Burned-In, Not Burned Out: A Theory of how Excellent Urban Educators Shift Mindsets and Continue to Teach

Co-Authors: Julia King and Sophia Kokores

University of Pennsylvania

A Capstone Project Submitted

In Partial Fulfillment of the Requirements for the Degree of

Master of Applied Positive Psychology

Advisors: Angela Duckworth, PhD. and Claire Robertson-Kraft, PhD.

August 1, 2017

Burned-In, Not Burned Out: A Theory of how Excellent Urban Educators Shift Mindsets and

Continue to Teach

Co-Authors: Julia King and Sophia Kokores juliataylorking@gmail.com and skokores@gmail.com

Capstone Project

Master of Applied Positive Psychology
University of Pennsylvania

Advisors: Angela Duckworth, PhD. and Claire Robertson-Kraft, PhD.

August 1, 2017

Abstract

The need for teacher well-being is a given. Even so, teaching is tied with nursing as the most stressful profession and teacher turnover is at an all-time high, especially in urban schools. Both students and schools suffer as a result. Three states of being characterize teacher burnout: emotional exhaustion, cynicism, and lowered self-efficacy. In this paper, however, we study why some teachers do not burn out or leave their jobs; indeed, they excel in their profession and find great fulfillment in it. We postulate that there is an opposite of teacher burnout, what we have termed teacher "burn-in." We isolate its three characteristics: a sense of energy, optimism, and self-efficacy. The tripartite typology of both burnout and burn-in, hence, is Energy, Outlook, and Self-Evaluation. We use this typology to chart transformations of burnout to burn-in. Interviews with 20 excellent urban educators, all of whom taught through or beyond the five-year mark, interestingly illustrated that the burned-in teacher was also - to lesser or greater degrees - burned out. Sometimes burnout led to burn-in. In the end, we found that teacher burn-in is a blend of both teacher burnout and burn-in. The study also charts the mindset shifts in each portion of the typology that activates this blending process: (1) in Energy, the burned-in teachers shifted mindset from "school only" to "school-plus-me"; (2) in Outlook, from "I am solely responsible, I am solely to blame" to "I rely on collective action" and "I rely on complex measures of success;" and (3) in Self-Evaluation, from "a prescribed practice" to "a preferred practice." Because our research is limited to data collected from these 20 educators only, it suggests the need for further study of what it means to be and how to become a teacher who is "burned-in."

Acknowledgements

To Sophia, from Julia: You know I love to win and winning you over as my Capstone partner was my biggest victory this year. It took a couple of months, but I'm so glad I convinced you to do this Capstone with me and that you convinced us to focus on teacher well-being as a pathway to school well-being.

To Julia, from Sophia: The greatest gift MAPP gave me was you. You taught me that good ideas stem from the individual, but excellent work comes from partnership. Thank you for being my partner; I know this is merely the beginning.

To Angela Duckworth & Claire Robertson-Kraft: Our burned-in teachers, turned Advisors. You modeled for us how to communicate big ideas simply. How to trust our intuition and follow our north star. Luckily our handwritten thank-you notes and savoring of your funny quotes won you over. Having you as our Advisors has made this whole process fun. Thank you for showing up to our graduation with Duckie-yellow nail polish, for Sunday selfies, for all the honest feedback, and for Claire-ifying edits to our many Google documents. Most of all, thank you for believing that with grit, we can reach worthy goals. Love, your Krafty-Duckies.

To Scott Barry Kaufman: You passed on just the right research at just the right moment. Your expertise and encouragement fueled us.

To Erin Hearn: When you gave your speech at Summit, we looked over at each other and said, "She must mentor us!" Luckily you obliged. Your earnest and deliberate integration of positive psychology into your urban school is admirable.

To Emily Larson: You kept it real and believed in our focus on teacher well-being from day one. Your vision and leadership of IPEN inspires us.

To Marty Seligman: We are grateful that you sparked this field and that you have stayed burned-in. You model bold creativity rooted in science.

To James Pawelski: The mark of an excellent teacher is one who allows all students to shine. You show your students they belong from the start. This year, we felt your optimism, energy, and confidence as a teacher. Thanks for walking your talk. And, we are even grateful for the Theory Papers.

To Leona Brandwene: You taught us to focus on a cause, not an end goal. You embody how modeling well-being is teaching at its best. And you give the best advice. Ever.

To Reb Rebele & Adam Grant: Your collaboration, commitment to helping teachers, and generosity inspire us. Thank you for the articles. All of them.

To Amy Rebele & Gloria Park: Thank you for reading our journals and nudging us on our journey.

To Tom Rath: We promise to follow your example of managing our energy level and helping others digest big ideas. Thank you for brainstorming with us when our theory was just developing.

To Karen Reivich & Judy Saltzberg: Here we come! Following in your MAPP dynamic duo footsteps.

To The King Family, from Julia: To Mom, I promise to find deep peace in your honor, you are my role model. To Dad, since day one in the classroom you pushed me to be better, not to complain, to control what I could, and to work to give my students what they deserve. You intuited what being burned-in means. To Claire, Alex, and PayPay for being my heart and home in Philadelphia. To Ben and Alena, for making space for me and for what really matters. To

Allegra, Liliana, and Penelope, for still being young enough to tell me, "Good-Job-Julia" as many times as I need to hear it.

To Sean Pool, from Julia: You are my forever partner in doing good, doing well, and being well. This is just the beginning. I love you.

To Bill St. John, from Julia: Your expertise in cooking, conversation, and writing style kept me burned-in.

To Erika Raskin, from Julia: The best writing teacher I've ever had.

To The Kokores Family, from Sophia: To my parents, thank you for your steadfast belief in me. Being raised by you is my greatest strength. To my sister, you are my teacher in love and friendship. Thank you for paving the way for me to partner with Julia, who is now our shared sister. And to my two late grandmothers, you both were and will always be my models of well-being. I strive to be the blend of both of you every day. I think this work reflects that.

To Teach For America: You trained us both at LA Institute, but we did not meet until eight years later at MAPP. Thank you for selecting us as teachers and helping us find our calling. Thank you for setting a high bar and giving us the skills to create our own. We are proud to be a part of the education reform movement. As we work for One Day, we are committed to helping teachers do well and be well.

To our teachers: Listening to you was the best part of this project. Thank you for teaching us about teaching.

Table of Contents

Preface	/
Importance of Teachers	7
Burned Out Teachers	8
Key Question	11
Mirroring Positive Psychology	11
Defining Burn-In	12
Methodology	14
Study Design	17
Description of Sample	18
Procedure and Protocol	18
Results and Analysis Interviews	20
Energy: Becoming more energized	20
From "school only"	21
To a blend of "school-plus-me"	23
Outlook: Becoming more optimistic	27
From "I am solely responsible, I am solely to blame"	28
To a blend of "collective action"	31
To a blend of "complex measures of success"	32
Self-Evaluation: Becoming more self-efficacious	34
From a "prescribed practice"	35
To a blend of "preferred practice"	35
Strong Relationships	36
Sense of Belonging	40
Limitations	43
Theoretical Implications	44
Practical Implications	46
Conclusions	49
Appendices	51
Appendix A - Teacher Demographics	51
Appendix B - Consent Form	52
Appendix C - Interview Script	54
Appendix D - Coded Mindsets	55
Appendix E – Interview Coding	56
Appendix F - Ratio Data	57
References	58

Preface

As Teach For America (TFA) trained educators with a combined 18 years of teaching and educational leadership experience, we have seen firsthand what Jonathan Kozol (1991) calls *savage inequalities* play out in urban classrooms. The unfair distribution of resources in American schools changes the trajectory of students' lives. It also negatively impacts the teachers who have committed to working in difficult settings - which again hurts the children.

We both joined TFA because we were motivated by a desire to work toward social justice by remediating academic deficiencies and narrowing the achievement gap between impoverished students and their more privileged peers. We learned to default to a deficit-based mindset. Though we saw accomplishments, there were times when our energy turned into exhaustion, our hope into cynicism, and our confidence into self-doubt. We eventually recognized the need for a more integrated approach to teaching that focused on overall well-being: social, emotional, and academic. We came to rely on the power of collective action. In other words, we realized we could not do this work alone.

We met in the Master of Applied Positive Psychology Program (MAPP) at the University of Pennsylvania which offered a more holistic vision for education. Here we learned to develop an asset-based mindset, studying evidence-based student well-being programs. In this context we began to wonder about the importance of teacher well-being. Having both been on the brink of burnout we wondered about the inverse of this phenomenon: What makes a teacher burned-in?

Importance of Teachers

Excellent teaching makes a difference. Researchers have consistently found that teachers are the most important in-school factor in producing improved student achievement (Kane & Staiger, 2012). There is a growing body of research showing that students can improve their

social and emotional skills - to varying degrees - with the support of teachers (Kraft & Grace, 2016). For example, students who felt supported by their teacher, tended to have higher math self-efficacy and better classroom behavior than those who did not feel supported (Blazar & Kraft, 2016). Similarly, when students perceive a caring, enthusiastic, supportive, and available teacher, their sense of belonging in school improves (Allen et al., 2016; Wang & Holcombe, 2010; Demanet & Van Houtte, 2012). This research suggests that if we want our students to do and be well, we must support our teachers in doing and being well. The phrase *happy teachers*, *happy kids* resonates. In other words, teacher well-being means student well-being. But what do happy teachers look like? (The current research on teachers does little to tell us this.) This is what we endeavored to find out.

Burned Out Teachers

Teacher stress is at an all-time high. Nearly 50% of teachers report high daily stress during the school year. This is the highest rate among all occupational groups, tied with nurses, and higher than physicians (Gallup, 2014). Stress results when the demands made by the job and the circumstances in which the job must be done outweigh the available resources one is willing to put into the job (Beehr & Newman, 1978; French, 1973). In a classroom, for example, teacher stress could understandably result from having 30 students, each with unique academic and social needs (the demands), and only one adult, no other teaching assistant, co-teacher, or support (the resources).

Teacher stress can lead to poor physical health. In a study of high school teachers, 46% of teachers were diagnosed with excessive daytime sleepiness and 51% with poor sleep quality, compromising health, low quality of life, and diminished teaching performance (de Souza et al., 2012). Teacher stress can lead to poor teacher performance and poor student outcomes too.

According to a longitudinal study, elementary school teachers who showed more symptoms of depression created classroom environments that were less conducive to learning and contained students with the lowest rate of achievement (McLean & Connor, 2015). Furthermore, like emotions (Hatfield, Cacioppo, & Rapson, 1994) stress can be contagious (Lens & Decruyenaere, 1991). In other words, one teacher's stress can spread to another.

Most significantly, stress is related to burnout. Burnout was a term coined in the 1960s by workers themselves and was not empirically validated until the 1980s when Maslach (1982) came up with a theoretical model. Rudow (1999) defines burnout as an overlapping term- one that unites symptoms of stress, fatigue, and job satisfaction. Often times teacher stress and teacher burnout are used interchangeably, but much of the literature describes burnout as a result of, among two other things, continuously experiencing distress, or levels of stress beyond the optimal (Lens & de Jesus, 1999).

For the purpose of this paper, we will use Maslach's (1982, 1998) multidimensional theory which conceptualizes burnout (BO) as a psychological syndrome in response to emotional and interpersonal stressors that is characterized by: 1) emotional exhaustion (EE) 2) cynicism (sometimes referred to as depersonalization) (C), and 3) lowered sense of efficacy (also referred to as reduced personal accomplishment) (LSE).

$$BO = EE + C + LSE$$

Emotional exhaustion reflects the stress characteristic of burnout and refers to feelings of being overextended or depleted.

Depersonalization, also referred to as cynicism, is the act of distancing oneself from the recipients of the service and refers to negative or detached responses to aspects of the job.

Burnout research shows a consistently strong correlation between exhaustion and

depersonalization (Maslach, Schaufeli, & Leiter, 2001). Teachers, for example, will react to exhaustion by distancing themselves from students. A teacher might say to oneself, "*This student is more than I can handle, so someone else can handle him.*" An unintended consequence of this coping mechanism is less learning time for the student, resulting in lower achievement at the micro level and contributing to the achievement gap at the macro level.

Finally, reduced personal accomplishment reflects a teacher's self-evaluation and refers to feelings of incompetence or lack of achievement and productivity. While the link between exhaustion and depersonalization has been found to be sequential, the relationship between exhaustion and depersonalization and inefficacy is more complex. In some instances inefficacy appears to be a function of either exhaustion or depersonalization or both (Byrne, 1994; Lee & Ashforth, 1996). For teachers, a sense of reduced personal accomplishment might stem from feeling depleted because a class of students are difficult to manage. A teacher might say to oneself, "I won't make any progress with this class because they wear me down everyday."

Other research suggests that lower sense of self-efficacy develops simultaneously with the other two dimensions (cynicism and emotional exhaustion).

Burnout is not particular to the field of teaching, although it appears to be common in other human services professions, such as nursing. There is evidence to support that teachers are more susceptible to burnout than most professions that require the same educational and entry level requirements (Kyriacou, 1987). The MBI (multidimensional burnout inventory) is the survey to assess all three symptoms. The MBI-ES is the version specific for educators (Maslach, Schaufeli, & Leiter, 2001), which uses slightly different terms (depersonalization instead of cynicism and reduced personal accomplishment instead of inefficacy) to reflect the interpersonal nature of the job- that is, the fact that teachers work so extensively with other humans on the job.

Both stress and burnout contribute to an alarming teacher turnover rate. In urban schools in low socio-economic contexts, teacher loss in the first five years is around 50% (Yonezawa, Jones, & Robb Singer, 2011, citing Merrow, 1999; National Commission on Teaching and America's Future, 2007). There are personal costs for the teachers, the students, and the communities, in addition to severe financial costs to our nation. The National Commission on Teaching and America's Future (2007) estimates that public school teacher turnover costs more than \$7.3 billion per year.

All of these statistics are signals, signals that the job of the teacher is not sustainable for many.

Key Question

We have just explored the question, "What constitutes burnout?" Much of the research has focused on what causes stress for teachers. The message, albeit subtle, is that education research embraces a deficit model of public schools and the teaching profession.

This paper challenges these assumptions. Moreover, it applies the same research-based science to those who nonetheless flourish in our public schools. We call for equal focus on why teachers stay as why they leave.

This paper assumes that excellent teachers who have outlasted their peers, have as much - or more - to teach us as those who have burned out and bailed.

Mirroring Positive Psychology

At the turn of the century, something very similar occurred in the field of psychology. Former president of the American Psychology Association, Martin Seligman, boldly called for reimagining the priorities of psychology (Seligman, 1999). Influenced by the negativity bias (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001), the field had become focused on

diagnosing pathologies and treating weaknesses. But a deficit-based approach has its limitations, as remediating mental illness does not automatically bring about mental wellness. Seligman called for the field to move "beyond the remedial." The same technologies that have empowered and informed scientists to diagnose and intervene on depression or bipolar disorder can be applied to human strengths and virtues. In contrast to a manual of mental disorders, Seligman called for the creation of a manual of the sanities including, for example, courage, optimism, honesty, perseverance, forgiveness and finding purpose (Peterson & Seligman, 2004).

Coined "positive psychology," this new science is asset-based. Two decades later, the field is home to a growing empirical body of knowledge of optimal human functioning. The positive psychology movement has two basic goals: to increase understanding of and to measure human strengths though the development of classification systems and methods, and to infuse this knowledge into effective programs and interventions designed to build participants' strengths rather than remediate their weaknesses (Peterson, 2006). We mirror this approach.

Defining Burn-In

To explore the opposite, we define the opposite. Positive psychology makes an immediate, important distinction. Positive does not necessarily mean the opposite of negative (Pawelski, 2016).

The philosopher Simon Blackburn (1994) defines polar concepts as "concepts that gain their identity in part through their contrast with one another" (p. 291). With this logic we came to define "burn-in" based on the literature we reviewed.

We conceptualize burn-in as a psychological syndrome in the context of emotional and interpersonal stressors characterized by the dimensions of Energy, Outlook and Self-Evaluation, opposite those of burnout.

Dimension	Burnout	Burn-In
Energy	emotional exhaustion	energized
Outlook	cynicism	optimism
Self-Evaluation	low sense of self-efficacy	sense of self-efficacy

We conceptualize burn-in (BI) as having: 1) energy (E), 2) optimism (O), 3) sense of self-efficacy (SSE).

$$\mathbf{BI} = \mathbf{E} + \mathbf{O} + \mathbf{SSE}$$

Energy reflects what we consider the Energy dimension of burn-in. We define energy as "making choices that improve mental and physical health" (Rath, 2015).

Optimism reflects the Outlook dimension of burn-in. We define optimism as "(1) noticing the goodness in self and others, (2) identifying what is controllable, (3) remaining wedded to reality, and (4) challenging counterproductive beliefs" (Reivich, Seligman, & McBride, 2011).

Self-efficacy reflects what we consider the Self-Evaluation dimension of burn-in. We define self-efficacy as "one's belief in one's ability to succeed" (Bandura, 1977).

We began our research by asking, "What can we learn from people who are not burned out?" We assumed we would create a burned-in profile that was the point for point opposite of the burned out profile. We assumed that teachers were one or the other. We were wrong.

Based on our findings, burnout is not simply the opposite of burn-in. Instead, we found that burned-in teachers experience most if not all of the symptoms of burnout, but it does not end there. Over time, they develop mindsets that moreover help them thrive. For example, let's

imagine that a teacher is exhausted from supporting a student recently displaced from her family. We found that a way she dealt with this emotionally exhausting experience was to stay committed to her daily practice of running.

Running did not automatically reverse the emotional exhaustion but it did increase the positive (energy) to negative (emotional exhaustion) ratio, thus buffering against symptoms of burnout. As you will see, our focus was on identifying the mindsets that support this shift.

Our nascent and developing Burn-in Theory argues that teachers who lean toward mitigating the symptoms of burnout and cultivating the symptoms of burn-in, over time, are able to sustain themselves and their performance in the classroom. We will elaborate much more on this in the second half of the paper, but it is helpful context as we begin to explain the focus of our study.

Burn-In Theory: BIT = BI + BO, where BI>BO

Methodology

In our quest to start to develop a theory about teacher burn-in, we interviewed 20 excellent urban public-school educators with five or more years of experience in the classroom. (It is worth mentioning that, in addition, we interviewed three excellent urban teachers with fewer than five years of experience - two with three years and one with four years - for added color and comparison. Their interviews helped us to see the different mindsets that less experienced teachers espouse).

We selected a sample of urban educators using an exemplar methodology. Exemplar methodology is based on the premise that studying positive outliers within a field has descriptive value that differs from population-wide sampling, which describes average performance.

Exemplar methodology helps to reveal what the high performers in the teaching field look like in

practice, allowing the researcher to analyze the constructs in question at a highly developed state (Bronk, 2012). Not only does exemplar methodology help us to grow our understanding of the field of psychology with its emphasis on optimizing individuals and constructs within a real world context (Bronk, 2012), but it helps us to grow our understanding of who excellent teachers are and what they do and think. We targeted and studied the exceptional teachers to learn the unique attributes or characteristics that enable them to do well and be well in the classroom, over time. The nomination criteria (urban educators, at least five years teaching in the classroom, and excellent teachers) were narrow enough to be descriptive, yet broad enough to reflect a wide range of experience in terms of geography, years of teaching, age group, gender and race (Bronk, 2012).

First, we wanted to study the experience of **urban educators**. We define urban as areas with high rates of poverty, diverse, multicultural populations; high rates of students whose first language is not English; and, or communities that due to historic and systematic racism, have a history of being underserved. We focused on urban educators for three reasons. Number one, as urban educators ourselves, it is what we know best. Number two, we recognize that the need for excellent teachers is especially high in urban areas since the student population has such complex needs. Number three, urban schools experience more turnover than more affluent districts (Ingersoll, 2001).

Second, we wanted to interview teachers who had taught for at least five years. Sure, one reason is because they are rare. Only 50% to 60% of urban educators stay past five years (Ingersoll, 2003). But mostly because we think what it takes to become a teacher is not the same as what it takes to stay a teacher. To date, the primary studies on positive psychology and urban education have focused on first and second year teachers, specifically interested in the traits that

predict teacher effectiveness and retention (Robertson-Kraft & Duckworth, 2014; Duckworth, Quinn & Seligman 2009). Research indicates that the learning curve in year one to three is most significant (Hanushek, 1996; Hanushek & Rivkin, 2004). We wanted to study the teachers who climbed the steep learning curve to become teachers, and continuously kept climbing. As one of our interviewees put it, "What it took for me to get good at this job, is not what it's taking for me to keep getting better."

Not all of the teachers we interviewed were still in the classroom. Some of them had 'burned-out' after the five-year mark. This distinction was important to us, as we hypothesized that what causes someone to leave before the five-year mark was different than the reasons that someone would leave after that point.

Finally, for this paper, we were not interested in teachers simply because of the number of years they had taught. In fact, some studies show that the ineffective teachers are the most likely to stay (Jacob, Vidyarthi, & Carroll, 2012). The teachers in our study also needed to be **excellent teachers**. We spent a significant amount of time uncovering how the literature and current policies define excellent teaching. This is a contentious issue, to say the least. We landed on the word excellent, in part because we did not want to use the word effective or high-quality, both terms which are highly contended in the field of education. This is partly because many researchers argue that there is not a one-size-fits-all way to determine quality teaching. Context and conditions, such as student engagement, parental support and sufficient resources, matter. As such, quality teaching takes on different characteristics in different contexts and as a result, good teaching does not automatically lead to successful teaching absent the right conditions for learning (Berliner, 1976; Fenstermacher & Richardson, 2005). What's more, defining a benchmark for measuring teaching quality is difficult because goals are complex and effective

instruction cannot be attributed to the teacher alone (Harris, 2011; Kelly, 2011). As a result, most districts use a variety of measures for teacher quality. This includes, value added measures, teacher observation measures, internal evaluation systems and more.

To account for this, we decided to draw from our respective networks, opting to interview teachers who were deemed excellent at their school site by principals, had been nationally recognized through awards, or with whom we first-hand knowledge of their teaching style and impact.

While improving longevity in the classroom (as measured by retention) is important, we think learning about how teachers experience the day to day is the first step. During our interviews, our focus was on how teachers approached the job moment to moment. We were interested in learning about their daily experience. What are the small, but meaningful subtleties in the way they experience the ups and downs of classroom life? How do they differ from those who decided to leave?

Study Design

To test our theory that burn-in is the opposite of burnout on the three dimensions of Energy, Outlook, and Self-Efficacy, we conducted 20 qualitative interviews. We wanted to better understand the profile of the burned-in teacher and more specifically, the development of burned-in mindsets.

While the study does not seek proof or solutions, we hoped that through the identification of the most salient mindsets, we could begin to craft an understanding, and later an intervention, that would promote burn-in for excellent teachers surpassing the five-year mark.

Throughout the process we consulted the way that Sutton & Staw (1995) define theory. We found his description below to be helpful.

We agree with scholars like Kaplan (1964) and Merton (1967) who assert that theory is the answer to queries of why. Theory is about the connections among phenomena, a story about why acts, events, structures and thoughts occur. Theory emphasizes the nature of causal relationships, identifying what comes first as well as the timing of such events. (p. 378)

Description of Sample

The 20-person sample of educators was comprised of nine male and eleven female kindergarten through high school public school teachers who met our criteria.

The range of years of classroom teaching experience spanned from five to 19 years. One teacher had five years of experience, nineteen teachers had more than five years of experience. The average years of experience was 9.75 years. The sample of teachers included 14 teachers who were still in the classroom and six teachers who had left the classroom. The cities in which these educators have taught (or are teaching in) span over 30 cities. The teachers who were still teaching represented elementary, middle, and high schools across the United States. Teachers included four recipients of the State Teacher of the Year Award and 13 former Teach For America corps members. Eight teachers identified as people of color. For a full list of teacher demographics, see Appendix A.

For additional context, we interviewed three teachers with less than five years of experience. Their interviews helped us to see the different mindsets that less experienced teachers espouse.

Procedure and Protocol

The 20 selected teachers each participated in one 45 minute interview over videoconference. They were told the interview was going to be about their personal experience,

mindsets, and perspective on teacher well-being. Participants were emailed the questions a day before the interview. Almost all teachers read the questions beforehand and came to the interview ready to share their personal experiences and thoughts on the teaching profession. The informed consent form can be found in Appendix B.

The interviews were casual, the script (see Appendix C) was followed, and we listened for evidence of burnout and burn-in characteristics, probing for their mindsets. We asked the participants to share their experiences and opinions on: their decision to stay or leave the classroom, their reactions to both positive and negative statements about teaching and the teacher's role, examples of both a stressful and successful moment in the classroom, and advice they would give the five-year teacher to help sustain him or her in the classroom. While one of us took notes, the other transcribed the full interview. We later coded the interviews for evidence of burnout and burn-in symptoms and analyzed for themes.

Each of the mindsets were eventually coded as being a part of Outlook, Energy or Self-Evaluation, see Appendix D. There was some overlap on dimensions. Initially, the list was created based on our own experience in education and the research that we had encountered within positive psychology. For example, *I can use my strengths in the classroom* supports strength based research that indicates that engagement in the workplace improves when employees can use their strengths (Hone at al., 2015; Dubreuil, Forest, & Courcy, 2013). *Teachers are the reasons students misbehave or do poorly academically* is an all or nothing thinking trap (Reivich &Shatté, 2002) which we anticipated would reveal teacher training and explanatory style. *Every teacher has something to teach me* is part of growth mindset (Dweck, 2015). *Secure my own oxygen mask first* is somewhat opposite to *True teachers are saints/warriors/martyrs*. Each statement, we hoped, would spark conversation or mindsets

behind which there is substantive research from which we could build.

When coding interviews, we indicated burnout symptoms, burn in symptoms, and indication that an interviewee took a new approach to the work, see Appendix E for Interview Coding. The first few we coded separately and compared in order to norm on our approach. Finally, we coded the number of burn-in to burnout symptoms in order to estimate a ratio.

In preparation for analysis, we identified trends in mindsets based on common statements from teachers.

Results and Analysis

The results of our interviews showed that teacher burn-in is a blend of both teacher burnout and burn-in. In the following sections, we will chart the movement from burnout mindsets to burn-in mindsets in the following three dimensions: Energy, Outlook, and Self-Evaluation. Within each dimension, each shift is accompanied with excerpts from the interviews and supporting research.

Energy: Becoming more energized

In Energy, teachers became less emotionally exhausted and experienced more energy over time. The mindset of burned-in teachers shifted from "school only" to "school-plus-me".

Mindset shift:

Burned-in teachers shifted from "school only" to "school-plus-me."

When Mrs. D, who has been teaching middle and high school for 10 years, thinks about her teaching work, she asks herself:

"Can I **blend** being the kind of mom I want to be with the kind of teacher I want to be?" - Mrs. D., Brooklyn, New York

She introduced us to the word blend and inspired a discovery of this mindset shift from

school only (which can steer a teacher toward emotional exhaustion) to a blend of school-plusme (which can steer a teacher toward energization). We identified this mindset shift as a theme
when many of our teachers chose to comment on this statement: Taking care of myself helps me
take care of my classroom.

From "school only". Many teachers expressed a mindset of selfless and endless giving at the beginning of their careers, either because that is what they believed their students deserved, needed, or what the job demanded. As Ms. G, who taught high school for five years, puts it:

"[I know] you have to sleep, eat well, exercise. I was really bad at that. It was hard for me to take that approach when I thought my kids had so much working against them and that they deserved to have adults that could give 1,000 percent." - Ms. G, Los Angeles, California

However, she realized this mindset (*school only*) exhausted her. Research supports this.

In a recent study conducted by Adam Grant and Reb Rebele (2017), 400 second-year preK through high school teachers throughout the United States were given 11 different "giving" scenarios. Teachers were prompted to select one of four options that best reflected how they

"Imagine that you're teaching a geometry class, and you've volunteered to stay after school one day a week to help one of your students, Alex, improve his understanding of geometry. He asks if you'll also help his friend Juan, who isn't in your class. What would you do?

- a. Schedule a separate after-school session to help Juan, so you can better understand his individual needs.
- b. Invite Juan to sit in on your geometry sessions with Alex.

would respond in real life. For example, one of the scenarios read:

- c. Tell Alex that it's nice that he wants to help Juan, but he really needs to focus on his own work in order to catch up.
- d. Tell Alex that Juan should ask his own teacher for help."

In this scenario, option (a) is the selfless response, while option (b) is the self-protective (making sure the costs don't outweigh the benefits) response (Grant & Rebele, 2017). This study found that the teachers with the highest scores for selflessness had the lowest-performing classes. That is, the more times teachers chose responses that sounded like "I will do whatever it takes without boundaries" (what is referred to as "prosocial and selfless" in the study), the worse their students performed on end-of-year state tests. This makes sense.

Our interviews taught us that selfless (or *school only*) educators exhaust themselves. And despite their best intentions, these selfless teachers were unintentionally hurting the very people they had set out to serve by depleting themselves and draining their reserves. Because emotional exhaustion is a symptom of burnout, these teachers were at higher risk for burnout and attrition.

We interviewed one such teacher, Mr. Q, who taught middle school for six years. He began teaching with high and unrealistic expectations of himself. He then experienced feelings of depletion; his students and he suffered because of it. Essentially, he burned out.

"My expectations of myself became not as realistic. It reached a point where I was so not happy. I got very depressed...I noticed about myself that I think I'm a lot more negative than I want to be. I have compassion fatigue. Nothing shocks me about kids. I've given a lot. I'm tired. I don't have the patience. I scream a lot more than I did. Things irritate me." - Mr. Q, El Cerrito, California

Prosocial behavior research outside of the teaching profession validates Mr. Q's experience. In a diary study of 68 MBA students that tracked the students' helping behaviors, depletion, and perceived social impact of those helping behaviors, Lanaj, Johnson, & Wang

(2016) found that reacting to help requests depletes regulatory resources at an increasing rate. The ego depletion theory is a contested, yet compelling explanation of this (Baumeister, Bratslavsky, Muraven, & Tice 1998). Individuals exercise self-regulation in order to comply with social norms, such as managing attitudes or even managing demanding interpersonal interactions (Finkel et al., 2006; Johnson et al., 2014; Lin, Ma, & Johnson, 2016). However, there is a finite pool of regulatory resources to pull from (Baumeister, Gailliot, DeWall, & Oaten, 2006; Baumeister, Vohs, & Tice, 2007) and like a muscle, over-exercised self-regulation results in fatigue, or less effective daily self-regulation and performance (Lanaj et al., 2014).

Interestingly, this same study found that perceived social impact was able to replenish those resources. For example, if a teacher perceived that her giving helped a student in some way, her self-regulatory pool was replenished. The relationship between depletion and perceived social impact, however, was moderated by prosocial motivation. Simply put, if the teacher felt it was her role to help a student, her perception of how her giving impacted the student had no benefit. In other words, prosocial motivation worsened the depleting effect of helping and weakened the replenishing effect of perceived social impact (Lanaj et al., 2016).

Most teachers enter the field of education motivated by its prosocial nature and because they want to help students succeed. They are therefore easily susceptible to the damaging effects of depletion.

Many teachers, including Mr. Q, recognized another way. Whether the impetus for change was an external factor (i.e., marriage, children) or job protection (to sustain their desired career), they recognized the need to take care of their own physical, emotional, and social needs. They also recognized that the act of self-care was in service of their students. And so, they shifted their mindset.

To a blend of "school-plus-me". Interestingly, many of our teachers noticed an internal energy-mindset shift around the five-year mark. Mrs. P who has been teaching middle and high school for 11 years remarked:

"I can see why people leave after the fifth year. My fifth year was an examination year. It's like when you hit a six-month mark in a relationship, you ask yourself, man is this person for me?...When I came to [teach in] New Orleans I specifically asked about work-life balance. [I took the job] where I've been promised a work life balance." - Mrs. P, New Orleans, Louisiana

Research supports the benefits of this mindset shift (*school-plus-me*). It is reasonable to infer from both Grant & Rebele's (2017) and Lanaj, Johnson, & Wang's (2016) studies, that employees, in our case, teachers, who give wisely, experience less negative impact on their performance. In other words, by blending a mindset of giving to *school only* with giving to *school-plus-me* teachers can sustain energy and impact. This is called self-protective giving (Grant & Rebele, 2017) and because of its proactive nature, it empowers the teacher with permission to choose if, when, how, and to whom they will respond.

Self-protective teachers look for high-impact, low-cost ways of giving so that they can sustain their altruism and enjoyment, and avoid generosity burnout (Grant & Rebele, 2017). In fact, self-protective giving can be an energizing force.

One such teacher, Mrs. N from Los Angeles, who has been teaching special education for 14 years, learned to give and self-protect simultaneously. She said:

"You're no good to anybody if you're not good to yourself. You have to remind yourself it's not selfish. My recess and lunch- very rarely will I give that up. I kick my students out and I kick myself out. I need a time to breath out and vent to my TAs. We need to close the door and say 'Oh my God'. And laugh. It's important to laugh." - Mrs. N, Los Angeles, California

The simple act of *not* giving to her students and giving to herself during recess and lunch instead enables her to give more effectively to her students during class-time.

Grant (2013) expands upon this notion: "If takers are selfish and failed givers are selfless, successful givers are otherish: they care about benefiting others, but they also have ambitious goals for advancing their own interest" (p. 157). Grant interviewed one such self-protective model- a TFA teacher who commented on the training she received, which taught her to have the mindset that "unless you pour every waking hour of your life into the job then you're doing a disservice to your kids" (Grant, 2013, p.161). She admitted to quickly experiencing symptoms of burnout. However, instead of taking a step back, she decided to give more, and in a novel way. She gave in a way that aligned with her own passion- she helped the high-achieving, low-income students prepare for college. She transitioned to doing something for others, while also doing something for herself. She had the mindset of being "otherish." The success and accolades that ensued gave her a newfound sense of energy and impact - all because she didn't give up on giving, but blended it with giving to herself too.

Tom Rath agrees. Giving to the self can be energizing. Rath (2015) argues that in order to truly make a difference in the lives of others you need to put your energy and health first. This resonates with the well-known airplane saying *Secure your own oxygen mask first*, and it also resonates with the statement that 17 out of our 20 teacher interviewees chose to respond to: *Taking care of myself helps me take care of my classroom*.

We all know that eating well, sleeping well, and moving well make us feel well (Rath, 2013). In fact, doing just one of those things well can lead to an upward spiral (Fredrickson, 2009) of improvement in the other two areas, demonstrating that energy is like positive emotions, a small boost can have an exponential effect.

Many of our teacher interviewees noted something similar, particularly around exercise.

To them, exercise was taking care of themselves and taking care of their classrooms, both.

Ms. N, who has taught middle and elementary school for nine years, shared how yoga evolved her thinking about her approach to teaching.

"[At first], I felt from my principal that you don't stop. You just go, go, go. I wanted to be like, let me show you another way. [Then I found yoga.] It's a whole other community- another way to define yourself, another way to practice [teaching]... an act of calming and being judgement free." -Ms. N, Washington, D.C.

Likewise, Mrs. D, who has been teaching middle and high school for 10 years, recognized how running helped her burn-in.

"We have to think about all the different parts of ourselves just like we want to take care of [all the parts] of our kids. [For me], this means being able to take care of [my son] and going for a run. Running makes me kinder...Running is my meditation." - Mrs. D, Brooklyn, New York

As burn-in buffers against burnout symptoms, eating, moving, and good sleeping hygiene buffer against emotional exhaustion. A team of researchers at University of California, San Francisco (Puterman, et al., 2014) studied telomeres. Telomeres are the protective caps at the end of chromosomes affecting how quickly cells age. They shorten as a result of stress. Puterman, et al. (2014) found that this shortening process can be slowed even in the presence of stressors. Healthy lifestyle decelerated this process. This study followed the stressful events, and eating, moving, and sleeping habits of 239 women for one year. The results: the women who were exposed to more stressors in one year did in fact have shorter telomeres. But the women who lived healthy lifestyles through eating, moving, and sleeping well, and who too were exposed to stressors, did not have as short of telomere lengths (Puterman, et al., 2014).

What does this mean for teachers? Chronic stressors are a surefire way to deplete a teacher's energy. But the frequency and magnitude of stressors, especially in an urban settingwhere poverty, crime, violence, mental illness, and substance abuse can be common - are outside

a teacher's control. The physiological- and we argue, psychological- impact of stress, however, can be offset simply by a teacher eating a healthy breakfast before school, walking the halls in between every class, and setting one's students' papers aside in order to get a good night of rest. Those choices fall within a teacher's control.

Furthermore, on any given day, people with high levels of energy are three times more likely to be engaged in their work (Rath, 2013).

And like emotion (Fowler & Christakis, 2008), we believe energy is contagious. In this way, students are reflections of their teachers. As Mr. R, who has been teaching elementary and middle school for 18 years, sums it up:

"My classroom is my mirror. I have to be ready myself, to give my best." -Mr. R, Oakland, California

Outlook: Becoming more optimistic

In Outlook, teachers became more optimistic and less cynical over time. The mindset of burned-in teachers shifted from "I am solely responsible, I am solely to blame" to "I rely on collective action" and "I rely on complex measures of success."

Mindset Shift:

Burned-in teachers shifted from "I am solely responsible, I am solely to blame to" 1) "I rely on collective action" and 2) "I rely on complex measures of success."

Mr. D, who has been teaching high school for 11 years, commented on how his expectations of himself have changed:

"What made me good at the beginning was thinking that I needed to be good at everything and I was responsible for everything. I was grinding. What has made me better at this work is realizing that I can't and don't need to do it all." -Mr. D, Brooklyn, New York

He inspired a discovery of this mindset shift from *I am solely responsible*, *I am solely to blame* (which leads to cynicism and an unclear sense of control) to *I rely on collective action* and *I rely on complex measures of success* (which leads to optimism and discernment of control). We identified this mindset shift as a theme when we recognized that many of our teachers chose to comment on this specific statement from the interview list: *Teachers are the reason students misbehave or do poorly academically*.

From "I am solely responsible, I am solely to blame". Most of the teachers we interviewed, 16 out of the 20, expressed a mindset of taking full responsibility and assigning self-blame at the beginning of their teaching careers. This was either because they believed they deserved it, it was what they needed to stay motivated, or it was what the job demanded. As Mrs. B, who has been teaching elementary school for seven years, put it:

"I was beating myself up so much about things that weren't going well. All I did was obsess about work." -Mrs. B, Washington, D.C.

When teachers looked back on their day, they would focus on the negative and let it define their experience and their identity as teachers. This mindset leads to rumination and cynicism. Buchanan & Seligman (1995) define how we explain bad events as our explanatory style. Broadly speaking, pessimists interpret and explain bad events as permanent, pervasive, and personal.

When teachers attribute personal causes for when things go wrong (*I am solely responsible, I am solely to blame*), they are more prone to cynicism. And despite their best intentions to maintain high expectations and assume full responsibility, this pessimistic thinking exhausted them. Because cynicism is a cause of burnout, these teachers were at higher risk for burnout and, or attrition.

We interviewed Mr. J who has taught middle school for seven years. At the beginning of his teaching career, if one bad thing happened in the day, it defined the whole day.

"Back then, I would think if this one thing that happened in the day, where I felt unsuccessful, I would associate it with the entire day. It was horrible. I would tell myself, 'I failed kids."". -Mr. J, Atlanta, GA

Beck's (1964) research puts words to Mr. J's experience and former outlook. Mr. J carried a negative perception of his performance as a teacher that became a persistent cognitive pattern, what Beck calls a schema. When one schema takes over, it becomes difficult to test reality and recognize the complexity of a situation objectively. The teaching day is ripe with opportunities for this type of thinking, which can create a downward spiral of thoughts and feelings.

Of course it can become tempting to overemphasize one part of a story. Most urban teachers enter the field of education because they attribute the achievement gap to current and historical racism at the personal, institutional, and cultural level. Therefore, they are easily susceptible to embracing mindsets that promise total teacher control. (The authors of this paper, included). Doing so leads teachers to take action and responsibility, but can also lead to an inflated sense of control or even self-righteousness (Okun, n.d.).

Reflecting on our own experience with Teach For America, and on its training materials from a decade ago, it is clear where the role of the individual teacher was overemphasized.

Author of TFA's teacher rubric, Steven Farr (2010) argues that:

Highly effective teachers first seek root causes [for student failures] in their own actions.

Because they see themselves as ultimately responsible for what happens in their classroom, they begin with the assumption that their actions and inactions are the source

of student learning and lack of learning. (Farr, 2010, p. 185)

Further, in the training manual from 2008, the running footer of each section highlighted the mindsets that beginning teachers should espouse (TFA, 2008):

- **Bottom Line:** I am responsible for developing my students' value in the work we do (p. 71).
- **Bottom Line:** What students understand depends 100% on what you present to them and how you present it (p. 191).
- **Bottom Line:** The expectations I set for my students will determine the extent of their academic achievement (p. 301).
- **Bottom Line:** Do not let minor misbehavior slide. If you do, you are opening the door to major misbehavior (p. 331).

Ten years later, what do we think? The upside to these foundational mindsets is that teachers ought to take full responsibility for their important role in a classroom. And, in no way do we advocate that teachers shirk responsibility. Nor do we advocate that teachers change mindsets wholly. Rather, we notice the benefit when teachers develop a more discerning explanatory style - that is, a blend.

Over time, almost every one of the teachers, including Mr. J and Mrs. B, recognized this on their own. Whether the impetus for change was to avoid loss (burning-out) or toward promising gains (greater sustainability), they recognized the need to develop a more complex and discerning explanatory style. They also recognized that a more optimistic approach that focused on what was within their control benefited their students. And so, the burned-in teachers shifted their mindset.

To a blend of "collective action". Many of our interviewees noticed that their thinking style had an impact on their teaching style. Mr. L, who has been teaching middle school math for 11 years, described what could "push" him out of the classroom.

"Teachers are very influential but not entirely responsible. If you think you are the reason students are misbehaving ... That can be a push factor." -Mr. L, Washington, DC

Teachers showed signs of decreasing pessimism, by not assuming full blame, thus increasing their optimism. To describe the practice of increasing optimism, we use Reivich, Seligman, & McBride's (2011) definition of: "(1) noticing the goodness in self and others, (2) identifying what is controllable, (3) remaining wedded to reality, (4) and challenging counterproductive beliefs."

The first component, "noticing the good," became a priority for Mrs. S from Western Pennsylvania, who has taught high school for 19 years. When we asked what sustains her, she told us about a folder that she has kept for almost 20 years.

"Inside that Happy Folder are thank you cards, emails from students who have left and gone to college, photographs of students in the newspaper and those little reminders of how they are contributing in positive ways." -Mrs. S, Western Pennsylvania

The Happy Folder, which was suggested to her by a colleague, helped her shift her mindset toward the positive. Research tells us that we all have a tendency to notice the negative more than the positive. This is called the negativity bias (Baumeister et al., 2001). Given that the reality of teaching is so challenging, the effect of the negativity bias is that much greater. What Mrs. S was doing, was savoring the positive.

Bryant (2003) defines savoring as a way to mindfully engage in the thoughts and behaviors that heighten the effect of a positive event on positive feelings. Much like prolonging a

negative emotion can lead to rumination, prolonging a positive emotion can lead to savoring, which leads to more positive emotions. Effectively, savoring contributes to the upward spiral effect of positive emotions (Fredrickson, 2013).

Our burned-in teachers revealed that they had stories that they had been savoring for years. Just as importantly, they could explain what they did to influence the good events. They recognized their positive influence and shared some of the credit.

So far, we have discussed how optimists spot strengths and share some of the credit.

They also spot adversity and share some of the blame.

Research supports the benefits of this mindset shift and even attributes it to increased effort. Optimists, writes Martin Seligman (1991), "are unfazed by defeat. Confronted by a bad situation, they perceive it as a challenge and try harder" (p. 4-5). The key to optimists is that they look for where they have influence and control in situations, especially in response to adversity (Peterson & Vaidya, 2001). Optimists do not default to assuming full control.

This is why in response to the statement: *My students' academic performance determines my success as a teacher*, nearly all of our teachers said, "It depends." They agreed, to an extent.

To a blend of "complex measures of student success". Research consistently shows that teachers are the most important in-school factor for increasing student achievement and that positively influencing social and emotional development is an important part of the teacher's role (Kane & Staiger, 2012). Researchers have come to value a blend of measures of success including those academic, social, emotional, and related to well-being (Duckworth & Gross, 2014; Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011).

Our teacher interviewees noted something similar, particularly around maintaining a more complex picture of student success and teacher influence. To both Mrs. B in Washington,

D.C., who is entering her eighth year of teaching elementary school, and Mrs. P, who is entering her 12th year of teaching high school in New Orleans, constantly calibrating their measures of success and control is a necessity.

"Sometimes, I am concerned that I lose [sight of] what I want out of the classroom besides my students' ability to score x on an assignment. When the conversation is constantly around data and numbers it's easy to forget the other things. Like that their identities matter and they feel valued and are gaining friendships. I struggle to remind myself." - Mrs. B, Washington, D.C.

"The longer I've taught, I've realized a few things to be true. Students do well when they have great teachers. Sometimes student don't do well and it doesn't mean you're a shitty teacher – could be trauma, bad day, measurement systems. You have a lot of perfectionists in high performing schools. I was groomed to be that way. When a kid does average, what does that say about him? About me?" - Mrs. P, New Orleans, Louisiana

The fourth component of practicing optimism is to "stay wedded to reality". For example, according to Ms. N, who has been teaching elementary school for nine years, teaching will always present challenges. However, consistent with our theory, she does not expect perfection, nor does she free herself from responsibility. Her outlook blends powerlessness (cynicism) and impact (optimism).

"I take it very seriously that if I'm teaching a class, there are underlying factors and I acknowledge those, but I think the ultimate success of a class can be attributed to the teacher. I can see the way that I set up a classroom in year five as opposed to year eight has impacted the learning. At the same time, I think the teacher has to be set up for success across the school environment. Even in a crazy school I knew that the failure was a reflection of what I'm able to bring to students at this time. These feelings contribute to both burnout and burn-in for me. Burnout because I've felt, 'What am I doing wrong?' Or, when I get back data that isn't strong or when I have general classroom management issues. I've at times felt powerless. But I'm also motivated by that and I see the impact of my presence in the classroom." -Ms. N, Washington, D.C.

We cannot divorce our students from our country's history of racism, power, and

inequity. Nor can we deny the reality that teaching is complex. It's downright hard. However, urban educators must remain wedded to this reality without losing hope. Striking that balance takes years of experience and is what we found to contribute to teacher burn-in.

Burned-in teachers have learned that unrealistic expectations are a powerful force against their sense of possibility. They work to share blame, share credit, and share responsibilities while constantly spotting strengths. This helps them to develop a nuanced understanding of progress and to work toward collective action. As burn-in symptoms buffer burnout symptoms, an optimistic outlook can modulate against temporary thoughts of defeat and cynicism so that excellent teachers keep teaching.

Ensuring this blend is a constant process. Our interviewees and research tells us that thinking style can be improved (Reivich, Seligman, & McBride, 2011). Teachers who prioritize honing their outlook not only think differently about the job, but they act differently too.

As Mrs. D, who has been teaching middle school for 11 years concludes, developing a nuanced understanding of progress and blending her actions with others has become central to her teaching approach.

"I've recognized that humans are so complex and kids are humans. There are [so many] deeply rooted things at play. If you don't think of the whole child, it's really hard to solve. Now, I don't try to prove I can do it alone. I get more teachers and members of the community involved." -Mrs. D, Brooklyn, New York

Self-Evaluation: Becoming more self-efficacious

In Self-Evaluation, teachers' sense of self-efficacy, "one's belief in one's ability to succeed" (Bandura, 1977) evolved from doubtful to confident over time. Their mindset shifted from a "prescribed practice" to a "preferred practice."

Mindset:

Burned-in teachers shifted from a "prescribed practice" to a "preferred practice."

We noticed a shift in excellent teachers as they moved from a *prescribed practice*, the way they were originally taught to teach, to a *preferred practice*, the way they proudly choose to teach.

There were two consistent themes of how people developed a *preferred practice*. When (1) teacher-student relationships were strong and, or prioritized and, or (2) their preferred style 'belonged' at their school, burned-in teachers spoke with confidence. As such, strong relationships and a sense of belonging contributed to the shift from a *prescribed* to a *preferred practice*.

From a "prescribed practice". When teachers first start teaching, they feel a sense of self-doubt. This was reported by 17 of our 20 interviewees. Conscious of their incompetence and inexperience, they learned from articulated and modeled examples. The way to teach was prescribed both overtly, by being directly told what to do, and more subtly, by observing the surrounding examples. We called this adopting a prescribed practice.

There is a need for a *prescribed practice* at the beginning of one's teaching career.

Research supports the three-year time frame of acquiring the foundational skills of teaching

(Hanushek, 1996; Hanushek & Rivkin, 2004). As teachers acquire skills, the need to rely on the prescribed approach contributes less to their sense of self-efficacy.

To a blend of "preferred practice". Teachers described the trials and errors that lead them away from *a prescribed practice* and confidently toward their own style.

Mrs. W from Sacramento, California, best described this shift. At first she was merely executing what she was told to do. Once she became consciously competent, she started to

develop her own preferred practice through trial and error.

"Over time I have understood how to do things and [now] I have a way to do things and a way that I refuse to do things that is largely through trial and error." - Mrs. W, Sacramento, California

Research confirms that the more someone achieves, the more confident he feels (Bandura, 1977; Gist, 1987). Similarly, as teachers gain confidence and experience, they gain preferences.

Mrs. P, who has been teaching middle and high school for 11 years, explained:

"When I was [training to become a teacher] there was an archetype - you can be this type of teacher or this type of teacher. I don't subscribe to that anymore. - Mrs. P, New Orleans, Louisiana

Mrs. P shifted from subscribing to an approach to teaching, one she learned through Teach For America's training program, to exploring her own approach. First of all, she taught elsewhere. She moved from a school without structure to a school with too much structure. She decided she felt most effective somewhere in between. She moved and taught abroad; she learned Spanish. And when she came to the school in which she now teaches, she asked about work-life balance, teacher autonomy, and the coaching philosophy before she accepted the job. She has now landed in a place that comfortably blends with her expectations of her role as teacher. For other teachers whom we interviewed, exploration happened through travel, furthering their own education, gaining membership into professional organizations, or stepping away from the career before coming back.

Strong relationships. We asked teachers to describe a successful teaching moment and learned more about what gave them confidence. We noticed that their response

always included a triumph with a student. We concluded that one of the most frequent spikes in self-efficacy came from strong relationships. More specifically, we concluded that strong student-teacher relationships contributed to the development of their *preferred practice* and, or it solidified their belief in their practice.

What follows are three stories from three teachers with three distinct styles, all of which offer a window into the many different ways that teachers leverage relationships to teach with confidence.

Ms. G described her increasing confidence through a story about her student Diamond, a student with whom all other teachers struggled. Whereas she was initially taught to immediately nip all inappropriate behaviors in the bud, eventually, her *preferred practice* developed. She spoke with confidence about how her ability to form relationships increased her self-efficacy.

"I knew from the first day of school that [Diamond] had a super tough exterior but was just a teddy bear. She had challenges at home and because of that had put up a front. I figured out that in class when I would approach her and she would speak to me in a less than loving way, I'd tell myself- that's just Diamond and it isn't about me. I decided to not take anything that she did personally because I knew that our relationship just looked different. Because of that, I didn't experience the same frustration as other teachers. I would tell her-'I love you. I'm going to be back in 5 minutes and we'll talk.' She couldn't hurt my feelings so she stopped trying. [I heard from her the other day]. She is still in college and has a job and got her first car. A lot of my students have dropped out, but Diamond is just killing it." - Ms. G, Los Angeles, California

The relationship with Diamond took time. So did developing a *preferred practice*. But by responding gently and consistently with love, and focusing on her unique relationship with Diamond, Ms. G started to see success. Diamond's academic success, along with their shared relationship, proved to Ms. G that her approach was effective.

Mrs. T, who has taught middle school for eight years in Washington, D.C., had a different *preferred practice* than the school that her student, Amir, came from. In her words, he

had been babied before and her approach of holding high expectations, even when he whined or cried, resulted in push back from his mother all year. By the end of the year, he had matured greatly and his behavior improved along with his academics. Mrs. T confidently reported that had she backed off of him earlier in the year, that success, "never would have happened." To celebrate, they went together to Six Flags at the start of the summer. Mrs. T's story showcased her *preferred practice*. Her ultimately positive relationship with Amir, in addition to his growth, gave her confidence as a teacher.

Dutton's (2003) research on high quality connections (HQCs) validates the connection between strong relationships and teacher confidence. HQCs are short-term, dyadic, positive interactions at work (Dutton, 2003). They result in a feeling of vitality, being held in positive regard, and a high feeling of mutuality (Stephen, Heaphy, & Dutton, 2011) and in the words of Dutton (2003) herself, they are "literally life-giving" (p. 20).

There are four pathways to HQCs: (1) task enabling, or facilitating another person's successful performance; (2) respectful engagement, or engaging the other in a way that sends the message of value and worth; (3) trusting, or conveying to the other person that you believe they will meet your expectations, (4) playing, or participating in activities with the intention of having fun (Dutton, 2003).

All of these pathways take substantial time. In particular, respectfully engaging and building trust require steady patience and consistent maintenance. They are not end goals; they are ceaseless processes in and of themselves. And the process is usually messy, which can rattle one's sense of self-efficacy. Ms. H, one of the few teachers who we interviewed with only three years of experience, says it best:

"You can't edit a lesson plan to have a better relationship with a kid." - Ms. H, Sunnyvale, California

Mr. R's interaction with his student Jakari was one such messy, non-prescribed process.

"Early in the year he started cursing. When I would ask him what I could do to help... he threaten me, say, 'I'm going to kill you!' or 'What you lookin at?' He threw his chair. When this kind of thing is brought into the classroom you have to be mindful of what comes out of your mouth. You're responding interpersonally, non-verbally and then [you have] to find a way to respond. So, I'd check in with him right off the top. Did he sleep? Had he eaten? Anything to get his mind diverted from stress... He'd act really confident. [I'd call him] Jakari on a Safari because he was always on the move. But he had a lot of self-doubt. And then it came time for the reading test. I observed him on the test. I told him, 'You gotta fight through. Remember, you're going to get this goal. You have to maintain a level head.' He got a 549. He was so elated." - Mr. R, Oakland, California

It is hard to pinpoint exactly what Mr. R did to get Jakari to first stop cussing and throwing chairs and then improve his test scores. But that is the point. He explored. Through play, nicknames, and constant check ins, he built trust. Their relationship helped Mr. R to find his *preferred practice*, and it also helped Jakari succeed, which further propelled Mr. R to feel confident about this approach.

Mr. J, who has taught elementary, middle, and high school students for seven years, shared that facilitating strong relationships within his classroom increased both his students' sense of self-efficacy, and his own.

"I felt really successful with [these] boys...even though they were a challenging group. If I could build culture with that group, then I could build culture with any group. [Getting them to] trust each other revealed to me that I have complete control in the classroom. I can make kids feel empowered. I can make them feel good." - Mr. J, Atlanta, Georgia

Sense of belonging. Sense of belonging is defined as the extent to which someone feels socially connected, supported, respected, or in other words, like they fit in (Romero, 2015). We concluded that teachers' sense of belonging at their school contributed to the development of their *preferred practice* and, or it solidified their belief in their practice.

While the existing research is largely centered around students, we hypothesize that when teachers feel a sense of belonging, they are more capable of creating conditions for student belonging.

Mr. K, who has been teaching high school for 10 years, developed a *preferred practice* of incorporating the arts and involving local community organizations in his curriculum. His sense of belonging, which he had from the beginning, allowed him to develop this *preferred practice* and it made him feel like he was making a difference.

"I knew very early that I had students who wanted me to be successful and that was a big bump for me. From early on, I had support from administration [too]. When both students and adults are giving you similar feedback, in a positive way, you feel like: *I belong* and *I'm making a difference*." -Mr. K, Washington, D.C.

But not all teachers felt a sense of belonging right away. Sometimes, after settling on their most efficacious teaching style, it did not jive with the school culture. In these instances, to become burned-in teachers intuited that they needed to find a different environment. Mrs. Y, who taught elementary school for seven years, noted a mindset shift from merely accepting the school's approach to developing her own.

"I think that during my fifth year of teaching, I started to question [the school's] approach, which is ultimately what prompted me to leave my school... I felt like the approach wasn't working for students. Every student except one was ESL [English as Second Language]. I found what happened was that when kids had to write [on their own], they didn't have the words to know what to write about. I started to add in my own shared texts [outside of what the model provided] and it helped. Ultimately I left for a school that would provide me more autonomy to do my own thing." - Mrs. Y, Chicago, Illinois

Many teachers described how they felt more confident about their *preferred practice* once they found a school that shared the same vision. Mrs. B, who has been teaching elementary school for a total of seven years, returned to the classroom for this very reason.

"My conversation with the principal and her vision for kids reignited my passion. I got excited about the opportunity to go back. After a year at her school, I think the things we spoke about are still aligned. I'm going to stay next year and I feel good about it." – Mrs. B, Washington, DC

Later in the interview, Mrs. B shared that she feels valued because the school leaders ask for her opinion. She belongs.

"I'm asked for my voice to be heard. My leadership wants me to be involved." Mrs. B, Washington, DC

In summary, teachers felt a sense of self-efficacy when they developed and were given the autonomy to teach in their preferred style. The importance of personal teaching philosophy and a school culture that supports it could not be underestimated.

As stated earlier, we believe teachers who belong encourage student belonging. And when students feel they belong, they do better in school.

Sense of belonging has been shown to correlate with improved outcomes for students in a myriad of ways: improved grades and academic competencies (Pittman & Richmond, 2007),

higher levels of academic motivation (Gillen-O'Neel & Fuligni, 2013), and lower levels of negative academic behaviors such as absenteeism, dropping out, truancy, and academic misconduct (Demanet & Van Houtte, 2012).

Creating a sense of belonging should be a priority for teachers of historically disadvantaged groups, such as ethnic minorities, which most of the teachers who we interviewed serve. Minority students tend to be hypervigilant about whether they belong in school. A lack of belonging predicts higher stress levels and lower academic performance (Yeager, Walton & Cohen, 2013).

But, there is evidence to suggest that interventions can mitigate lack of belonging. A first step is to acknowledge and normalize the anxiety and desire to belong. In a study conducted by Yeager & Walton (2011), college freshmen read survey findings and anecdotes from seniors' first year at college. These findings demonstrated that students commonly question their belonging, especially when embarking on something new. The freshmen then wrote about their own experiences transitioning into college and were told that they would be shared with future freshmen. The writing exercise was meant to help students internalize the message that feeling out of place in school is normal in the beginning. Moreover, the writing exercise itself felt more like a prosocial opportunity to help others than a remedial task (Romero, 2015). The researchers argue that priming students' sense of belonging increases students' beliefs in and about school, which ultimately leads to greater student achievement (Yeager & Walton, 2001).

Given the research, we assert that teacher self-efficacy rises in the context of strong relationships and a sense of belonging. And over time, this enables teachers to burn-in, shifting toward a *preferred practice* and gaining confidence in their craft.

Limitations

We note several limitations of the current study that can be leveraged to inform future research.

To begin, this study is limited to the data of our 23 qualitative interviews. We selected only teachers who met our criteria, plus three who fell just below the five-year mark. As the description of the sample set demonstrates (see Appendix A), our teachers represent a diversity in gender, race, geography, content and grade level, and affiliation, though not the full range of each of these identifying factors. To increase external validity of the burned-in teacher profile, we would continue to interview teachers, diversifying and expanding the teachers in our sample.

The interview questions themselves were limited. Teachers responded to 15 statements. We created the list based on our literature review and our own experiences in the classroom. An issue of measurement validity is possible as the wording we chose to use may have inadvertently influenced teacher answers, and, or the absence of other statements may have led to gaps in our findings altogether. We also asked teachers to talk about the entirety of their careers, and while some questions narrowed in on a specific point in time (for example, the last question asks teachers to give advice for the fifth year teacher), it is likely that teachers shared mostly about their most recent school experience and their first year of teaching. These tend to be most top of mind. And certainly it is possible, due to the fact that almost all of our interviews were conducted over videoconference, that our body language, facial expressions, and responses (while we tried hard to remain neutral) influenced their sharing as well.

Furthermore, due to time restrictions of the interview itself and the scope of this Capstone project, we were unable to pinpoint exactly when each of the mindset shifts occurred for the teacher. Several did mention year five, but this could have been because we shared that many

teachers leave around year five at the beginning of the interview. We also gathered limited evidence on how the mindset shift was or was not related to other mediating factors. For example, some teachers chose to share that a marriage or birth of a child is what in fact made them realize they needed to shift to prioritizing their health alongside their duties at school. Not all teachers reflected on this as it was not a formal part of the interview.

Our coding process, which we normed on, is subject to confirmation bias and thus issues of measurement reliability. It is probable that we listened for or read the transcription more closely for evidence of a particular characteristic as we started to see trends emerge. We wanted to know specifically about the interviewee's personal experiences, but often times they would redirect the conversation to their views on teachers in general. Thus, it was difficult at times to know whether to code those statements for the characteristics we were looking for, when in fact they may have been rich with evidence of burnout or burn-in.

Finally, it is important to call out that when we looked at the ratios (see Appendix F), and thus compared burn-in to burnout symptoms, the number of each symptom represented what the teacher chose to share. It is possible, therefore, that a teacher chose to elaborate more on their burnout experiences than their burn-in experiences or vice versa.

Theoretical Implications

From a theoretical standpoint, burn-in contributes to burnout research because it involves elements of burnout. When looking at the data gathered from coding, it was clear that most all of our interviewees experienced more symptoms of burn-in than burnout. This makes sense, as the majority were still teaching and excelling in the classroom, some well beyond year five. However, our data shows an inconsistent relationship between these two continuums. Without clear ratios, we can only speculate that the participants with no burnout symptoms (two out of

20) were outliers to our Burned-In Theory.

We do hypothesize, however, that like Fredrickson and Joiner (2002)'s research on positive emotions triggering upward spirals toward emotional well-being, it is possible that increasing positivity through burned-in mindsets, can lead to an upward spiral. Our theory supports the idea that increasing the positive (burned-in mindsets), as opposed to focusing on decreasing the negative (burned-out mindsets) can be an effective approach to teacher wellbeing. To reflect this, we calculated a ratio of burn-in symptoms to burnout symptoms for each teacher based on our interview coding. The majority, 13 out of 20 of our teacher interviewees, expressed more symptoms of burn-in than burn-out. The majority of that majority, 8 out of 13, are still in the classroom teaching (see Appendix F).

Our current ratio data is merely interesting, not suggestive of any relationship. In order to validate this data, as suggested in the limitations section, we would need to diversify our sample of teachers, ensure each teacher was asked the same set of questions (to strengthen validity), and better norm the coding processes of these interviews (to strengthen reliability). Future research has the potential to suggest a relationship between the ratio of burn-in: burnout and teacher retention, as well as teacher job satisfaction.

The ratio hypothesis ignites a long list of further research. From a practical standpoint, the Burn-In Theory is truly only valuable to the field of education if it can demonstrate to schools and their leaders *how* to keep the very best teachers teaching in some of the most demanding settings. Some questions to frame future research are:

- What is the ratio that quantifiably describes the blend of burn-in to burnout we discovered?
- Is there a temporal component to this blend? Does year five in fact indicate the

most needed time to track and examine data?

- Do other mindset shift trends exist? Are there other mindset shifts that need to happen in order to activate a blend? And what is the relationship that exists among them?
- Are there certain dimensions (i.e. Energy) or symptoms (i.e. emotional exhaustion) or mindsets (*Taking care of myself allows me to take care of my classroom*) that best predict a burned-in blend?
- What other mediators or moderators might influence this equation?

$$BIT = BO + BI$$
, where $BI > BO$

Despite the aforementioned limitations and this lengthy list of future research questions, it is our hope that future research builds upon our preliminary findings by studying the excellent urban educator, particularly at year five. It is also our hope that future research studies the outliers in our Burned-In Theory - for example, the excellent urban teachers who never seem to express any level of burnout.

Practical Implications

We hypothesize that a mindset intervention has the potential to shift the five-year-plus teacher's mindsets toward burn-in.

Yeager's leading work on sense of belonging and Dweck's leading work on growth mindset have inspired this idea. Earlier, we mentioned a mindset intervention designed by Yeager & Walton (2011). College freshman read anecdotes written by seniors that alluded to their lack of sense of belonging when they began college. Freshmen were then told they could help other students by writing their own anecdotes for future freshmen. Similarly, Dweck (2010) has studied how simply teaching kids that the brain can grow has positive effects on their

motivation and achievement. Aronson, Fried, & Good (2001) developed an intervention that taught students at Stanford University about growth mindset through a workshop. Students read about how the brain is like a muscle that gets stronger with more exercise. They then had the option to tutor younger students about growth mindset.

Our design of a potential mindset intervention for teacher burn-in is influenced by three ideas from the mindset interventions mentioned above. First, normalizing similarities in mindsets makes people feel less isolated, and perhaps part of a supportive community. Secondly, reading and writing are powerful reflective tools that build self-awareness, and perhaps over time, change habits. Writing, in particular, helps commit information to memory but can also reinforce concepts (Karpicke & Blunt, 2011). If these concepts are positive ones (i.e. *I am not the only one who feels I don't belong and this feeling will dissipate over time*) they can help to build positive connections (Pennebaker, 1997). Third, paying it forward, that is, teaching someone else what you just learned, supports the internalization of the mindset.

We'll proffer, for example, building a mindset intervention around the Outlook dimension with the objective of shifting teachers from a place of burnout (*I am solely responsible*) to a more blended place of burn-in (*I am part of a collective team*). First, we would prepare a reading activity to be disseminated to the five-year plus teacher. The purpose of this would be to norm the hardships and mistakes before the shift was made. These stories could begin with the very interviews we conducted, such as:

"I [used to be] really cocky about my ability to manage. Give me any student and I'll get them there [is what I'd say]. My seventh year of teaching I was working in a community where there was a high number of ACE [adverse childhood experiences] scores, higher than most schools. That experience taught me that it's not always just about the teacher. It's about the wraparound services that are at that school so that the right environment is created." - Mrs. Y, Chicago, Illinois

Then, after reading these stories, teachers would reflect in writing. More specifically, at the end of every month, five-year-plus teachers would be asked to write a reflection around a particular question aligned to the targeted dimension. For example: What is an example of a time in which you realized you weren't solely to blame for a student's failure? The purpose of this writing activity would be to build self-awareness and reinforce the normalcy of shifting mindsets.

Finally, these five-year-plus teachers would be told that other future teachers would read their stories too. The purpose of this is to make teachers feel accountable for and attached to what it is that they are writing, thus internalizing the message they are offering to others. We predict, much like the interventions designed to target sense of belonging and growth mindset, this intervention would ultimately contribute to a mindset shift toward burn-in.

But this example of a mindset intervention begs the larger question of *how*. *How* is this intervention administered effectively and consistently? Interventions at the school site are often treated as quick fixes, losing their stickiness and value when they stand alone. We believe mindsets are more caught than taught. This intervention requires a supportive community and should be infused into school culture. As principals help to build community, we suggest it be modeled by the administration. When burned-in mindsets are modeled from the top, they are more likely to be caught.

We were reminded of the summer reading that Teach For America assigned to us before our first year of teaching. One story of a selfless first-year teacher helped to instill some of the motivating, yet unsustainable mindsets we adopted as first-year teachers.

We suggest principals maintain an internal book or blog that supports the five-year-plus teacher to develop and sustain burned-in mindsets. The narrators would be fifth-year-plus

teachers who exemplify burned-in mindsets. We'd call it: "The Teacher's Guide to Thriving Here at (School Name)". The impact of such a shared text could be measured through studying the correlation between sharing such a resource and survey results on teacher job satisfaction and retention data.

As stated at the beginning of this paper, we see the benefit of the mindsets that can lead to burnout - such as prioritizing school over self - especially in the context of social injustice and teacher inexperience. After the steep learning curve at the start of all teaching careers is in the rearview mirror, we see the benefit of another layer of support, as suggested in the administration of this mindset intervention by the principal. This extra layer of support, we believe, can not only act as a buffer against burnout, but activate a blend, and sustain the very best in the classroom.

Teacher training programs, such as Teach For America, empower teachers to be excellent from the start of their careers. Our theory and its ensuing implications seek to support teachers in sustaining their excellence to, through, and beyond year five. Our desired result for further research is to fortify the case for this new layer of support.

Conclusions

Just as James Pawelski (2016) contends that happiness and unhappiness are not just two ends of the same continuum, we contend that burnout and burn-in are not just two ends of the same continuum. Absence of burnout does not mean burn-in. Instead, there is an overlap of positive and negative characteristics. This overlap, what we call the *blend*, is what we find most interesting for further research. It is not a question of an inverse relationship (dialing one up and the other down), but a simultaneous experience of negative and positive symptoms, particularly at specific times, like year-five of teaching. It is at this point that research shows we lose many teachers (Ingersoll, 2003) and it is at this point, we found, that teachers realized they could not hold on to many of the mindsets they originally had or they would burnout. So, they made some

shifts.

According to our theory, a teacher must experience more sustained symptoms of burn-in than burnout to be considered truly burned-in. In closing, we will use the analogy of building a fire to illustrate the concept.

You need three elements to start a fire: heat, oxygen, and fuel. Fuel is what ignites the fire's flames and it is also what sustains them. Initially, you need an igniting agent, like charcoal or ignitor fluid, to get the flames going. These beginning flames, however, need another agent to sustain and spread the fire, otherwise it will burn out. The consistent addition of wood, in the words of disco star Gwen McCrae, will "keep the fire burning."

Teaching is like fire. For most new teachers, there is an igniting agent. Some of the very same mindsets that lead to burnout can jump-start one's teaching career. For instance, *I am solely responsible for my student's success* can be initially motivating. Teachers, especially ones in disenfranchised urban schools, should feel responsible for their student's academic performance. But over time, this mindset, without modulation (or anything other than the igniting agent), leads to symptoms of burnout. A more nuanced mindset like, *I am part of the collective whole and I rely on complex measures of success*, activates optimism and thus burn-in. In this way, burn-in characteristics are the teaching profession's wood- the necessary fuel to sustain and grow the fire.

One could say, a fire that is thriving (a teacher who is staying and doing well) is the blend of the two types of fuel: the igniting agent (with its activating, albeit unsustainable, burnout mindsets) and the steady addition of wood (which blends in the burn-in mindsets) that will keep the fire burning year after year.

Appendices

Appendix A - Teacher Demographics

Variable	#	% (of 20)	
Gender/Race			
Female Teachers	11	55%	
Male Teachers	9	45%	
Teachers of Color	8	40%	
# of Years in the Classroom Teaching *Average years of classroom teaching experience = 9.75 years			
5-7 Years of classroom teaching experience	7	35%	
8-10 Years of classroom teaching experience	5	25%	
10+ Years of classroom teaching experience	8	40%	
Currently still Teaching in the classroom	14	70%	
Not Currently still Teaching in the classroom	6	30%	
Affiliations			
State Teacher Of The Year Recipients	4	20%	
Teach For America Corps Members	13	65%	

Appendix B - Consent Form

UNIVERSITY OF PENNSYLVANIA RESEARCH SUBJECT INFORMATION FORM

Protocol Title:

Burned In: Teacher Well-Being Interviews

Principal

Investigator: Dr. Robertson Kraft

Co Investigators:

Sophia Kokores

skokores@sas.upenn.edu

650-575-3587

Julia King

juking@sas.upenn.edu

804-241-6109

You are being invited to participate in a research study because you are or have been deemed an excellent teacher in an urban school and we believe you can help to identify teacher well-being biases that contribute to *teacher burnout* as well as positive mindsets that contribute to *teachers becoming burned-in*.

Before you agree, the investigator must explain a number of things to you. These things include:

- The purpose of the study is to identify examples to be used in Sophia Kokores' and Julia King's capstone paper (as part of the Master of Applied Positive Psychology program at the University of Pennsylvania) on teacher well-being biases that contribute to teacher burnout and positive mindsets that contribute to teachers becoming "burned in" in the urban public education space.
- Approximately 20 people will be interviewed for this study in the month of June, 2017.
- The study will consist of a single interview for each participant, with a set of questions designed to obtain a description of his or her experiences and mindsets teaching in urban education.
- There is no experiment associated with this study.
- There is a minimal risk that your confidentiality will be breached. However, to mitigate this, your real name or the name of your school will not be used in our final paper.
- The study will not have a direct benefit to you, but you may request a copy of the final capstone paper.
- There are no costs for you to participate in this study, nor will you be paid for your participation.
- The investigator may halt your participation in the study if during the interview the information being provided is either a) not about teaching in urban settings or b) the investigator feels that sensitive information is being provided.

- The interview will be conducted via videoconference, but your physical identity will not be recorded. Only your voice will be recorded so that in case we miss something in our notes we can go back and listen to the audio recording. You may opt out of audio recording. Please inform us if you do not wish to be audio recorded.
- The final report (the capstone paper) will be publicly available on the University of Pennsylvania's scholarly commons site: http://repository.upenn.edu/ The notes and audio-recording from your interview will not be made publicly available. They will be saved on Penn Box.
- To protect your privacy, ONLY a pseudonym, the type of teaching work, and the city and type of school you work/have worked in will be reported in the final paper. For example, it could sound like: "Mr. R is currently teaching 9th and 10th grade English for his 12th year in an Oakland charter school. He says...." You will also be asked to refrain from identifying specific individuals or organizations in your responses.

Your participation in this research study is voluntary. If you decide not to participate, you are free to leave the interview at any time. If you have questions about your participation in this research study or about your rights as a research subject, make sure to discuss them with either Sophia Kokores or Julia King, the co study investigators. You may also call the Office of Regulatory Affairs at the University of Pennsylvania at (215) 898-2614 to talk about your rights as a research subject.

Appendix C - Interview Script

TITLE: Burned In: Teacher Well-Being Interviews

Section 1: Build Understanding of Teacher (5min)

- 1. Tell us what it was like to make the decision to stay or leave the classroom.
- 2. What ultimately has helped sustain you in this work?

Section 2: Activity (15min)

DIRECTIONS: Look at this list. What resonates with you? What doesn't resonate with you? To what extent do you have any of these mindsets? Which of these statements do you believe have made you consider leaving the classroom? Which of these statements do you believe have helped to sustain you in the classroom?

- Teachers are the reason students misbehave or do poorly academically.
- To keep teaching, I need to enjoy it.
- I can use my strengths in the classroom.
- Teachers shouldn't take anything personally.
- There is meaning in my daily experience.
- True teachers are saints/warriors/martyrs.
- I am part of a collective team that supports positive change.
- The teachers who work the longest, care the most.
- My students' academic performance determines my success as a teacher.
- Every student has something to teach me.
- I believe in my approach as a teacher.
- My work here is not done.
- I add value add value and am valued at my school.
- My job mixes with my life.
- Secure your own oxygen mask first.
- Taking care of myself helps me take care of my classroom.

Section 3: Anecdotes (15min)

- 1. Think about a very stressful day this past school year. Describe it. What were you thinking? What were your reactions? What mindset do you think this is related to? Why or where does that mindset come from?
- 2. Think about a very successful day this past school year. Describe it. What were you thinking? What were your reactions? What mindset do you think this is related to? Why or where does that mindset come from?

Section 4: Advice (5min)

If you were to give a 5-year teacher advice on how to sustain him/herself in the classroom what advice would you give?

Appendix D - Coded Mindsets

- Teachers are the reason students misbehave or do poorly academically. Ev/O
- To keep teaching, I need to enjoy it. En
- My students' academic performance determines my success as a teacher. Ev
- I can use my strengths in the classroom. En/Ev
- Teachers shouldn't take anything personally. En
- There is meaning in my daily experience. O
- True teachers are saints/warriors/martyrs. **O**
- I am part of a collective team that supports positive change. O/E
- The teachers who work the longest, care the most. **Ev/En**
- Every student has something to teach me. O
- My job mixes with my life. En
- Secure your own oxygen mask first. En
- I believe in my approach as a teacher. Ev/O
- My work here is not done. **O/Ev/En**
- I add value and am valued at my school. **O/Ev/En**
- Taking care of myself helps me take care of my classroom. En/O/Ev

Appendix E - Interview Coding

TFA Trained (yes or no)

Previously Experienced Symptoms of Burnout

- EE Emotional Exhaustion
- C Cynicism
- LSE- Lowered Sense of Efficacy

Purposefully Took New Approach

- E Externally Driven (example: changed schools)
- I Internally Driven (example: realized needed to prioritize personal care)
- B Both

Currently Experience Symptoms of Burnout***

- EE Emotional Exhaustion (example: I would have a panic attack every Sunday night)
- C Cynicism (example: it didn't matter what any of us did)
- LSE- Lowered Sense of Efficacy (example: I felt like I was making my student's worse)

Currently Experience Symptoms of Burn-In

- E Energized/Engaged (example: I started to do Pottery for fun on Tuesday nights)
- O Optimistic (example: improved sense of locus of control)
- SSE Sense of Self-Efficacy (example: notice impact, belief in philosophy, mattering)

***The reason for doing previous burnout and Current Burnout/Burn-in is to see if people experience both + and - symptoms and if they experience more of one or the other.

Appendix F - Ratio Data

The table below displays preliminary data indicating a ratio of burn-in to burnout symptoms for the teachers we interviewed. It is merely interesting to share, not suggestive of any relationship. In order to validate this data, as suggested in the limitations section, we would need to diversify our sample of teachers, ensure each teacher was asked the same set of questions (to strengthen validity), and better norm the coding processes of these interviews (to strengthen reliability). Future research has the potential to suggest a relationship between the ratio of burn-in: burnout and teacher retention, as well as teacher job satisfaction.

Total # of years in classroom	Still In the Classroom Teaching?	Reduced and Estimated Ratio: Burned-in Symptoms: Burned Out Symptoms	
6	YES	0:1	
7	YES	1:1	
11	YES	1:1	
7	YES	1:1	
8	YES	1:1	
11	YES	1:1	
6	NO	1:1	
7	NO	2:1	
19	YES	2:1	
11	YES	2:1	
5	NO	3:1	
12	YES	3:1	
9	NO	4:1	
8	NO	5:1	
7	YES	6:1	
14	YES	10:1	
10	YES	17:0	
8	NO	18:0	
18	YES	18:1	
11	YES	20:1	

References

- Allen, K., Kern, M. L., Vella-Brodrick, D., Hattie, J., and Waters, L. (2016). What schools need to know about fostering school belonging: A meta-analysis. *Educational Psychology Review*, 1-34. doi:10.1007/s10648-016-9389-8
- Aronson, J., Fried, C., & Good, C. (2001). Reducing the effects of stereotype threat on African

 American college students by shaping theories of intelligence. *Journal of Experimental Social Psychology*, 38, 113-125.
- Bandura, A. (1997). Self-efficacy: The exercise of control. New York: Freeman.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323-370. doi: 10.1037//1089-2680.5.4.323
- Baumeister R.E, Bratslavsky, E., Muraven, M., & Dianne, T. M., (1998). Ego Depletion: Is the active self a limited resource? *Journal of Personality and Social Psychology*, 74(5), 1252-1265
- Baumeister, R. F., Gailliot, M., DeWall, C. N., & Oaten, M. (2006). Self-regulation and personality:

 How interventions increase regulatory success, and how depletion moderates the effects of traits on behavior. *Journal of Personality*, *74*, 1773–1802. Retrieved from http://dx.doi.org/10.1111/j.1467-6494.2006.00428.x
- Baumeister, R. F., Vohs, K. D., & Tice, D. M. (2007). The strength model of self-control. *Current Directions in Psychological Science*, *16*, 351-355. Retrieved from http://dx.doi.org/10.1111/j.1467-8721.2007.00534.x
- Beck, A. T. (1964) Thinking and depression II: Theory and therapy. *Archives of General Psychiatry*. 10, 561-571

- Beehr, T.A. and Newman, J.E. (1978) Job stress, employee health and organizational effectiveness: A facet analysis, model and literature review. *Personnel Psychology*, *31*, 665-699. Retrieved from http://dx.doi.org/10.1111/j.1744-6570.1978.tb02118.x
- Berliner, D. C. (1976). The California Beginning Teacher Evaluation Study: Overview of the ethnographic study. *Journal of Teacher Education*, *27*(1), 24-30.
- Blackburn, S. (1994). Polar concepts. In *The Oxford dictionary of philosophy*. Oxford: Oxford University Press.
- Blazar, D., & Kraft, M. (2016). Teacher and teaching effects on students' attitudes and behaviors. *Educational Evaluation and Policy Analysis*, 39(1), 146-170
- Bronk, C.B. (2012). The exemplar methodology: An approach to studying the leading edge of development. *Psychology of Well-Being: Theory, Research and Practice*, doi:10.1186/2211-1522-2-5
- Bryant, F. B. (2003). Savoring beliefs inventory (SBI): A scale for measuring beliefs about savouring. *Journal of Mental Health*, 12(2), 175-196.
- Buchanan, G., & Seligman, M. E. P. (1995). *Explanatory style*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Byrne, B. M. (1994). Burnout: Testing for the validity, replication, and invariance of causal structure across elementary, intermediate, and secondary teachers. *American Educational Research Journal*, *31*, 645–73.
- Carroll, T. G. (2007). *The high cost of teacher turnover (Policy brief)*. Retrieved from https://nctaf.org/wp-content/uploads/NCTAFCostofTeacherTurnoverpolicybrief.pdf
- de Souza, J. C. de Sousa, I. C., Belísio, A. S., de Azevedo, C. V. M. (2012). Sleep habits, daytime sleepiness and sleep quality of high school teachers. *Psychology & Neuroscience*,

- BURNED-IN, NOT BURNED OUT 2, 257-263.
- Demanet, J., & Van Houtte, M. (2012). School belonging and school misconduct: The differing role of teacher and peer attachment, *Journal of Youth and Adolescence*, 41(4): 499-514.
- Dubreuil, P., Forest, J., & Courcy, F. (2014). From strengths use to work performance: The role of harmonious passion, subjective vitality and concentration. *Journal of Positive Psychology*, *9*, 335-349.
- Duckworth, A. L., & Gross, J. J. (2014). Self-control and grit: Related but separable determinants of success. *Current Directions in Psychological Science*, *23*(5), 319–325.
- Duckworth, A.L., Quinn, P.D. & Seligman, M.E.P. (2009) Positive predictors of teacher effectiveness, The Journal of Positive Psychology, 4(6), 540-547, doi: 10.1080/17439760903157232
- Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405–432
- Dutton, J. E. (2003). Energize your workplace: How to create and sustain high-quality connections at work. San Francisco, CA: Jossey-Basse.
- Dweck, C. (2010). Mindset: The new psychology of success. New York, NY: Random House.
- Dweck, C. (2015). Teachers' mindsets: 'Every student has something to teach me.' *Educational Horizons*, 93(2), 10-14. Retrieved from https://eric.ed.gov/?id=EJ1047427
- Farr, S. (2010). *Teaching as leadership: how highly effective teachers close the achievement gap.* San Francisco: Jossey-Bass.
- Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213.
- Finkel, E. J., Campbell, W. K., Brunell, A. B., Dalton, A. N., Scarbeck, S. J., & Chartrand, T. L. (2006).

- High-maintenance interaction: Inefficient social coordination impairs self-regulation. *Journal of Personality and Social Psychology*, *91*, 456–475. Retrieved from http://dx.doi.org/10.1037/0022-3514.91.3.456
- Fowler, J. H., & Christakis, N. A. (2008). Dynamic spread of happiness in a large social network:

 Longitudinal analysis over 20 years in the Framingham Heart Study. *British Medical Journal*,

 337. Retrieved from https://doi.org/10.1136/bmj.a2338
- Fredrickson, B. L. (2009). *Positivity: Top-notch research reveals the upward spiral that will change your life.* New York: Crown Publishing Group.
- Fredrickson, B. L. (2013). Positive emotions broaden and build. In Patricia Devine and Ashby *Plant*, *Editors: Advances in Experimental Social Psychology, Vol. 47*, pp. 1-53. Burlington: Academic Press.
- Fredrickson, B.L., and T, Joiner (2002). Positive emotions trigger upward spirals toward emotional well-being. *Psychological Science*, *13*, 172-175,
- Gallup, Inc. (2014). State of america's schools: The path to winning again in education. Retrieved from http://www.gallup.com/services/178709/state-america-schools-report.aspx
- Gist, M. (1987). Self-efficacy: Implications for organizational behavior and human resource management. *The Academy of Management Review*, *12(3)*, 472-485.
- Gillen-O'Neel, C., & Fuligni, A. (2013). Longitudinal study of school belonging and academic motivation across high school. *Child Development*, *84*(2), 678–692.
- Grant, A. (2013). *Give and take.* London: Orion Publishing Group.
- Grant, A., & Rebele, R. (2017). Beat Generosity Burnout. Harvard Business Review. Retrieved from https://hbr.org/cover-story/2017/01/beat-generosity-burnout.
- Hanushek, E. A. (1996). A more complete picture of school resource policies. Review of Educational

- BURNED-IN, NOT BURNED OUT Research, 66(3), 397-409.
- Hanushek, E. A., & Rivkin, S. G. (2004). How to improve the supply of high quality teachers. *Brookings Papers on Education Policy:* 2004, 7-44.
- Harris, D. N. (2011). *Value-added measures in education: What every educator needs to know.*Cambridge, MA: Harvard Education Press.
- Hatfield, E., Cacioppo, J. T., & Rapson, R. L. (1994). *Emotional contagion:*Studies in emotional and social interaction. New York: Cambridge University Press.
- Holt-Lunstad J, Smith TB, Layton JB (2010) Social Relationships and Mortality Risk: A Meta-analytic Review. *PLoS Med* 7(7): e1000316. Retrieved from https://doi.org/10.1371/journal.pmed.1000316
- Hone, L. C., Jarden, A., Duncan, S., & Schofield, G. M. (2015). Flourishing in New Zealand workers:

 Associations with lifestyle behaviors, physical health, psychosocial, and work-related indicators. *Journal of Occupational and Environmental Medicine*, 57(9), 973-983.
- Ingersoll, R. M. (2001). Teacher turnover and teacher shortages: An organizational analysis. *American Educational Research Journal*, *38*(3), 499-534.
- Ingersoll, R.M, (2003). *Is there really a teacher shortage?* Seattle, WA: Center for the Study of Teaching and Policy, University of Washington.
- Jacob, A., Vidyarthi, E., & Carroll, K. (2012). *The irreplaceables: Understanding the real retention crisis in America's public schools*. Brooklyn, NY: TNTP.
- Johnson, R. E., Lanaj, K., & Barnes, C. M. (2014). The good and bad of being fair: Effects of procedural and interpersonal justice behaviors on regulatory resources. *Journal of Applied Psychology*, *99*, 635–650. Retrieved from http://dx.doi.org/10.1037/a0035647

- Kane, T. J., & Staiger, D. O. (2012). Gathering feedback for teaching: Combining high-quality observations with student surveys and achievement gains. Seattle, WA: Bill & Melinda Gates Foundation, Measures of Effective Teaching Project.
- Kaplan, A. (1964). *The conduct of inquiry*. New York: Harper & Row.
- Karpicke, J.D., & Blunt, J.R. (2011). Retrieval practice produces more learning than elaborative studying with concept mapping. *Science* 331, 772-775.
- Kelly, S. (2011). Understanding teacher effects: Market versus process models of educational improvement. In S. Kelly (Ed.), *Assessing teacher quality: Understanding teacher effects on instruction and achievement*, pp. 7-32. New York, NY: Teachers College Press.
- Kozol, J. (1991) Savage inequalities. New York: Crown Publishing.
- Kraft, M.A., & Grace, S. (2016). Teaching for tomorrow's economy? Teacher effects on complex cognitive skills and social-emotional competencies (working paper). Providence, RI: Brown University.
- Kyriacou, C., (1987). Teacher stress and burnout: An international review. *Educational Research*, 29(2), 146-152.
- Lanaj, K., Wang, M., Johnson, R. I. (2016). When lending a hand depletes the will: The Daily Costs and Benefits of Helping. *Journal of Applied Psychology*, *101*(8), 1097-1110.
- Lee, R.T., & Ashforth, B.E (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of Applied Psychology*, 81(2), 123-133.
- Lens, W, & Decruyenaere, M. (1991). Motivation and de-motivation in secondary education: Student characteristics. *Learning and Instruction*, *1*(2) 145-159.
- Lens W., Nevesde Jesus S. (1999) A psychosocial interpretation of teacher stress and burnout. In:

 Vandenberghe R., Huberman A. M. (eds) Understanding and preventing teacher burnout: A

- source book of international research and practice. Cambridge University Press, Cambridge, pp 192–201.
- Lin, S. J., Ma, J., & Johnson, R. E. (2016). When ethical leader behavior breaks bad: How ethical leader behavior can turn abusive via ego depletion and moral licensing. *Journal of Applied Psychology*.

 Advance online publication. Retrieved from http://dx.doi.org/10.1037/apl0000098
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). MBI: The Maslach Burnout Inventory: MBI. Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Reviews, 52, 397-422.
- Maslach, C. (1982). Burnout: The cost of caring. Englewood Cliffs, NJ: Prentice-Hall.
- Maslach, C. (1998). A multidimensional theory of burnout. In *Theories of Organizational Stress*, ed. CL Cooper, pp. 68-85. Oxford, UK: Oxford Univ. Press.
- McLean, L., & Connor, C. M. (2015). Depressive symptoms in third grade teachers: Relations to classroom quality and student achievement. *Child Development*, 86, 945-954.
- Merton, R.K. (1967). On theoretical sociology. New York: Free Press.
- Okun, T. (n.d.). From white racist to white anti-racist. changework. Retrieved from http://www.cwsworkshop.org/pdfs/CARC/White Identity/4 Life Long Journey.PDF
- Pawelski, J.O. (2016). Defining the 'positive' in positive psychology: Part I: A descriptive analysis. *The Journal of Positive Psychology*, 11(4), 339-356.
- Pennebaker, J.W. (1997). Writing about emotional experiences as a therapeutic process. *Psychological Science*, 8(3), 162-166.
- Peterson, C. (2006). A primer in positive psychology. Oxford: Oxford University Press.

- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*.

 New York: Oxford University Press.
- Peterson, C., & Vaidya, R. S. (2001). Explanatory style, expectations, and depressive symptoms.

 *Personality and Individual Differences, 31, 1217-1223.
- Pittman, L. D., & Richmond, A. (2007). Academic and psychological functioning in late adolescence: The importance of school belonging. *Journal of Experimental Education*, 75(4), 270-290.
- Puterman, E., Lin, J., Blackburn, E. H., & Epel, E. S. (2014). Determinants of telomere attrition over 1 year in healthy older women: stress and health behaviors matter. Molecular Psychiatry: 1-7. doi:10.1038/mp.2014.70
- Rath, T. (2015). Are you fully charged?: The 3 keys to energizing your work and life. Silicon Guild.
- Reivich, K. J., Seligman, M. E. P., & McBride, S. (2011). Master resilience training in the U. S. Army. *American Psychologist*, 66(1), 25-34.
- Reivich, K. & Shatté, A. (2002). The resilience factor: 7 essential skills for overcoming life's inevitable obstacles. New York, NY: Broadway Books.
- Robertson-Kraft, C., & Duckworth, A. (2014). True grit: Trait-level perseverance and passion for long-term goals predicts effectiveness and retention among novice teachers. *Teachers College Record*, 116(3), 1–27.
- Romero, C. (2015). What we know about belonging from scientific research. Mindset Scholars Network.

 Retrieved from http://mindsetscholarsnetwork.org/wp-content/uploads/2015/09/What-We-Know-About-Belonging.pdf
- Rudow B. (1999) Stress and burnout in the teaching profession: European studies, issues, and research perspectives. In: Vandenberghe R., Huberman A. M. (eds) Understanding and preventing teacher

- burnout: A source book of international research and practice. Cambridge University Press, Cambridge, pp 38–58.
- Stephens, J.P., E. Heaphy and Dutton J.E., (2011). High quality connections. In K. Cameron & G. Spreitzer (eds). *Handbook of positive organizational scholarship* (pp. 385-399). New York: Oxford University Press.
- Sutton, R.I. & Staw, B.M. (1995). What theory is not. Administrative Science Quarterly, 40(3), 371-384.
- Seligman, M. E. P. (1991). Learned optimism. New York: Knopf.
- Seligman, M. E. P., (1999). The president's address. *American Psychologist: APA 1998 Annual Report* (pp. 559-562). American Psychologist Association.
- Shirom, A., Toker, S., Alkalay, Y., Jacobson, O., & Balicer, R. (2011). Work-based predictors of mortality: A 20-year follow-up on healthy employees. *Health Psychology*. *30*(3), 268-275.
- Teach For America. (2008). Los Angeles Corps Member Instruction Binder: Volume 1. NY, NY: Teach For America.
- Wang, M., & Holcombe, R. (2010). Adolescents' perceptions of school environment, engagement, and academic achievement in middle school, *American Educational Research Journal*, 47(3), 633-66.
- Yeager D. S., Walton G., & Cohen, G. L. (2013). Addressing achievement gaps with psychological interventions. *Phi Delta Kappan*, *94*(5), 62–65.
- Yeager, D. S., & Walton, G. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81(2), 267–301.
- Yeager, D. S., Purdie-Vaughns, V., Garcia, J., Apfel, N., Brzustoski, P., Master, A., & Cohen, G. L. (2014). Breaking the cycle of mistrust: Wise interventions to provide critical feedback across the

racial divide. *Journal of Experimental Psychology*: General, 143, 804–824. doi:10.1037/a0033906

Yonezawa, S. Jones, M., Robb Singer, N. (2011). Teacher resilience in urban schools: The importance of technical knowledge, professional community, and leadership opportunities. *Urban Education*, *46*(913).