I am able to set challenging goals, even if I fall short, I feel like I matter. 3. When goals are used in a way to grow rather than control, I feel like I matter. 4. Creating professional goals helps me create meaning in my work. 5. It matters when my supervisor understands and supports the goals I have created.
Personal Values (Regulatory Focus Theory)	1. It matters when the values of the organization align with my values. 2. When my supervisor understands and respects my personal values, I feel like I matter. 3. When my values align with my colleagues, I feel like I matter. 4. When my values align with my organization, I feel like I matter. 5. When my colleagues respect my personal values, I feel like I matter.
Authentic Self (Regulatory Focus Theory)	1. It matters when I can be the same person at home that I am at work. 2. When I don't have to pretend to be a different person at work, I feel like I matter. 3. It matters that I can be my "authentic self" at work. 4. It matters when I don't have to compromise my feelings at work.

	5. When I don't have to have a different "image" a work, I feel like I matter.

APPENDIX D: INFORMED CONSENT SURVEY

THE BUILDING BLOCKS OF MATTERING IN THE K–12 CLASSROOM

You are being invited to participate in a research study. This study aims to find out ***what criteria should be met for teachers to feel they matter as a teacher***. You can help me answer this question by completing this anonymous survey, which should take you about ***20 minutes.***

Some reasons you might want to participate in this research are ***to help identify elements necessary for teachers to feel valued and to increase the job satisfaction of teachers***. Some reasons you might not want to participate in this research are ***you are no longer a K–12 teacher.***

The choice to participate or not is yours; participation is entirely voluntary. You also can choose to answer or not answer any question you like, and to exit the survey if you wish to stop participating. No one will know whether you participated or not.

The survey asks questions about ***how or when you feel like you matter to your colleagues and society***. You have been asked to participate in this research because ***you are a K–12 classroom teacher***.

Although every effort will be made to protect your privacy, complete anonymity cannot be guaranteed over the Internet. Other potential risks of the study include ***loss of confidentiality due to a data breach or frustration with your current teaching situation.***

It is unlikely that you will benefit directly by participating in this study, but the research results may benefit ***the teacher profession by gaining a better understanding of what makes a teacher feel they matter***.

If you have any questions, please contact Shelly Wilfong, (574) 318-8953, rwilfong@sycamores.indstate.edu. You may also contact my faculty sponsor, Dr. Ryan Donlan, at ryan.donlan@indstate.edu

If you have any questions about your rights as a research subject or if you feel you have been placed at risk, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-3088, or by email at irb@indstate.edu.

APPENDIX E: EMAIL TO PROSPECTIVE PARTICIPANTS

A Study on the Building Blocks of Mattering for K–12 Teachers

Thank you for your time and work as a classroom teacher.

I am a doctoral candidate at Indiana State University and am conducting a study on teachers' sense of mattering as a teaching professional. The objective of this study is to determine what is necessary for a teacher to feel like they matter as a professional educator.

This survey will take about 20 minutes to complete. At the beginning of the survey, you will be asked to provide some general information about your current teaching position. Next, you will be asked to respond to answer a series of questions regarding how much you would feel like you matter, given a certain situation.

I am trying to get a diverse population of teachers from across the United States. I would greatly appreciate you passing this link on to your fellow educators.

This survey is anonymous. If you choose to participate, your responses will be confidential. Because this is a web-based survey, absolute confidentiality cannot be guaranteed; however, the researcher will not collect any participant IP addresses or attempt to identify the participants. No one will be able to identify you, your answers, or your participation in this study. You will have an opportunity to include your email for potential follow-up questions.

Your participation in this study is completely voluntary, and there is no penalty if you choose not to participate. If you choose to complete part or all of the survey, you voluntarily agree to participate. If at any time you want to exit the study, simply close out of the survey without submitting your answers. Partial data will not be used in study results. Due to the data collection procedures, we will not be able to delete individual responses once the survey has been submitted.
If you have any questions or concerns about this study, please contact me at (574) 318-8953 or rwilfong@sycamores.indstate.edu. You may also contact my faculty sponsor, Dr. Ryan Donlan, at ryan.donlan@indstate.edu. If you have any questions about your rights as a research subject, you may contact the Indiana State University Institutional Review Board (IRB) by mail at Indiana State University, Office of Sponsored Programs, Terre Haute, IN 47809, by phone at (812) 237-3088, or e-mail irb@indstate.edu.

Thank you for your time and consideration,
Shelly Wilfong
Principal Investigator

APPENDIX F: DESCRIPTIVE STATISTICS

Question	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
Question	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
1	1074	-50.00	50.00	30.4032	17.18976	295.488	-1.291	0.075	2.760	0.149
2	1054	-50.00	50.00	22.0911	21.04531	442.905	-1.036	0.075	1.107	0.151
3	1080	-50.00	50.00	19.8324	23.58584	556.292	-0.860	0.074	0.080	0.149
4	1092	-50.00	50.00	32.9881	16.28039	265.051	-1.570	0.074	4.107	0.148
5	1075	-50.00	50.00	30.9256	17.59894	309.723	-1.390	0.075	2.664	0.149
6	1060	-50.00	50.00	28.0585	21.95859	482.180	-1.351	0.075	1.778	0.150
7	1066	-50.00	50.00	30.1773	18.53745	343.637	-1.291	0.075	2.132	0.150
8	1067	-50.00	50.00	19.8688	24.37446	594.114	-0.930	0.075	0.325	0.150
9	1050	-50.00	50.00	26.2352	18.87698	356.340	-1.108	0.075	1.805	0.151
10	1048	-50.00	50.00	15.6145	27.26747	743.515	-0.754	0.076	-0.300	0.151
11	1048	-50.00	50.00	27.5181	17.50873	306.556	-0.955	0.076	1.359	0.151
12	105	-50.00	50.00	32.8131	15.33117	235.045	-1.120	0.075	2.185	0.151
13	1033	-50.00	50.00	26.5353	23.31502	543.590	-1.225	0.076	1.163	0.152
14	1072	-50.00	50.00	36.5970	18.05076	325.830	-1.975	0.075	4.698	0.149
15	1069	-46.00	50.00	34.8765	15.65576	245.103	-1.345	0.075	2.431	0.149
16	1039	-50.00	50.00	28.0606	20.42721	417.271	-1.159	0.076	1.281	0.152
17	1051	-50.00	50.00	28.8582	17.82983	317.903	-1.092	0.075	1.690	0.151
18	1036	-50.00	50.00	23.1583	20.38215	415.432	-0.898	0.076	0.871	0.152
19	1046	-50.00	50.00	25.4092	18.36167	337.151	-0.973	0.076	1.392	0.151
20	1049	-50.00	50.00	24.4538	20.16355	406.569	-1.021	0.076	1.179	0.151
21	1017	-50.00	50.00	18.2517	21.01536	441.645	-0.633	0.077	0.113	0.153
22	1036	-50.00	50.00	27.5290	20.70786	428.816	-1.190	0.076	1.525	0.152
23	1029	-50.00	50.00	26.4655	20.22207	408.932	-1.140	0.076	1.418	0.152
24	1037	-50.00	50.00	29.0858	18.13440	328.857	-1.233	0.076	2.167	0.152
25	1032	-50.00	50.00	28.8692	18.72594	350.661	-1.166	0.076	1.850	0.152
26	1028	-50.00	50.00	27.1702	19.12902	365.919	-1.074	0.076	1.299	0.152
27	993	-50.00	50.00	9.4028	26.76456	716.342	-0.365	0.078	-0.694	0.155
28	1034	-50.00	50.00	29.9168	17.43889	304.115	-1.223	0.076	2.259	0.152
29	1009	-50.00	50.00	14.4242	24.09209	580.429	-0.551	0.077	-0.311	0.154
30	1035	-50.00	50.00	26.6367	20.53989	421.887	-1.234	0.076	1.712	0.152
31	1043	-50.00	50.00	31.6798	15.59243	243.124	-1.204	0.076	3.093	0.151
32	1002	-50.00	50.00	24.9112	20.66640	427.100	-1.069	0.077	1.171	0.154

Question	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
Question	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
33	996	-50.00	50.00	24.2952	19.94936	397.977	-1.011	0.077	1.105	0.155
34	1017	-50.00	50.00	28.3029	18.47691	341.396	-1.200	0.077	2.161	0.153
35	1024	-50.00	50.00	28.8311	18.61478	346.510	-1.254	0.076	2.165	0.153
36	1039	-50.00	50.00	32.2474	17.15523	294.302	-1.357	0.076	2.727	0.152
37	1043	-50.00	50.00	30.0844	17.78536	316.319	-1.286	0.076	2.612	0.151
38	1049	-50.00	50.00	31.3308	15.98879	255.641	-1.339	0.076	3.575	0.151
39	1023	-50.00	50.00	25.3803	21.20654	449.717	-1.112	0.076	1.244	0.153
40	1022	-50.00	50.00	24.9697	23.81462	567.136	-1.173	0.077	1.005	0.153
41	1023	-50.00	50.00	22.8700	20.88450	436.162	-1.041	0.076	1.145	0.153
42	1048	-50.00	50.00	30.1260	17.57607	308.918	-1.303	0.076	2.501	0.151
43	1013	-50.00	50.00	23.3149	20.99446	440.767	-1.175	0.077	1.664	0.154
44	1047	-50.00	50.00	30.7813	18.42122	339.341	-1.479	0.076	3.047	0.151
45	1031	-50.00	50.00	27.1513	17.95113	322.243	-1.125	0.076	1.912	0.152
46	1046	-50.00	50.00	31.0956	17.69817	313.225	-1.386	0.076	2.746	0.151
47	1061	-50.00	50.00	32.3959	16.86080	284.287	-1.490	0.075	3.322	0.150
48	1055	-50.00	50.00	31.4218	16.87214	284.669	-1.271	0.075	2.629	0.150
49	1059	-50.00	50.00	31.3843	17.72907	314.320	-1.367	0.075	2.600	0.150
50	1047	-50.00	50.00	28.4642	17.46826	305.140	-1.003	0.076	1.534	0.151
51	1066	-47.00	50.00	31.9099	15.27523	233.333	-0.867	0.075	1.059	0.150
52	1062	-50.00	50.00	32.3333	15.43617	238.275	-1.034	0.075	1.680	0.150
53	1051	-50.00	50.00	30.8982	15.60806	243.612	-0.872	0.075	1.157	0.151
54	1054	-50.00	50.00	29.4507	17.23661	297.101	-1.192	0.075	2.182	0.151
55	1050	-44.00	50.00	30.5943	17.22191	296.594	-1.097	0.075	1.387	0.151
56	1060	-50.00	50.00	32.6396	16.65884	277.517	-1.281	0.075	2.179	0.150
57	1055	-50.00	50.00	33.3365	17.42579	303.658	-1.687	0.075	4.136	0.150
58	1056	-50.00	50.00	31.7945	18.56288	344.580	-1.429	0.075	2.608	0.150
59	1052	-50.00	50.00	29.3460	17.85495	318.799	-1.125	0.075	1.736	0.151
60	1060	-50.00	50.00	32.4123	18.95706	359.370	-1.562	0.075	3.087	0.150
61	1037	-50.00	50.00	31.1630	19.08378	364.191	-1.553	0.076	3.072	0.152
62	1038	-50.00	50.00	29.7881	20.83358	434.038	-1.407	0.076	2.202	0.152
63	1072	-50.00	50.00	39.8050	13.36719	178.682	-1.747	0.075	4.273	0.149
64	1061	-50.00	50.00	33.1461	17.36018	301.376	-1.292	0.075	2.172	0.150
65	1049	-50.00	50.00	34.0810	16.75133	280.607	-1.420	0.076	2.959	0.151
66	1031	-50.00	50.00	25.6615	20.06409	402.568	-1.123	0.076	1.659	0.152

Question	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
Question	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
67	1074	-38.00	50.00	38.7896	12.95258	167.769	-1.360	0.075	2.328	0.149
68	1055	-50.00	50.00	34.0123	15.95323	254.506	-1.487	0.075	3.476	0.150
69	1079	-30.00	50.00	42.2845	11.16928	124.753	-1.693	0.074	3.106	0.149
70	1077	-25.00	50.00	39.4178	12.82778	164.552	-1.463	0.075	2.482	0.149
71	1066	-50.00	50.00	33.8265	18.65815	348.127	-1.598	0.075	3.124	0.150
72	1077	-47.00	50.00	37.6156	13.76336	189.430	-1.167	0.075	1.378	0.149
73	1062	-50.00	50.00	31.4887	17.54105	307.688	-1.246	0.075	2.171	0.150
74	1045	-50.00	50.00	23.9713	27.82824	774.411	-1.088	0.076	0.290	0.151
75	1055	-50.00	50.00	34.0635	19.85710	394.304	-1.559	0.075	2.476	0.150
76	1015	-50.00	50.00	22.8128	21.62703	467.728	-0.765	0.077	0.602	0.153
77	1054	-50.00	50.00	32.6404	20.90467	437.005	-1.427	0.075	1.878	0.151
78	990	-50.00	50.00	9.5616	26.22061	687.520	-0.478	0.078	-0.349	0.155
79	1014	-50.00	50.00	18.2140	26.01572	676.818	-0.704	0.077	-0.232	0.153
80	1063	-50.00	50.00	32.4064	18.97263	359.961	-1.529	0.075	2.842	0.150
81	1069	-48.00	50.00	36.9991	13.32330	177.510	-1.171	0.075	1.858	0.149
82	1062	-50.00	50.00	34.6638	14.34124	205.671	-1.045	0.075	1.461	0.150
83	1030	-50.00	50.00	24.7718	21.11294	445.756	-1.049	0.076	1.092	0.152
84	1021	-50.00	50.00	24.6709	21.55930	464.803	-0.960	0.077	0.810	0.153
85	1033	-50.00	50.00	28.6234	19.45887	378.648	-0.963	0.076	0.922	0.152
86	1017	-50.00	50.00	22.5034	24.26345	588.715	-0.978	0.077	0.551	0.153
87	968	-50.00	50.00	7.8223	28.11605	790.512	-0.374	0.079	-0.763	0.157
88	1027	-50.00	50.00	27.3126	17.13030	293.447	-0.910	0.076	1.280	0.152
89	1015	-50.00	50.00	24.0453	18.68386	349.087	-0.927	0.077	1.220	0.153
90	1046	-50.00	50.00	29.9493	18.52675	343.240	-1.347	0.076	2.449	0.151
91	1020	-50.00	50.00	20.7588	22.98241	528.191	-0.966	0.077	0.609	0.153
92	1041	-50.00	50.00	32.1422	17.87206	319.411	-1.600	0.076	3.503	0.151
93	1033	-50.00	50.00	28.3833	18.76668	352.188	-1.292	0.076	2.251	0.152
94	1038	-50.00	50.00	31.0973	18.70816	349.995	-1.567	0.076	3.513	0.152
95	1003	-50.00	50.00	22.8385	21.16813	448.090	-0.997	0.077	0.924	0.154
96	1022	-50.00	50.00	26.4883	20.24723	409.950	-1.205	0.077	1.744	0.153
97	1035	-50.00	50.00	27.7565	19.19685	368.519	-1.222	0.076	1.965	0.152
98	1009	-50.00	50.00	25.6769	21.99199	483.647	-1.083	0.077	0.840	0.154
99	1019	-50.00	50.00	26.5388	21.79966	475.225	-1.194	0.077	1.274	0.153
100	1034	-50.00	50.00	29.9265	19.05803	363.209	-1.263	0.076	2.024	0.152

Question	N	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
Question	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
101	1021	-50.00	50.00	26.5475	20.87181	435.632	-1.178	0.077	1.441	0.153
102	997	-50.00	50.00	24.8074	21.54278	464.091	-1.016	0.077	0.899	0.155

APPENDIX G: ITEM-TOTAL STATISTICS

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
1	2952.2709	1209536.400	0.522	0.671	0.980
2	2960.2809	1201876.060	0.601	0.650	0.980
3	2962.4113	1205047.518	0.460	0.632	0.980
4	2949.3830	1210566.379	0.547	0.705	0.980
5	2951.5191	1209218.392	0.525	0.605	0.980
6	2953.7801	1206843.572	0.487	0.700	0.980
7	2951.7858	1207648.436	0.540	0.689	0.980
8	2961.0965	1204122.991	0.487	0.547	0.980
9	2955.7035	1207333.717	0.537	0.650	0.980
10	2964.8440	1200116.794	0.506	0.672	0.980
11	2954.2255	1203567.007	0.677	0.644	0.980
12	2949.3972	1205086.032	0.727	0.737	0.980
13	2955.0468	1199042.775	0.604	0.676	0.980
14	2945.5475	1210538.194	0.482	0.495	0.980
15	2946.8142	1207466.941	0.654	0.697	0.980
16	2953.7305	1201040.407	0.648	0.804	0.980
17	2953.2496	1203649.875	0.664	0.657	0.980
18	2958.5901	1202527.538	0.609	0.745	0.980
19	2956.7035	1205645.800	0.602	0.748	0.980
20	2957.4695	1202349.241	0.620	0.768	0.980
21	2963.2837	1199888.002	0.654	0.747	0.980
22	2954.0582	1199379.731	0.664	0.809	0.980
23	2955.6582	1204761.293	0.565	0.671	0.980
24	2952.4950	1205449.336	0.631	0.748	0.980
25	2953.1021	1204497.470	0.625	0.738	0.980
26	2954.7035	1205994.399	0.570	0.701	0.980
27	2972.1504	1197049.514	0.549	0.612	0.980
28	2951.7021	1205738.175	0.635	0.758	0.980
29	2966.8468	1199110.860	0.573	0.689	0.980
30	2954.4582	1199555.612	0.701	0.698	0.980
31	2950.3929	1205236.605	0.718	0.808	0.980
32	2956.7589	1203250.101	0.590	0.678	0.980
33	2957.6284	1201452.302	0.654	0.712	0.980
34	2953.7546	1199503.202	0.742	0.791	0.980
35	2953.2255	1202096.891	0.673	0.735	0.980
36	2949.8454	1205026.000	0.669	0.746	0.980

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
37	2951.5830	1203370.224	0.694	0.802	0.980
38	2950.4085	1205672.427	0.696	0.785	0.980
39	2955.8837	1200515.140	0.638	0.728	0.980
40	2957.2553	1200104.406	0.548	0.643	0.980
41	2958.7504	1200278.935	0.644	0.828	0.980
42	2951.4156	1204737.164	0.678	0.742	0.980
43	2958.3291	1201380.357	0.631	0.818	0.980
44	2950.3546	1203408.726	0.680	0.779	0.980
45	2954.5021	1205292.395	0.638	0.631	0.980
46	2950.4752	1204830.503	0.650	0.761	0.980
47	2949.3504	1206283.236	0.653	0.699	0.980
48	2950.2965	1204942.121	0.675	0.768	0.980
49	2950.2298	1203901.927	0.681	0.722	0.980
50	2952.9532	1204420.869	0.674	0.759	0.980
51	2950.3887	1206127.863	0.679	0.762	0.980
52	2950.4085	1206976.268	0.637	0.700	0.980
53	2951.1333	1206077.832	0.666	0.704	0.980
54	2952.1574	1203902.042	0.692	0.690	0.980
55	2951.6766	1205065.429	0.640	0.695	0.980
56	2950.0780	1206419.720	0.607	0.646	0.980
57	2948.7660	1207136.316	0.591	0.722	0.980
58	2950.2213	1206973.829	0.549	0.720	0.980
59	2952.2582	1207392.288	0.578	0.602	0.980
60	2949.9787	1207630.308	0.514	0.739	0.980
61	2951.3546	1205247.076	0.571	0.604	0.980
62	2952.3546	1204971.286	0.541	0.617	0.980
63	2943.0411	1214194.346	0.521	0.636	0.980
64	2949.3603	1207032.714	0.578	0.630	0.980
65	2948.3716	1209356.089	0.542	0.688	0.980
66	2956.7305	1199995.223	0.660	0.683	0.980
67	2943.6681	1213583.205	0.583	0.689	0.980
68	2948.4184	1207758.616	0.611	0.604	0.980
69	2940.5858	1216880.138	0.508	0.670	0.980
70	2943.2652	1213207.013	0.574	0.675	0.980
71	2948.0695	1211166.835	0.464	0.642	0.980
72	2944.9319	1212581.296	0.567	0.636	0.980
73	2950.5390	1209285.874	0.528	0.559	0.980
74	2958.8511	1213502.172	0.250	0.455	0.980

Item	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
75	2948.7277	1217263.258	0.275	0.804	0.980
76	2959.4468	1210137.307	0.400	0.647	0.980
77	2950.2979	1216474.658	0.275	0.824	0.980
78	2972.0879	1206099.359	0.407	0.486	0.980
79	2964.3390	1212255.318	0.295	0.680	0.980
80	2949.7901	1209852.754	0.469	0.574	0.980
81	2945.2028	1212035.642	0.635	0.670	0.980
82	2947.4468	1210325.313	0.609	0.627	0.980
83	2957.4539	1204896.760	0.524	0.686	0.980
84	2958.2539	1207535.934	0.451	0.734	0.980
85	2954.0525	1209085.553	0.452	0.661	0.980
86	2960.0468	1206103.647	0.434	0.594	0.980
87	2974.2624	1204318.790	0.414	0.472	0.980
88	2954.4723	1207599.642	0.593	0.656	0.980
89	2957.8113	1205127.440	0.605	0.657	0.980
90	2951.8241	1206503.935	0.584	0.600	0.980
91	2960.5404	1200972.320	0.587	0.637	0.980
92	2950.5887	1206211.876	0.595	0.658	0.980
93	2953.8539	1205404.034	0.580	0.679	0.980
94	2951.4355	1204465.976	0.609	0.707	0.980
95	2958.5135	1202168.520	0.616	0.697	0.980
96	2955.4085	1201775.367	0.630	0.689	0.980
97	2953.6057	1204879.793	0.618	0.683	0.980
98	2956.1887	1202397.554	0.566	0.699	0.980
99	2955.7305	1201871.297	0.573	0.754	0.980
100	2951.7362	1205677.456	0.591	0.716	0.980
101	2955.7064	1203343.452	0.573	0.660	0.980
102	2957.1674	1202559.640	0.567	0.739	0.980

APPENDIX H: INITIAL COMMUNALITIES

Item	Initial	Extraction
1	0.580	0.600
2	0.591	0.612
3	0.534	0.482
4	0.617	0.608
5	0.528	0.499
6	0.629	0.659
7	0.641	0.631
8	0.508	0.490
9	0.612	0.614
10	0.559	0.507
11	0.626	0.579
12	0.583	0.502
13	0.401	0.329
14	0.622	0.584
15	0.691	0.625
16	0.572	0.538
17	0.695	0.714
18	0.685	0.685
19	0.709	0.728
20	0.688	0.643
21	0.646	0.662
22	--	--
23	0.698	0.696
24	0.706	0.699
25	0.667	0.674
26	0.555	0.515
27	0.699	0.720
28	0.626	0.566
29	0.639	0.606
30	0.771	0.750
31	0.633	0.618
32	0.665	0.653
33	0.731	0.716
34	0.685	0.659
35	0.704	0.705
36	0.769	0.767
37	0.752	0.726
38	0.698	0.725
39	0.595	0.622

Item	Initial	Extraction
40	0.641	0.627
41	0.708	0.698
42	0.728	0.724
43	--	--
44	0.554	0.510
45	0.713	0.705
46	0.646	0.609
47	0.733	0.718
48	0.681	0.657
49	0.722	0.704
50	0.698	0.725
51	0.648	0.665
52	0.640	0.633
53	0.631	0.605
54	0.610	0.613
55	0.597	0.585
56	0.656	0.635
57	0.692	0.685
58	0.540	0.517
59	0.708	0.698
60	0.535	0.472
61	0.545	0.509
62	0.565	0.540
63	0.561	0.554
64	0.585	0.580
65	0.588	0.580
66	0.631	0.640
67	0.537	0.494
68	0.610	0.605
69	0.606	0.566
70	0.594	0.623
71	0.539	0.521
72	0.519	0.489
73	0.398	0.380
74	0.470	0.464
75	0.585	0.620
76	0.418	0.369
77	--	--
78	0.603	0.677
79	0.553	0.516

Item	Initial	Extraction
80	0.608	0.565
81	0.554	0.494
82	0.630	0.638
83	0.681	0.761
84	0.602	0.627
85	0.504	0.492
86	0.409	0.348
87	0.594	0.658
88	0.587	0.624
89	0.551	0.542
90	0.555	0.548
91	0.612	0.545
92	0.656	0.638
93	0.664	0.607
94	0.615	0.567
95	0.672	0.657
96	0.652	0.608
97	0.661	0.663
98	0.717	0.747
99	0.680	0.681
100	0.629	0.625
101	0.698	0.705
102	0.596	0.584

Note: Extraction Method: Principal Axis Factoring.

APPENDIX H: INITIAL TOTAL VARIANCE EXPLAINED

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	32.586	32.915	32.915	32.208	32.533	32.533	12.565	12.692	12.692
2	5.859	5.919	38.834	5.475	5.530	38.064	7.507	7.583	20.275
3	4.116	4.158	42.991	3.726	3.763	41.827	5.335	5.389	25.664
4	3.410	3.445	46.436	3.034	3.064	44.891	5.326	5.379	31.043
5	2.935	2.965	49.401	2.563	2.589	47.481	4.383	4.427	35.470
6	2.602	2.628	52.029	2.206	2.228	49.709	4.070	4.111	39.582
7	2.157	2.179	54.208	1.810	1.828	51.537	4.045	4.086	43.668
8	1.912	1.931	56.139	1.512	1.528	53.065	3.413	3.448	47.115
9	1.866	1.885	58.024	1.464	1.479	54.544	3.244	3.277	50.393
10	1.465	1.480	59.504	1.073	1.084	55.628	2.865	2.894	53.286
11	1.444	1.459	60.963	1.043	1.053	56.681	1.836	1.854	55.140
12	1.391	1.405	62.367	1.016	1.026	57.707	1.198	1.210	56.350
13	1.254	1.266	63.634	0.885	0.894	58.601	1.165	1.176	57.526
14	1.149	1.161	64.795	0.765	0.773	59.374	1.118	1.130	58.656
15	1.085	1.096	65.891	0.706	0.713	60.087	1.107	1.118	59.774
16	1.058	1.069	66.959	0.663	0.670	60.756	0.973	0.983	60.756
17	0.970	0.979	67.939						
18	0.854	0.862	68.801						
19	0.824	0.833	69.633						
20	0.806	0.814	70.448						
21	0.765	0.773	71.221						
22	0.737	0.744	71.965						
23	0.711	0.718	72.683						
24	0.706	0.713	73.396						
25	0.693	0.700	74.096						
26	0.683	0.690	74.786						
27	0.656	0.663	75.449						
28	0.649	0.655	76.104						
29	0.608	0.614	76.719						
30	0.586	0.592	77.310						
31	0.585	0.590	77.901						
32	0.560	0.565	78.466						
33	0.556	0.561	79.028						
34	0.541	0.546	79.574						
35	0.536	0.541	80.115						
36	0.531	0.537	80.652						

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
37	0.512	0.517	81.169						
38	0.503	0.508	81.677						
39	0.494	0.499	82.176						
40	0.480	0.485	82.661						
41	0.474	0.478	83.139						
42	0.468	0.473	83.612						
43	0.454	0.458	84.070						
44	0.446	0.451	84.521						
45	0.437	0.442	84.962						
46	0.427	0.431	85.394						
47	0.419	0.424	85.817						
48	0.408	0.412	86.229						
49	0.402	0.406	86.635						
50	0.395	0.399	87.035						
51	0.383	0.387	87.422						
52	0.378	0.382	87.804						
53	0.372	0.375	88.179						
54	0.367	0.371	88.550						
55	0.361	0.364	88.914						
56	0.358	0.362	89.276						
57	0.354	0.357	89.633						
58	0.349	0.353	89.986						
59	0.342	0.345	90.331						
60	0.338	0.341	90.672						
61	0.331	0.335	91.007						
62	0.326	0.329	91.336						
63	0.322	0.326	91.662						
64	0.313	0.316	91.978						
65	0.305	0.308	92.286						
66	0.302	0.305	92.591						
67	0.300	0.303	92.894						
68	0.293	0.296	93.190						
69	0.287	0.290	93.480						
70	0.279	0.282	93.762						
71	0.278	0.280	94.043						
72	0.270	0.273	94.316						
73	0.263	0.266	94.581						
74	0.260	0.262	94.844						

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
75	0.255	0.258	95.101						
76	0.251	0.253	95.355						
77	0.248	0.250	95.605						
78	0.245	0.247	95.852						
79	0.239	0.242	96.094						
80	0.235	0.237	96.331						
81	0.232	0.235	96.566						
82	0.229	0.231	96.798						
83	0.225	0.228	97.025						
84	0.221	0.223	97.249						
85	0.217	0.219	97.468						
86	0.212	0.214	97.682						
87	0.206	0.208	97.890						
88	0.202	0.204	98.094						
89	0.195	0.197	98.290						
90	0.191	0.193	98.483						
91	0.188	0.190	98.673						
92	0.182	0.184	98.857						
93	0.179	0.181	99.039						
94	0.171	0.172	99.211						
95	0.166	0.168	99.379						
96	0.161	0.163	99.542						
97	0.159	0.161	99.703						
98	0.153	0.154	99.857						
99	0.141	0.143	100.000						

Note: Extraction Method: Principal Axis Factoring.

APPENDIX J: PARALLEL ANALYSIS

Component or Factor	Mean Eigenvalue	Percentile Eigenvalue
1	1.690659	1.733111
2	1.644493	1.674996
3	1.616943	1.645531
4	1.587501	1.609876
5	1.56472	1.584359
6	1.543218	1.564751
7	1.520638	1.541449
8	1.500488	1.521669
9	1.481755	1.501545
10	1.463483	1.48343
11	1.446227	1.464132
12	1.428196	1.446014
13	1.412028	1.426256
14	1.396689	1.415261
15	1.380303	1.397926
16	1.365679	1.383999
17	1.35122	1.367496
18	1.335533	1.350717
19	1.322543	1.335822
20	1.308479	1.323185
21	1.294143	1.308684
22	1.281929	1.294474
23	1.269095	1.280381
24	1.255417	1.266463
25	1.242319	1.253498
26	1.228485	1.243274
27	1.217212	1.230672
28	1.204448	1.216209
29	1.191599	1.202877
30	1.180567	1.195276
31	1.168879	1.183818
32	1.1578	1.168836
33	1.146913	1.158583
34	1.134662	1.146271
35	1.124976	1.135857
36	1.112472	1.123511
37	1.101531	1.112259

Component or Factor	Mean Eigenvalue	Percentile Eigenvalue
38	1.090045	1.101319
39	1.079549	1.088596
40	1.069479	1.077883
41	1.059208	1.068673
42	1.048431	1.057096
43	1.038175	1.050558
44	1.02823	1.037886
45	1.017591	1.027509
46	1.007454	1.01674
47	0.997603	1.007315
48	0.987172	0.999578
49	0.977195	0.988212
50	0.967555	0.976758
51	0.957333	0.966481
52	0.948826	0.957447
53	0.939844	0.948698
54	0.930099	0.942092
55	0.920463	0.930232
56	0.91119	0.922167
57	0.901721	0.912513
58	0.892268	0.901514
59	0.883001	0.894529
60	0.874293	0.882624
61	0.863856	0.87297
62	0.855182	0.864511
63	0.845444	0.85451
64	0.836624	0.84759
65	0.827554	0.837232
66	0.818492	0.827674
67	0.808935	0.818206
68	0.800283	0.809312
69	0.791132	0.802673
70	0.782383	0.792917
71	0.77352	0.782738
72	0.765457	0.774258
73	0.754628	0.762065
74	0.746108	0.754143
75	0.736584	0.746433

Component or Factor	Mean Eigenvalue	Percentile Eigenvalue
76	0.727126	0.735921
77	0.718334	0.727169
78	0.70978	0.720048
79	0.700498	0.710943
80	0.691243	0.700974
81	0.681373	0.693544
82	0.672322	0.682637
83	0.66314	0.672933
84	0.654232	0.664475
85	0.643991	0.653087
86	0.634748	0.644423
87	0.626005	0.63663
88	0.616233	0.628463
89	0.605807	0.6156
90	0.597108	0.60603
91	0.585956	0.595374
92	0.575719	0.587471
93	0.564762	0.574587
94	0.554548	0.566035
95	0.542286	0.554171
96	0.529141	0.543585
97	0.515368	0.528664
98	0.501214	0.51819
99	0.482915	0.50214

APPENDIX K: INITIAL FACTOR TRANSFORMATION MATRIX

Factor	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	0.554	0.369	0.323	0.304	0.265	0.249	0.261	0.245	0.189	0.132	0.159	0.097	-0.001	0.077	0.063	0.059
2	-0.441	0.615	-0.055	-0.194	0.378	-0.211	0.274	0.071	-0.053	-0.302	0.096	-0.036	-0.066	-0.083	-0.027	0.055
3	-0.563	-0.052	0.450	-0.089	-0.030	0.537	-0.053	0.228	0.112	0.302	-0.028	-0.048	-0.060	-0.038	-0.108	0.051
4	-0.309	-0.239	-0.376	0.449	0.182	-0.146	0.236	0.040	0.538	0.211	0.185	-0.033	0.122	0.091	-0.006	-0.015
5	0.190	0.050	-0.082	-0.703	0.019	-0.093	0.108	-0.113	0.447	0.411	0.026	0.036	0.049	-0.213	0.088	-0.025
6	-0.078	0.587	-0.117	0.272	-0.227	-0.028	-0.353	-0.378	0.065	0.387	-0.236	0.040	0.079	0.052	-0.109	0.105
7	0.067	-0.131	0.122	0.026	0.676	-0.257	-0.536	0.110	-0.002	0.167	-0.164	-0.102	-0.157	-0.072	-0.167	-0.129
8	-0.065	-0.151	0.162	0.011	0.312	-0.021	0.376	-0.415	-0.469	0.345	-0.026	0.123	0.416	0.048	-0.027	-0.069
9	0.076	0.053	-0.634	-0.073	0.105	0.309	0.060	0.422	-0.379	0.303	-0.153	-0.110	-0.045	-0.022	0.012	0.153
10	-0.138	0.112	0.042	0.006	-0.109	-0.200	-0.265	0.404	-0.108	0.116	0.166	0.363	0.379	0.006	0.497	-0.325
11	-0.023	0.036	0.163	0.053	-0.273	-0.437	0.226	0.146	-0.226	0.414	0.197	-0.237	-0.500	0.151	-0.048	-0.195
12	-0.051	0.005	-0.202	-0.100	0.182	0.323	-0.138	-0.329	-0.035	0.001	0.350	0.381	-0.451	0.365	0.150	-0.233
13	-0.032	-0.013	0.022	0.191	0.082	0.122	-0.051	-0.261	-0.071	0.039	0.137	-0.378	-0.171	-0.511	0.636	0.079
14	0.084	0.128	-0.100	-0.046	-0.046	0.199	-0.162	-0.043	-0.044	-0.046	0.507	-0.464	0.319	-0.067	-0.340	-0.444
15	0.001	-0.077	0.029	-0.031	-0.018	-0.148	-0.218	0.027	-0.136	0.096	0.599	0.185	0.056	-0.119	-0.173	0.674
16	-0.007	0.009	0.078	-0.184	0.082	-0.035	-0.115	-0.018	0.049	-0.013	-0.001	-0.469	0.192	0.697	0.336	0.282

Note: Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

APPENDIX L : FINAL FACTOR TRANSFORMATION MATRIX

Factor	1	2	3	4	5	6	7	8
1	0.639	0.368	0.365	0.354	0.249	0.244	0.129	0.244
2	-0.469	0.572	0.468	-0.210	-0.143	0.220	-0.339	0.076
3	-0.539	-0.149	0.164	0.219	0.674	0.073	0.375	0.112
4	0.223	0.060	-0.030	-0.857	0.316	0.197	0.265	-0.050
5	-0.084	0.679	-0.638	0.147	0.168	-0.068	0.124	-0.234
6	-0.004	0.215	0.348	-0.081	-0.210	-0.723	0.508	-0.048
7	-0.151	0.030	-0.239	-0.012	-0.456	0.323	0.477	0.616
8	-0.036	-0.053	0.187	0.144	-0.288	0.466	0.396	-0.695

Note: Extraction Method: Principal Axis Factoring.

Rotation Method: Varimax with Kaiser Normalization.

APPENDIX M: FINAL TOTAL VARIANCE EXPLAINED

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	13.772	34.431	34.431	13.423	33.558	33.558	6.996	17.490	17.490
2	3.463	8.658	43.089	3.099	7.747	41.305	3.630	9.075	26.565
3	2.770	6.925	50.014	2.413	6.033	47.337	3.388	8.469	35.034
4	2.211	5.528	55.542	1.891	4.727	52.064	3.379	8.448	43.482
5	1.827	4.568	60.110	1.453	3.632	55.696	2.591	6.477	49.959
6	1.707	4.267	64.377	1.381	3.453	59.149	2.079	5.197	55.155
7	1.429	3.573	67.950	1.107	2.768	61.916	1.826	4.565	59.720
8	1.240	3.099	71.049	0.917	2.293	64.209	1.796	4.489	64.209
9	0.721	1.801	72.851						
10	0.652	1.631	74.482						
11	0.591	1.478	75.960						
12	0.556	1.391	77.351						
13	0.502	1.255	78.606						
14	0.481	1.202	79.808						
15	0.472	1.181	80.989						
16	0.439	1.099	82.088						
17	0.429	1.074	83.162						
18	0.405	1.013	84.175						
19	0.399	0.997	85.172						
20	0.376	0.941	86.113						
21	0.363	0.909	87.021						
22	0.355	0.887	87.908						
23	0.352	0.880	88.789						
24	0.339	0.848	89.636						
25	0.335	0.837	90.473						
26	0.307	0.767	91.240						
27	0.302	0.755	91.995						
28	0.292	0.729	92.724						
29	0.283	0.707	93.431						
30	0.276	0.691	94.122						
31	0.267	0.666	94.788						
32	0.265	0.661	95.449						
33	0.251	0.628	96.077						
34	0.244	0.609	96.687						
35	0.239	0.598	97.285						
36	0.232	0.581	97.866						

	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
Factor	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
37	0.232	0.580	98.447						
38	0.221	0.552	98.999						
39	0.205	0.512	99.510						
40	0.196	0.490	100.000						

Note: Extraction Method: Principal Axis Factoring.

APPENDIX N: SURVEY NUMBERS AND CORRESPONDING QUESTIONS

1 When I feel my work meets a societal need
2 When I feel connected to society through my work
3 I think about teaching even on my days off in a positive way.
4 When I feel my work has meaning
5 When I am the best version of myself as a teacher
6 When I believe I was called to do this job
7 When I know "why" I am a teacher
8 Just being a teacher makes me feel like I matter
9 When I feel a “pull” toward teaching
10 I feel teaching is my “reason for being.”
11 When I have an understanding of why I have to do certain things in my work
12 When I have a sense of why my job is important
13 When I think about teaching as part of my legacy
14 Teaching is important to society
15 When I feel passionate about my job
16 When I feel teaching is an essential part of who I am
17 When I seek out additional opportunities to grow because it will help me do my job better.
18 When I don’t mind doing tasks that I am asked to do because it helps the organization reach its goals
19 I do tasks that I don’t like when I know it helps the overall goal.
20 I will do tasks I don’t like if I know it will serve a higher purpose with the organization
21 When there are tasks that I don’t enjoy doing, but I know it will help me do my job, so I don’t mind doing them.
22 When I feel teaching is an essential part of who I am
23 When I lose track of time teaching or preparing because I am so involved in the activity
24 When time seems to "fly by" during the day
25 When I wonder where the time went because I am enjoying what I am doing
26 When I lose track of time while teaching
27 When I am excited about Mondays because I have a whole week to teach
28 When I get totally immersed in what I am doing
29 I can enjoy doing the most tedious tasks because I know it matters.
30 When feel I "belong" among my colleagues
31 When my colleagues appreciate my support and help
32 When I can accomplish more working with colleagues rather than working alone
33 When I can do more work together
34 When I feel a sense of synergy working with my colleagues
35 When I feel that my colleagues and I are equal partners
36 When I feel like I work with a great team

37 When I feel like I matter to my colleagues
38 When my colleagues value my ideas and suggestions
39 Knowing my colleagues would be disappointed if they knew that I might leave my job
40 Knowing my supervisor would be disappointed if they knew that I might leave my job
41 When I feel have a lot in common with my colleagues
42 When I can rely on my colleagues to help me
43 When I feel have a lot in common with my colleagues
44 When I feel that my colleagues really care about me
45 When I agree with my colleagues on fundamental issues related to teaching
46 When I enjoy being around my colleagues
47 When there is a sense of community in the organization
48 When my colleagues look out for me
49 When things get tough and we all pull together
50 When my colleagues help me
51 When I am able to make adjustments to my work to be more productive
52 When I can make changes to my job to make things run smoother
53 When I feel I can look for ways to do my job better
54 When my colleagues and I share ideas on how to improve
55 When I am empowered to change daily routines to meet my needs as a teacher
56 When I have flexibility to personalize my surroundings to help me do my job
57 When those outside education value my expertise
58 When people in society understand teaching fills a societal need
59 When people who don't know exactly what I do but still understand I have an important job
60 When society values the job I do
61 When people have a good understanding of what teachers do
62 When people that I don't know thank me for the job I am doing as a teacher
63 When people say that my work influenced their life
64 When my efforts are recognized
65 When someone makes me feel important as a teacher
66 When I feel connected to society through my work.
67 When someone genuinely appreciates the work I do
68 When I am able to successfully do what is expected of me as a teacher
69 When I have a positive impact on students
70 When I believe I can positively influence student outcomes
71 When teaching is respected by people in society
72 When I feel like my work influences people's lives
73 When people outside of education take my advice about education
74 The amount of pay shows how much society values educators.
75 If teachers were valued more, they would be paid more.

76 When I get a raise
77 If teachers mattered to society, they would be paid more.
78 When I am given gifts by the school or other organizations
79 The more I am paid, the more I feel like I matter.
80 When society at large appreciates the work I do as a teacher
81 When I feel effective at my job
82 When I do something at my job, and I am successful
83 When I feel teachers have a fairly stable job compared to the rest of society
84 When I have more Job security than most jobs.
85 Knowing that I have a steady paycheck
86 When I have protection from arbitrary termination
87 When participating in collective bargaining agreements (contract negotiations)
88 When I am able to set meaningful goals
89 When I am able to set challenging goals, even if I fall short
90 When professional goals are used in a way to grow rather that control
91 Creating professional goals helps me create meaning in my work.
92 When my supervisor understands and supports the goals I have created
93 When the values of the organization align with my values
94 When my supervisor understands and respects my personal values
95 When my values align with my colleagues
96 When my values align with my organization
97 When my colleagues respect my personal values
98 When I can be the same person at home that I am at work.
99 When I don’t have to pretend to be a different person at work
100 When I can be my “authentic self” at work
101 When I don’t have to compromise my feelings at work
102 When I don’t have to have a different “image” a work

APPENDIX O: REMOVAL OF ITEMS

The list below indicates when an item was removed in the data analysis process.

1	Removed after 1st	60	Removed after 2nd
2	Removed after 1st	61	Removed after 1st
3	Removed after 1st	62	Removed after 1st
8	Removed after 2nd	63	Removed after 2nd
11	Removed after 1st	64	Removed after 1st
12	Removed after 1st	65	Removed after 1st
13	Removed after 1st	66	Removed after 1st
14	Removed after 1st	67	Removed after 2nd
15	Removed after 1st	68	Removed after 1st
16	Removed after 1st	69	Removed after 2nd
17	Removed after 1st	70	Removed after 1st
21	Removed after 1st	71	Removed after 2nd
22	Removed during pre-analysis	72	Removed after 1st
27	Removed after 1st	73	Removed after 1st
29	Removed after 1st	74	Removed after 1st
31	Removed after 2nd	77	Removed during pre-analysis
32	Removed after 1st	78	Removed after 1st
33	Removed after 1st	80	Removed after 1st
35	Removed after 2nd	81	Removed after 1st
37	Removed after 2nd	82	Removed after 1st
38	Removed after 2nd	87	Removed after 1st
39	Removed after 1st	88	Removed after 1st
40	Removed after 1st	89	Removed after 1st
43	Removed during pre-analysis	90	Removed after 1st
45	Removed after 1st	91	Removed after 1st
53	Removed after 1st	92	Removed after 1st
54	Removed after 1st	93	Removed after 1st
56	Removed after 1st	94	Removed after 1st
57	Removed after 1st	95	Removed after 1st
58	Removed after 2nd	96	Removed after 1st
59	Removed after 1st	97	Removed after 1st

APPENDIX P: OUTPUT OF CBID CFA

```
--> Did a CLASSICAL analysis on INTERVAL DATA <--
 lavaan 0.6-3 ended normally after 50 iterations
  Optimization method                           NLMINB
  Number of free parameters                        148
                                                  Used       Total
  Number of observations                          1106        1110
  Number of missing patterns                       302

  Estimator                                         ML
  Model Fit Test Statistic                    1991.413
  Degrees of freedom                               712
  P-value (Chi-square)                           0.000

Model test baseline model:

  Minimum Function Test Statistic           29242.439
  Degrees of freedom                               780
  P-value                                        0.000

User model versus baseline model:

  Comparative Fit Index (CFI)                    0.955
  Tucker-Lewis Index (TLI)                       0.951

Loglikelihood and Information Criteria:

  Loglikelihood user model (H0)            -169044.551
  Loglikelihood unrestricted model (H1)    -168048.844
  Number of free parameters                        148
  Akaike (AIC)                              338385.102
  Bayesian (BIC)                            339126.360
  Sample-size adjusted Bayesian (BIC)       338656.276

Root Mean Square Error of Approximation:
  RMSEA                                          0.040
  90 Percent Confidence Interval          0.038  0.042
  P-value RMSEA <= 0.05                          1.000

Standardized Root Mean Square Residual:
  SRMR                                           0.037

Parameter Estimates:
  Information                                 Observed
  Observed information based on                Hessian
  Standard Errors                             Standard
```

```
Latent Variables:
                   Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
  F1 =~
    Item.30          15.646    0.547   28.596    0.000   15.646    0.760
    Item.34          14.121    0.498   28.381    0.000   14.121    0.761
    Item.42          14.824    0.443   33.482    0.000   14.824    0.840
    Item.44          15.543    0.464   33.475    0.000   15.543    0.840
    Item.46          15.025    0.442   34.000    0.000   15.025    0.848
    Item.47          12.912    0.444   29.085    0.000   12.912    0.764
    Item.48          14.226    0.421   33.751    0.000   14.226    0.842
    Item.49          14.384    0.455   31.581    0.000   14.384    0.808
    Item.50          14.537    0.442   32.899    0.000   14.537    0.831
    Item.41          15.814    0.555   28.474    0.000   15.814    0.758
  F2 =~
    Item.4           11.222    0.452   24.806    0.000   11.222    0.689
    Item.5           11.937    0.492   24.257    0.000   11.937    0.679
    Item.6           17.065    0.579   29.448    0.000   17.065    0.780
    Item.7           15.011    0.481   31.176    0.000   15.011    0.810
    Item.8           15.835    0.689   22.990    0.000   15.835    0.651
    Item.9           15.123    0.496   30.519    0.000   15.123    0.802
    Item.10          19.229    0.750   25.646    0.000   19.229    0.709
  F3 =~
    Item.98          18.359    0.568   32.316    0.000   18.359    0.835
    Item.99          19.270    0.549   35.109    0.000   19.270    0.879
    Item.100         15.953    0.498   32.062    0.000   15.953    0.832
    Item.101         16.325    0.561   29.115    0.000   16.325    0.781
    Item.102         18.340    0.548   33.486    0.000   18.340    0.854
  F4 =~
    Item.23          16.433    0.530   31.012    0.000   16.433    0.811
    Item.24          15.638    0.454   34.428    0.000   15.638    0.863
    Item.25          15.966    0.476   33.528    0.000   15.966    0.851
    Item.26          15.946    0.498   32.025    0.000   15.946    0.829
    Item.28          14.746    0.444   33.191    0.000   14.746    0.844
  F5 =~
    Item.83          16.973    0.563   30.172    0.000   16.973    0.807
    Item.84          19.023    0.548   34.737    0.000   19.023    0.886
    Item.85          15.315    0.532   28.797    0.000   15.315    0.785
    Item.86          16.581    0.695   23.865    0.000   16.581    0.685
  F6 =~
    Item.18          17.582    0.526   33.430    0.000   17.582    0.860
    Item.19          15.347    0.482   31.844    0.000   15.347    0.833
    Item.20          17.906    0.507   35.297    0.000   17.906    0.888
  F7 =~
    Item.75          13.066    0.595   21.972    0.000   13.066    0.658
    Item.76          17.542    0.628   27.925    0.000   17.542    0.812
    Item.79          21.782    0.748   29.109    0.000   21.782    0.841
  F8 =~
    Item.51          13.302    0.392   33.919    0.000   13.302    0.869
    Item.52          12.880    0.407   31.650    0.000   12.880    0.832
    Item.55          13.779    0.464   29.682    0.000   13.779    0.798

Covariances:
                   Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
```

```
  F1 ~~
    F2                0.456    0.027   16.982    0.000    0.456    0.456
    F3                0.564    0.023   24.082    0.000    0.564    0.564
    F4                0.491    0.026   19.257    0.000    0.491    0.491
    F5                0.369    0.029   12.536    0.000    0.369    0.369
    F6                0.496    0.026   18.881    0.000    0.496    0.496
    F7                0.302    0.032    9.308    0.000    0.302    0.302
    F8                0.551    0.024   22.480    0.000    0.551    0.551
  F2 ~~
    F3                0.354    0.030   11.610    0.000    0.354    0.354
    F4                0.562    0.024   23.187    0.000    0.562    0.562
    F5                0.273    0.032    8.462    0.000    0.273    0.273
    F6                0.510    0.027   19.145    0.000    0.510    0.510
    F7                0.058    0.036    1.606    0.108    0.058    0.058
    F8                0.447    0.029   15.669    0.000    0.447    0.447
  F3 ~~
    F4                0.431    0.028   15.152    0.000    0.431    0.431
    F5                0.366    0.031   11.958    0.000    0.366    0.366
    F6                0.358    0.031   11.695    0.000    0.358    0.358
    F7                0.232    0.034    6.765    0.000    0.232    0.232
    F8                0.499    0.027   18.548    0.000    0.499    0.499
  F4 ~~
    F5                0.358    0.031   11.709    0.000    0.358    0.358
    F6                0.516    0.026   19.706    0.000    0.516    0.516
    F7                0.142    0.035    4.051    0.000    0.142    0.142
    F8                0.567    0.025   22.911    0.000    0.567    0.567
  F5 ~~
    F6                0.376    0.031   12.302    0.000    0.376    0.376
    F7                0.397    0.032   12.534    0.000    0.397    0.397
    F8                0.370    0.031   11.941    0.000    0.370    0.370
  F6 ~~
    F7                0.103    0.036    2.860    0.004    0.103    0.103
    F8                0.506    0.027   18.682    0.000    0.506    0.506
  F7 ~~
    F8                0.246    0.034    7.139    0.000    0.246    0.246

Intercepts:
                   Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
   .Item.30          26.159    0.631   41.486    0.000   26.159    1.270
   .Item.34          27.694    0.571   48.504    0.000   27.694    1.491
   .Item.42          29.697    0.537   55.256    0.000   29.697    1.683
   .Item.44          30.278    0.564   53.729    0.000   30.278    1.637
   .Item.46          30.657    0.540   56.766    0.000   30.657    1.730
   .Item.47          32.093    0.515   62.369    0.000   32.093    1.899
   .Item.48          31.121    0.514   60.561    0.000   31.121    1.843
   .Item.49          31.002    0.542   57.244    0.000   31.002    1.742
   .Item.50          28.073    0.533   52.628    0.000   28.073    1.604
   .Item.41          22.292    0.641   34.755    0.000   22.292    1.068

   .Item.4           32.907    0.492   66.908    0.000   32.907    2.020
   .Item.5           30.729    0.534   57.588    0.000   30.729    1.747
   .Item.6           27.677    0.665   41.602    0.000   27.677    1.265
   .Item.7           29.858    0.562   53.126    0.000   29.858    1.612
```

```
   .Item.8           19.644    0.740   26.535    0.000   19.644    0.807
   .Item.9           25.795    0.575   44.889    0.000   25.795    1.367
   .Item.10          15.396    0.829   18.576    0.000   15.396    0.568
   .Item.98          25.248    0.679   37.183    0.000   25.248    1.149
   .Item.99          26.004    0.675   38.550    0.000   26.004    1.187
   .Item.100         29.509    0.590   50.045    0.000   29.509    1.538
   .Item.101         26.040    0.646   40.333    0.000   26.040    1.245
   .Item.102         24.270    0.664   36.533    0.000   24.270    1.130
   .Item.23          25.901    0.623   41.588    0.000   25.901    1.278
   .Item.24          28.782    0.555   51.878    0.000   28.782    1.588
   .Item.25          28.360    0.575   49.290    0.000   28.360    1.511
   .Item.26          26.577    0.591   44.992    0.000   26.577    1.382
   .Item.28          29.558    0.535   55.225    0.000   29.558    1.693
   .Item.83          24.563    0.648   37.893    0.000   24.563    1.167
   .Item.84          24.291    0.661   36.756    0.000   24.291    1.132
   .Item.85          28.282    0.601   47.079    0.000   28.282    1.450
   .Item.86          22.407    0.751   29.837    0.000   22.407    0.925
   .Item.18          22.828    0.627   36.418    0.000   22.828    1.117
   .Item.19          25.147    0.564   44.567    0.000   25.147    1.365
   .Item.20          24.249    0.617   39.313    0.000   24.249    1.202
   .Item.75          33.913    0.609   55.651    0.000   33.913    1.708
   .Item.76          22.537    0.670   33.662    0.000   22.537    1.043
   .Item.79          17.926    0.802   22.342    0.000   17.926    0.692
   .Item.51          31.656    0.466   67.997    0.000   31.656    2.069
   .Item.52          32.038    0.472   67.902    0.000   32.038    2.069
   .Item.55          30.231    0.528   57.249    0.000   30.231    1.750
    F1                0.000                             0.000    0.000
    F2                0.000                             0.000    0.000
    F3                0.000                             0.000    0.000
    F4                0.000                             0.000    0.000
    F5                0.000                             0.000    0.000
    F6                0.000                             0.000    0.000
    F7                0.000                             0.000    0.000
    F8                0.000                             0.000    0.000

Variances:
                   Estimate  Std.Err  z-value  P(>|z|)   Std.lv  Std.all
   .Item.30         179.366    8.513   21.068    0.000  179.366    0.423
   .Item.34         145.355    6.972   20.848    0.000  145.355    0.422
   .Item.42          91.451    4.578   19.977    0.000   91.451    0.294
   .Item.44         100.392    5.030   19.960    0.000  100.392    0.294
   .Item.46          88.459    4.464   19.816    0.000   88.459    0.282
   .Item.47         118.913    5.578   21.317    0.000  118.913    0.416
   .Item.48          82.916    4.133   20.060    0.000   82.916    0.291
   .Item.49         109.838    5.300   20.726    0.000  109.838    0.347
   .Item.50          94.965    4.713   20.148    0.000   94.965    0.310
   .Item.41         185.705    8.842   21.003    0.000  185.705    0.426
   .Item.4          139.430    6.719   20.752    0.000  139.430    0.525
   .Item.5          166.787    8.025   20.784    0.000  166.787    0.539
   .Item.6          187.624    9.944   18.868    0.000  187.624    0.392
   .Item.7          117.788    6.520   18.067    0.000  117.788    0.343
   .Item.8          341.192   16.155   21.120    0.000  341.192    0.576
   .Item.9          127.265    6.944   18.328    0.000  127.265    0.358
```

```
   .Item.10         366.258   18.238   20.083    0.000  366.258    0.498
   .Item.98         146.239    8.116   18.018    0.000  146.239    0.303
   .Item.99         108.824    6.776   16.060    0.000  108.824    0.227
   .Item.100        113.455    6.274   18.084    0.000  113.455    0.308
   .Item.101        170.894    8.796   19.429    0.000  170.894    0.391
   .Item.102        124.861    7.222   17.290    0.000  124.861    0.271
   .Item.23         140.975    7.407   19.032    0.000  140.975    0.343
   .Item.24          83.894    4.910   17.087    0.000   83.894    0.255
   .Item.25          97.372    5.492   17.730    0.000   97.372    0.276
   .Item.26         115.730    6.233   18.568    0.000  115.730    0.313
   .Item.28          87.525    4.856   18.025    0.000   87.525    0.287
   .Item.83         154.817    9.104   17.005    0.000  154.817    0.350
   .Item.84          98.686    8.169   12.080    0.000   98.686    0.214
   .Item.85         146.048    8.229   17.749    0.000  146.048    0.384
   .Item.86         311.839   15.605   19.983    0.000  311.839    0.531
   .Item.18         108.696    7.178   15.143    0.000  108.696    0.260
   .Item.19         103.905    6.248   16.630    0.000  103.905    0.306
   .Item.20          86.264    6.606   13.059    0.000   86.264    0.212
   .Item.75         223.690   11.668   19.171    0.000  223.690    0.567
   .Item.76         159.008   12.804   12.419    0.000  159.008    0.341
   .Item.79         196.331   18.653   10.525    0.000  196.331    0.293
   .Item.51          57.158    4.280   13.356    0.000   57.158    0.244
   .Item.52          73.949    4.670   15.834    0.000   73.949    0.308
   .Item.55         108.555    6.222   17.448    0.000  108.555    0.364
    F1                1.000                              1.000    1.000
    F2                1.000                              1.000    1.000
    F3                1.000                              1.000    1.000
    F4                1.000                              1.000    1.000
    F5                1.000                              1.000    1.000
    F6                1.000                              1.000    1.000
    F7                1.000                              1.000    1.000
    F8                1.000                              1.000    1.000

"Overall Cronbach's Alpha: 0.9502"
"Cronbach's Alpha subsetted on F1: 0.9473"
"Cronbach's Alpha subsetted on F2: 0.888"
"Cronbach's Alpha subsetted on F3: 0.9196"
"Cronbach's Alpha subsetted on F4: 0.9228"
"Cronbach's Alpha subsetted on F5: 0.8671"
"Cronbach's Alpha subsetted on F6: 0.8968"
"Cronbach's Alpha subsetted on F7: 0.8156"
"Cronbach's Alpha subsetted on F8: 0.8664"
```

APPENDIX Q: FOUNDATIONAL ELEMENTS OF MATTERING FOR K–12 TEACHERS SCALE

Score each statement from 1 (never) to 5 (most of the time).

	Score
1. I feel that my colleagues really care about me.	
2. I lose track of time teaching or preparing because I am so involved in the activity.	
3. I do not mind doing tasks that I don't like when I know it helps the overall goal.	
4. I feel I am paid adequately for the job I do.	
5. I am empowered to change daily routines to meet my needs as a teacher	
6. I feel teachers have a fairly stable job compared to the rest of society.	
7. I believe I was called to do this job.	
8. I can be the same person at home that I am at work.	
9. I feel I "belong" among my colleagues.	
10. When I am teaching, time seems to "fly by" during the day.	
11. I don't mind doing tasks I don't like if I know it will serve a higher purpose with the organization	
12. I have protection from arbitrary termination	
13. My salary makes me feel like I am valued.	
14. I can make changes to my job to make things run smoother.	
15. I feel teaching is my "reason for being."	
16. I don't have to have a different "image" a work.	
17. When I am teaching, I get totally immersed in what I am doing	
18. I can rely on my colleagues to help me.	
19. I have a steady paycheck	
20. I don't have to compromise my feelings at work	
21. There are certain things I don't like doing but the task is enjoyable because I know it will help meet our overall goals.	
22. I am the best version of myself as a teacher.	
23. My salary is comparable to other professions requiring the same skill level.	
24. I am able to make adjustments to my work to be more productive.	

Place the score in the white box. Place the total of the three scores in each column to the bottom.

1.	I feel that my colleagues really care about me.								
2.	I lose track of time teaching or preparing because I am so involved in the activity.								
3.	I do not mind doing tasks that I don't like when I know it helps the overall goal.								
4.	I feel I am paid adequately for the job I do.								
5.	I am empowered to change daily routines to meet my needs as a teacher								
6.	I feel teachers have a fairly stable job compared to the rest of society.								
7.	I believe I was called to do this job.								
8.	I can be the same person at home that I am at work.								
9.	I feel I "belong" among my colleagues.								
10.	When I am teaching, time seems to "fly by" during the day.								
11.	I don't mind doing tasks I don't like if I know it will serve a higher purpose with the organization								
12.	I have protection from arbitrary termination								
13.	My salary makes me feel like I am valued.								
14.	I can make changes to my job to make things run smoother.								
15.	I feel teaching is my "reason for being."								
16.	I don't have to have a different "image" a work.								
17.	When I am teaching, I get totally immersed in what I am doing								
18.	I can rely on my colleagues to help me.								
19.	I have a steady paycheck								
20.	I don't have to compromise my feelings at work								
21.	There are certain things I don't like doing but the task is enjoyable because I know it will help meet our overall goals.								
22.	I am the best version of myself as a teacher.								
23.	My salary is comparable to other professions requiring the same skill level.								
24.	I am able to make adjustments to my work to be more productive.								
	Total:								
		1	2	3	4	5	6	7	8

Category	#	Factor	Total Score
Interpersonal	1	Community	
	2	Authenticity	
	3	Flow	
Intrapersonal	4	Purpose	
	5	Assimilation	
External	6	Compensation	
	7	Stability	
	8	Job crafting	

Scores will range from 3 – 15. Lower scores indicate that the area is one that may need attention.