UNIVERSITY OF CALIFORNIA SAN DIEGO

Reimagining Wellbeing: 1-2-3 Wellness as a Neurobiologically-Based Approach to Human Flourishing

A dissertation submitted in partial satisfaction of the requirements for the degree of

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Educational Leadership

By

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The Dissertation of Drew E. Schwartz is approved, and it is acceptable in quality and form for publication on microfilm and electronically:

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Dedication

This work is dedicated to the people who go about their days quietly working hard, every day and in subtle ways often wrought with struggle, to be a bit more present and well as a human being. With such work, in small ways and large, you are changing the world.

Epigraph

“You are not just a drop in the ocean, you are the mighty ocean in the drop.”

-Rumi

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Abstract of the Dissertation

Reimagining Wellbeing:
1-2-3 Wellness as a Neurobiologically-Based Approach to Human Flourishing

by

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Doctor of Education in Educational Leadership

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Today, society is facing a collective onslaught of mental and social challenges which include increased instances of depression, anxiety, bullying, and suicide. An interconnected approach to wellbeing, as this paper presents, reimagines these problems not as separate issues that are effectively addressable through band aid solutions and isolated initiatives, but rather as the manifestation of interrelated root causes. This multiphase, mixed methods study which included 154 students and 12 educators, explored the effectiveness of an integrative approach to wellbeing in schools called 1-2-3 Wellness™ and helped identify themes and propellants of wellbeing.

Four fundamental findings rose to the surface within this study. First, the 1-2-3 Wellness™ program is effective in propelling wellbeing among students and educators with significant increases in mindfulness and social and emotional learning (SEL). More broadly, the program serves as an illustration of the power and potential of integrative approaches to wellbeing and has application for families, schools, organizations, and communities. Secondly, five essential elements of school wellbeing were identified: safety, connection, routines, purpose, and choice. Thirdly, the paper introduces the concept of *collective limbic regulation* to refer to the dynamic which occurs when healthy micro interactions between a group of people helps group members cultivate and sustain a state of wellbeing. The paper suggests that collective limbic dysregulation, rather than regulation, is at the root of many of society's growing problems, and that intentional efforts to cultivate *collective limbic regulation* hold promise for initiating solutions. Lastly, based on the findings, along with other cutting-edge research, *wellbeing* is reimagined with a new definition: the expression of interdependent systems of connection working in harmony. Along with the aforementioned findings, this new conceptualization offers a new lens to view societal problems and potential solutions related to wellbeing. Such a reimagined lens leads to the conception that *selfless-actualization*, rather than self-actualization, is the epitome of human flourishing and wellbeing and a gateway to solutions.

The paper concludes by discussing implications of the study and by offering ideas to support policy makers, researchers, and educators in navigating future efforts to promote wellbeing in communities. Ultimately, we reimagine wellbeing through a lens of human flourishing and connection, and discuss implications of this new lens for society moving forward.

Keywords: Wellbeing, Wellness, Schools, Communities, Families, Social and Emotional Learning, Mindfulness, Behavior, Neurobiology, Essential Elements of School Wellbeing, Integration, 1-2-3 Wellness™, Collective Limbic Regulation, Human Flourishing

Chapter 1: Introduction

Statement of the Problem

Here in the West, we are the 'healthiest', most fed, and most academically educated we have ever been in the history of humankind. Yet, we are concomitantly the most stressed out, depressed, and anxious (Reynolds, 2018). The frequent and rapidly increasing incidence of mental health concerns has prompted impassioned debate regarding their causes and correlations, both throughout the news media, and through the lenses of different scientific disciplines (Persson & Rossin-slater, 2018). While a myriad of complex variables undoubtedly contributes as the cause of these issues, some scholars and practitioners in the field of education, motivated by cogent trends in data, are attempting to discover ways to alleviate and prevent problems within school settings which later manifest into society.

Historically, education in the United States has focused almost exclusively on the development of rational, intellectual capacities, with little attention given to the maturation of other dimensions (Ferrer, 2005). Though academic achievement has received overwhelming attention, the U.S. public school system was not initially developed to exclusively teach academics like reading, writing, and arithmetic. Rather, our nation's founders envisioned a school system designed to foster a competent citizenry made up of collaborative, critical thinkers prepared to develop plans to rise above challenges (Greenberg, Domitrovich, Weissberg, & Durlak, 2017b). The school system was thus intended to prepare students to navigate their own successful pathways while also contributing to society (Greenberg et al., 2003).

In philosophy of education, since the fruits of work orchestrated in the formative school years later manifest and spread more broadly throughout society, *human flourishing*

(not academic attainment alone) has been defined as an ideal, or overarching aim, of education (Brighouse, 2009). Key building blocks of human flourishing include health and wellbeing, living a whole life, and actualizing human potential (Wolbert, Ruyter, & Schinkel, 2017). Human flourishing helps take into account the larger context and aspirations of people to live connected, happy lives. School can serve as an important part of the journey along with the way, invariably either propelling or stifling flourishing (Vanderweele, 2017). Some scholars thus question how school leaders, who value and uphold wellbeing as a central aim of education, might navigate curriculum and resources differently (Reiss & White, 2014). They argue that, in practice, schools tend to accept that traditional academic subjects such as reading, math, and science are important. Often, lesson plans are constructed from this starting point, without acknowledgement that non-academic factors are also significant contributors to a student's success in life. If wellbeing was defined as an overarching aim of education, however, this starting point might lead to different approaches to lesson plans and more broadly, schooling as a whole. As the presented research will suggest, in many cases, as an educational collective, we've moved with such intransigence towards the pursuit of academic excellence that we've forgotten other integral aspects of students' lives such as social and emotional needs.

In recent years, an estimated 4.3 million youth aged 12-17 years received treatment or counseling for emotional or behavior problems, representing 18.4% of the population (Texas, 2017). Children seeking to forge pathways of success in modern times face different challenges including hurdles related to race and socioeconomic status (Darling-Hammond, 2007). Approximately half of our nation's students are chronically disengaged (Klem & Connell, 2004). A recent meta-analysis from 2011-2012 shows that 3.5 million U.S. students

received in-school suspension, and another 3.45 million received out-of-school suspension. Every year, suspensions are disproportionately administered to minority students, especially males (Noltemeyer, Ward, & Mcloughlin, 2015). Urban schools serving a high percentage of economically disadvantaged students experience particularly high discipline and suspension rates (Mcloughlin & Noltemeyer, 2010). Black youth are two to three times more likely than white youth to be suspended. In fact, the discipline gap between black and white students starts as early as preschool. For example, national data from 2013-2014 shows that although only 19% of preschool children are black, African Americans represent 47 percent of preschool children who receive one or more out-of-school suspensions (Gregory, Fergus, Gregory, & Fergus, 2017).

Educational leaders are thus increasingly recognizing that our students require our adoption of a broader educational lens to understand students more holistically and offer support leading to both academic and broader wellness outcomes (Greenberg et al., 2017b). Thus, a recent focus for schools has been to address mental health challenges, since one in five children have reported significant mental health difficulties during their school years (Carsley and heath 2015; Koller and Bertel 2006; McMartin et al. 2014; CMHA 2014; NIMH 2015). Stress exposure has a negative effect on a child's brain and students from disadvantaged environments are disproportionately affected by toxic stress (Blair & Raver, 2016). Such negative results regarding the achievement gap, failing test scores, and behavioral problems represent a fierce "storm" with far reaching implications related to wellbeing.

With the aforementioned context serving as the backdrop, this study aims to address the absence of wellbeing in society, looking for opportunities to introduce high leverage solutions for infusing wellbeing into society via the school system. The present study focuses

on schools because habits related to wellbeing in youth can later translate to healthy lifelong outcomes which affect society at a larger scale (Greenberg et al., 2017b).

General Literature and Definition of Terms

The present work utilizes the words "wellbeing" and "wellness" somewhat interchangeably. The work draws upon key literature related to *wellness* in schools which is broadly defined as the "presence of physical, mental, and emotional health" though, in practice, the physical elements of wellness are often emphasized (Mcloughlin & Kubick, 2004). Similarly, *wellbeing*, a comprehensive concept, is marked by an individual's generally positive disposition, satisfaction, happiness, and healthy mental and physical capacities, along with the ability to make positive relationships, and social and emotional competence (Bernay, Graham, Devcich, Rix, & Christine, 2016). While the terms are similar, "wellbeing" draws upon a larger body of research than "wellness," encompassing an inclusive array of aspects related to human psychology and thriving. Generally, wellbeing is understood to consist of an amalgamation of thinking, feeling, and functioning. It is defined to include "cognitive satisfaction (achieved through goal accomplishment) and the presence of positive affect (and lack of negative feelings), in combination with the psychological needs of competence (personal ability), relatedness (social ties), and autonomy (personal control and resilience)" (Watson, 2018).

The phrase *interconnected wellbeing* is utilized in the present study to emphasize the interrelated relationships between variables and systems which inhibit or propel wellbeing. Similarly, "interconnected wellbeing" highlights the intentional integration of various interdisciplinary aspects of human experience including behavior, trauma, and self-compassion, which are too-often regarded with disparate lenses. With reverence to the fact

that the mind and body are inextricably connected, the work focuses more pointedly on the mental and emotional components of wellbeing, rather than physical, with attention to current educational efforts which address affective and cognitive dimensions (Littrell, 2008). Namely, research related to social and emotional learning, behavior, mindfulness, and other neurologically grounded school efforts such as trauma-informed practices, are explored. Ultimately, this paper introduces a new definition of wellbeing, suggesting that *wellbeing* manifests in the presence of interdependent systems of connection working in harmony.

Social and emotional learning (SEL) is defined as "children's ability to learn about and manage their own emotions and interactions in ways that benefit themselves and others, and that help youth succeed in schooling, the workplace, relationships, and citizenship" (Weissberg et al., 2015). For the purposes of this paper, SEL is the overarching approach that will be explored, with mindfulness and neurobiological considerations also examined. Throughout, the study examines potential synergistic, integrative opportunities for school practitioners.

Mindfulness involves paying attention in a particular way: "on purpose, in the present moment, nonjudgmentally" (Kabat-Zinn, 2003). In general, "wellbeing" represents the larger umbrella concept encompassing the whole person, SEL serves as the broad concept utilized, and mindfulness and neurobiological considerations serve as potential pathways to help promote positive wellbeing and academic outcomes concurrently. The relationships between wellbeing, mindfulness, SEL, and other school related terms, including behavior, trauma and neurobiology, are explored in this paper. The guiding theme, that all people possess interrelated relationships with symbiotic potential that has not yet been fully actualized in practice, is a premise supported by research, which is interwoven throughout this paper.

Social and emotional learning, mindfulness, and neurobiological research, with their promising outcomes within schools, and potential to enhance wellbeing in society more broadly, will be expounded upon further in chapter two. With the purpose on finding potential integrative connections that could prove symbiotic, this paper will contextualize school efforts, and showcase the derivation and evolution of the "story" of these efforts to promote cultures of wellbeing. The 1-2-3 Wellness™ program will serve as the integrative school initiative studied. This program was chosen because of its synthesis of social and emotional learning, mindfulness, academics, behavior, and neurobiology. 1-2-3 Wellness™, described in greater depth in chapter four, aims to empower learners to develop wellbeing through the cultivation of healthy daily habits related to social and emotional learning (SEL) and mindfulness skills. In chapter 3, the study of a school's use of the integrative program is explored. Chapter 4 presents results of the study. Chapter 5 offers key findings, along with implications for future research and practice.

Purpose of the Research

A well-rounded school system helps lead to a well-rounded society. Research related to the topics of human flourishing and Maslow's seminal hierarchy of needs illustrate that all people have certain foundational needs related to survival (Wolbert 2017; Maslow, 1943). Such needs, thought to serve as prerequisites to thriving, can help contextualize and frame efforts related to wellbeing in schools, and address the whole child.

Aspects that address the whole child are both inherently desirable and propellants for academic success. "Non-cognitive" factors include growth, mindset, grit, vulnerability, and other affective characteristics like self-esteem and self-compassion. These are becoming more valued by school leaders as they attempt to address issues like depression, anxiety, suicide,

and beyond (Dweck S., 2015; Daly, 2018; Neff, 2011). In order to help schools usher in wellbeing, we will look to further our understanding of how and why certain solutions are effective so that they can be replicated or improved upon. Such examination can also help scholars actively look for ways to integrate effective practices into streamlined, accessible methods, empowering both students and educators with systems cultivating wellbeing.

When our paradigms are fragmented, our approaches are fragmented (Berkowitz, Battistich, & Bier, 2007). When our approaches are fragmented, viewing academics, emotions, thoughts, and needs as distinct from one another, our students are apt to feel fragmented and disconnected in terms of mental health (Reynolds, 2018). However, when our paradigms and approaches are integrative, honoring the wholeness of every person, our students, too, are apt to feel whole. This can permeate into a society marked by wellbeing. This notion represents a huge promise in this evolving story of connected wellbeing.

With this broader context in mind, the following questions serve to guide this research.

Research Questions

The following research questions guide this study:

1. In what ways does an integrative framework combining SEL, mindfulness, and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing?
2. What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?
3. What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?

In the following chapter, literature is explored in order to illuminate what research describes about existing practices and opportunities related to wellbeing in schools. The framework espoused by the Center for Social and Emotional Learning (CASEL) offers a

structure helping us ground the study based on the five SEL core competencies of self-awareness, social awareness, relationship skills, self-regulation, and responsible decision making (Oberle, Domitrovich, Meyers, & Weissberg, 2016). Additionally, the literature review in chapter two is intended to contextualize current wellbeing-related work so that we might better envision ways to help support educational communities' efforts moving forward.

Chapter 2: Review of Related Literature

What is the purpose of education? How can a child become empowered to achieve not only personal success, but also serve as a change agent for the greater good? The manner in which educational professionals approach such foundational questions, through a lens of curiosity or unconscious default, can alter the way school solutions are envisioned and catalyzed (Greenberg et al., 2017b).

Research related to human flourishing suggests that the "greater good" involves wellbeing as a worthy pillar for a healthy society (Vanderweele, 2017). Within this study, mindfulness and socio-emotional learning (SEL) serve as the primary school approaches explored because they explicitly attempt to invite wellbeing considerations into a traditionally academic-focused school paradigm. Proactive, tier one, universal interventions will also serve as a central focal point. To gain a more robust understanding of wellbeing, foundational and seminal research, in addition to school efforts related to Positive Behavior Interventions and Supports (PBIS), trauma-informed learning, and neurobiological considerations will be explored.

Foundational Research

Are our kids happy? Are our kids healthy? Do our kids feel safe? Seen? Cared for? Hopeful? Such questions help underscore the value of young people's wellbeing, which is related to greater school and life satisfaction, school engagement, and overall quality of life (Furlong & Whipple, 2003; Gilman & Huebner, 2000; Miller, Gilman, & Martens, 2008). To frame the topic of school wellbeing, this section explores the underpinnings of foundational human needs research and introduces a socio-emotional learning (SEL) framework, which serves as a reference point throughout the paper.

Maslow's seminal hierarchy of needs maintains that certain *human needs* are foundational, serving as prerequisites for health, wellbeing and higher order thinking (Maslow, 1943). Physiological needs form the foundation of the Maslow's hierarchy, revealing that a person's nutritional, sleep and homeostatic needs are primary and must be met before other levels can even become addressed. Safety also serves as a primary, foundational human need. Thus, more advanced needs like love, esteem, and self-actualization require that a person first feels safe (Kaur, 2013). More recent research reaffirms the importance of safety, showing that the first question people, often subconsciously, ask themselves upon meeting someone new is 'Am I *safe* with this person?' (Cuddy 2016). Social justice implications related to this research abound. Students entering school from under-resourced communities with unmet basic needs are not starting from a place of equity.

Students who are impacted by hunger and fear do not only need food and safety. Without basic needs met, these students are *neurobiologically* hard wired to seek refuge due to unmet physiological and safety needs before focusing attention elsewhere –academically or otherwise (Kaur, 2013). In line with Maslow's hierarchy of needs framework, Bruce Perry describes the "Three Rs" involved in reaching the learning brain as 1) Regulate, 2) Relate, and 3) Reason (which involves academic tasks). Effectively, a learner's brain must first be regulated, or calmed, before they are able to relate, or connect, constructively with others and eventually learn new information (Perry 2003).

Regulating, which takes place in the midbrain and helps the learner access calmness, soothing their stress response, and r*elating*, which involves the emotional limbic brain and helps learners feel seen, heard, and understood, are prerequisites for *reasoning*, which

involves the cortex region of the brain and fosters higher order thinking (Perry 2003). Only after proper regulation and relation has been established can a learner reason and learn. Just as Maslow's hierarchy of needs illuminated foundational elements and relationships between human needs, Perry's "three R's" model depicts the brain as partly structured in a hierarchical fashion.

Guided by related work on Nonviolent Communication, Drs. Megan and Bob Tschannen-Moran built upon Maslow and Perry's work by illustrating how different needs underlie student and educator feelings (Rosenberg, 1995; Tschannen-Moran & Tschannen-Moran, 2012). For example, "underlying needs" such as respect, safety, autonomy and acknowledgement, are primary. When unmet, such needs can manifest as potentially destructive feelings which can inhibit student and educator success. When met, these needs can catalyze collaborative relationships, feelings of self-worth, creativity, and more (Tschannen-Moran & Tschannen-Moran, 2012). Thus, when evocative needs are met and ensuring positive emotions are catalyzed, wellbeing becomes more accessible over time.

Other, *psychologically*-rooted research offers illuminating insights related to wellbeing. Historically, traditional psychological approaches have followed a disease model, focusing on identifying and curing an individual's suffering. In recent decades, following the introduction of *positive psychology* by Martin Seligman and Mihaly Csikszentmihalyi, the promotion of health, happiness, and overall wellbeing has received increased attention ("Positive Psychology Seligman.Pdf," n.d.). As a related corollary of this positively framed work, Barbara Fredrickson and her colleagues found that everyday positive emotions such as happiness and hope, as ephemeral as they may be, can initiate a cascade of psychological processes that produce enduring impact on people's subsequent emotional wellbeing

(Fredrickson, 2004). Drawing upon such insights, Eran Halperin and I introduced the concept of *emotional ripeness*, denoting that different emotional configurations can either propel or inhibit healthy actions and relationships, particularly during times of conflict (Halperin & Schwartz, 2010). Similarly, transformative work by Kristin Neff addresses emotional wellbeing by focusing on the power of *self-compassion.* Self-compassion, which involves practicing self-kindness, mindfulness, remembering common humanity, recognizing that pain is a part of being human, and that you are not alone, helps people empathetically process difficulties ranging from everyday stress, to PTSD (Neff, 2011).

This collective body of research related to needs makes it clear that human beings have prerequisite requirements that serve as the gatekeepers for healthy development and relationships, and are vital components of wellbeing. *Connection* is also key. For example, with the current prevalence of various types of addiction, researchers and practitioners have begun to reconceptualize addiction, not as the absence of a chemical like alcohol or drugs, but rather as the absence of connection (Hari, 2015). The importance of connection and environment is depicted in a formative "Rat Park" study conducted by Canadian psychologist Bruce Alexander. Alexander showed that rats in small cages would become addicted to heroin when given the choice between pure water and water bottles containing heroin (Alexander, 2015). However, rats placed in larger cages with access to social interaction and connection with others, did not become addicted when presented with the same two water bottle options. Such research aligns with John Bowlby's seminal work on attachment theory, showcasing that trust and connection experienced in early childhood carries forth into adulthood (Bowlby, 1958). In terms of connection across one's lifespan, highly regarded researcher Brene Brown found that expressing vulnerability can serve as a powerful pathway to connection, meaning,

and relationship (Brown, 2018). Similarly, also related to connection, research on the topic of empathy has shown that certain mammals, including monkeys, possess mirror neurons which fire in their brains to produce emotions and actions whether they are personally experiencing an event or if they're watching a member of their community experience that event. Many researchers contend that humans also possess mirror neurons of connection (Lamm & Majdandžić, 2015).

Building upon such paradigm-shifting work, researchers and practitioners are still learning about the dynamics related to how needs and connection interact to usher in wellbeing. In the meantime, various initiatives and school efforts have attempted to meet learners' needs through different methodological theories and practices. Some of these theories and approaches do not fully draw upon the aforementioned seminal research. Understood and implemented individually, guided by disconnected assumptions, ideas and theoretical frameworks, these efforts tend to be seen and used in a compartmentalized fashion.

With this backdrop in mind, we will now turn our attention to the evolving story related to different individual initiatives and enterprises related to wellbeing in schools. By first examining the research related to individual efforts, we can draw out constructive value in each, and better understand certain drawbacks. Importantly, we can also begin to recognize how an integrative, connected approach to wellbeing might help pave the way for constructive school outcomes which can translate to society more broadly. As part of this evolving story, we will examine research related to the following school efforts: Positive Behavior Interventions and Supports (PBIS), Social and Emotional Learning (SEL), Mindfulness Based Interventions (MBIs), and neurobiological efforts including trauma-informed practices. First, we begin by exploring the practice and behaviorist theoretical underpinnings of PBIS.

Historical Approaches to Wellbeing

Historically, school "culture and climate" efforts have sometimes been discussed in terms that are synonymous with *behavior.* School behavior efforts often involve a focus on *outward* actions which are thought to be conductive to the learning environment including students staying quiet, raising hands to be called upon, and using kind words (Berkowitz et al., 2007). In part because behavior referral data can lend itself to clear quantitative measurement while emotions can prove to be more nuanced, a number of prominent behaviorist models have become widespread in schools. Pervasive among them, *Positive Behavior Interventions and Supports (PBIS)* is a framework for enhancing the adoption and implementation of a continuum of evidence-based interventions to achieve academically and behaviorally valuable outcomes for all students. For over two decades, PBIS has become a widely utilized model in the United States and abroad (G. Sugai et al., 2000). As the name would suggest, PBIS focuses on behavior. PBIS is based on the "Science of Behavior", also referred to as the ABCs of behavior: Antecedents, Behavior, and Consequences. This behaviorist way of understanding the world invites the use of conditioning strategies including positive and negative reinforcement to alter behavior, with a focus on exhibited behavior as a primary leverage point for understanding and modifying future behavioral outcomes (Horner et al., 2009). Such an approach historically focuses more on a person's behavior and less on their thoughts and emotions below the surface. Such a methodology is not entirely aligned or connected with mindfulness and SEL approaches, discussed later in this paper, which actively invite attunement to affective and cognitive dimensions beyond outward behavior.

The "continuum" verbiage used in the aforementioned PBIS definition is significant because it emphasizes that some research-based practices are organized within a multi-tiered system of support, also referred to as "response to intervention" or RTI (George Sugai & Horner, 2009). In other words, *all* students receive a range of proactive supports in tier 1 phase such as the opportunity to be taught and practice behaviors educators want to see, including lining up quietly in the hall, showing respect in the classroom, etc. Since *all* students receive support in the proactive tier 1 phase, it is also referred to as the "universal" level. Tier 2 strategies, which are reserved for students who do not respond favorably to tier 1 strategies, are more responsive and targeted. Rather than offering tier 2 supports to all students, only the small group of students, ideally 5-10% of students, who are viewed as needing additional support will receive tier 2 support. If students do not respond to tier 1 and 2 supports by behaving according to educators expectations, tier 3 supports, ideally reserved for 1-8% of the school population, are offered (Cregor, 2008).

The present study, discussed in greater depth later in the paper, focuses on a program called 1-2-3 Wellness™ which is also a tier 1 program intended to proactively help *all* students with their wellbeing. The importance of applying a universal approach to prevention is highlighted in the *prevention paradox* (Rose, 1985). The prevention paradox illustrates that even though it might theoretically make sense to first identify people who are at high risk for problems and focus initial prevention efforts by only treating these select few individuals, it is paradoxically more effective to treat the whole population with a universal strategy because humans cannot predict who will need support. The fact that all drivers in the U.S. are asked to wear seatbelts is a prime example of a universal preventative strategy based on the prevention paradox. Even though research shows that only a small percentage of people will have their

lives saved by a seatbelt, and it might seem reasonable to only ask "high-risk" drivers to wear safety belts, overall a universal approach helps save more lives (Greenberg et al., 2017b). The notion that preventative, universal approaches can prove particularly fruitful is important to consider for efforts related to wellbeing because, as researchers have discovered, certain proactive connections can greatly enhance wellbeing for all.

In recent decades, research involving qualitative and quantitative experimental design has documented the effectiveness of PBIS in improving problem disciplinary behavior, school climate, organizational health, bullying behavior, and academic achievement (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; G. Sugai et al., 2000). For example, one randomized, wait-list controlled trial found that PBIS produced a plethora of positive outcomes for elementary aged students (Horner et al., 2009). In another example, Syracuse public schools embraced a quantitative and qualitative approach to measuring school suspension changes based on PBIS implementation with a focus on reducing exclusionary discipline. Based on discipline data collected via school reports in Syracuse, 54% fewer black students were suspended after PBIS was introduced. However, large racial disparities still exist (Gregory et al., 2017).

In terms of equity, many point to the continued racial gap in expulsion rates following PBIS implementation as an indicator that the program is lacking and not holistic. Specifically, many argue that PBIS does not adequately account for the influence of a student's past experiences, including trauma. PBIS's limited reference to these formative experiences as "setting events", suggests that PBIS lacks the lens to fully address the influence of emotions, cognitions, and trauma (Berkowitz & Puka, 2009). As mentioned earlier, disadvantaged students who have not had opportunities to have their basic needs met require more than just

practice at learning to stand in line or use respectful words - they need opportunities to meet basic needs for safety, shelter, and food first (Maslow, 2008).

Consistency of language, clear expectations, and thorough teaching and reinforcement of common expectations are seen as key constructive elements within the approach which contribute to an environment conducive to wellbeing (George Sugai & Horner, 2009). On the other hand, amid widespread use internationally, PBIS has faced other criticism, particularly from those who feel that the focus on external rewards, rather than intrinsic motivation, is misled. As a behavioral approach, many scholars and practitioners argue persuasively that PBIS fails to adequately connect to affective and cognitive elements of wellbeing associated with emotions and thoughts (Berkowitz et al., 2007). Others contend that it is widely utilized today because of its success in cultivating a climate of safe, respectful, and responsible schoolwide behavior (George Sugai & Horner, 2009). Thus, despite a mixture of success and concerns, PBIS continues to be implemented pervasively.

In the following pages, we will turn our attention to other school initiatives for wellbeing which approach student behavior from different angles. Looking to varying approaches helps us understand the larger "story of wellbeing in schools" from a broader vantage point and look to connect the dots accordingly. Newer research and initiatives, like Social and Emotional Learning (SEL), mindfulness-based interventions (MBIs), and efforts exploring neurobiological considerations such as trauma informed approaches, have been introduced in an attempt to account for affective and cognitive factors in a more robust manner. Within research and practice, behavior, SEL, mindfulness, and neurobiological considerations do not always intersect. SEL, which can be regarded as the larger, "umbrella" idea since both mindfulness and neurobiology play important roles, will be presented first in

the following section. Knowing that all three approaches can help illuminate vital components related to wellbeing in schools, we will then explore mindfulness and neurobiological considerations, looking for benefits, drawbacks, and possible symbiotic connections.

Socio-Emotional Learning (SEL)

The vast majority of educational efforts have defined success criteria in terms of student performance on standardized, academic tests. Such a focus has existed despite a substantial body of emerging research showing that social and emotional skills, also referred to as non-cognitive skills, contribute to school success and adult outcomes (Kautz, Heckman, Diris, Weel, & Borghans, 2014). In fact, glaring research suggests that for every dollar invested in social and emotional (SEL) interventions, a school experiences a return of eleven dollars (Belfield, 2015). SEL can be defined as, "children's ability to learn about and manage their own emotions and interactions in ways that benefit themselves and others, and that help children and youth succeed in schooling, the workplace, relationships, and citizenship" (Weissberg, Durlak, Domitrovich, & Gullotta, 2015). Thus, SEL efforts aspire to connect with important dimensions related to wellbeing. Many contend that social and emotional learning can be at least as consequential as cognitive gains in explaining important developmental and life outcomes related to wellbeing (Kautz et al., 2014). Not surprisingly, efforts to address these so called "non-cognitive skills" in schools have been underway for some time and directly affects student and educator wellbeing.

In terms of the history of SEL, educators, researchers, and child advocates met at the Fetzer Institute in 1994 to discuss effective, coordinated strategies to enhance students' social-emotional competence, academic performance, health, and citizenship, and to prevent and reduce health, mental health, and behavior problems (Weissberg et al., 2015). After

conceiving of social and emotional learning (SEL) at that meeting, the group created the Collaborative for Academic, Social, and Emotional Learning (CASEL) to orchestrate SEL efforts more broadly. As their work has evolved, CASEL has introduced a conceptual model supporting schools, since interest in SEL has increased during the last two decades (Oberle et al., 2016) See Figure 1., CASEL Model for Social and Emotional Learning, for a visual of CASEL's conceptual model of SEL. Similar to mindfulness, SEL is related to the intersection of academics and socio-emotional wellbeing and can contribute to positive social, emotional, behavioral, and academic outcomes (Durlak, Weissberg, Dymnicki, Taylor, & Schellinger, 2011). The model promulgated by CASEL maintains that there are five core competencies of SEL which are vital to student development: self-management, self-awareness, responsible decision making, relationship skills, and social awareness.

These five core competencies help serve as the SEL blueprint, answering the question: What ingredients does a student need to become a successful learner with respect to social and emotional needs?

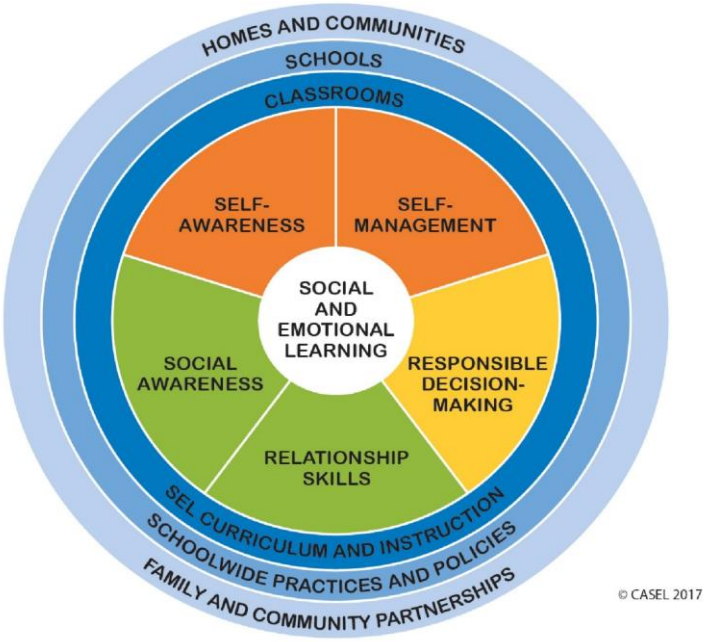


Figure 1. CASEL Model for Social and Emotional Learning

CASEL's conceptual framework, pictured in Figure 1 above, breaks down all five competencies as follows:

- *Self-awareness* entails labeling one's feelings, relating feelings and thoughts to behavior, self-efficacy, self-assessment of strengths, challenges, and optimism.
- *Social awareness* involves perspective taking, empathy, respecting diversity, understanding social and ethical norms of behavior, and recognizing family, school, and community supports.
- *Self-Management* includes emotion regulation, managing stress, self-control, self-motivation, stress management, and setting and achieving goals.
- *Relationship skills* refer to building relationships with diverse people, communicating clearly, working cooperatively, resolving conflicts, and seeking help. (Jones & Doolittle, 2017).

- *Responsible decision making* involves considering others' wellbeing, recognizing one's responsibility to behave ethically, basing decisions on safety and ethical considerations, evaluating consequences of actions, and making constructive, safe choices for self, relationships, and school.

In years past, even before the term was coined in 1994, variations of SEL were referred to by many other names including character education, 21st century skills, soft skills, and other terms making it difficult for researchers, educators, and policy makers to confirm what is included in this vast domain. That said, SEL specifically relates to emotional intelligence and involves skills like empathy, growth mindset, grit, and social skills (Jones & Doolittle, 2017).

Growing empirical evidence points to the effectiveness of school based SEL programs on promoting outcomes related to wellbeing. An SEL meta-analysis of 213 school based programs involving 270,034 K-12 students revealed that, compared to experimental control groups, students involved with SEL showed improvements in socio-emotional skills, attitudes, and behavior, with an 11% increase in academic performance (Durlak et al., 2011). One growing and respected SEL effort, RULER, was started at the Yale Center for Emotional Intelligence. As their website states, RULER applies "hard science" to the teaching of what have historically been called "soft skills". RULER stands for recognizing, understanding, labeling, expressing, and regulating emotions and involves ongoing SEL training and resources for schools (Ruler 2018).

SEL efforts have also been utilized to help address issues of equity. Responding to the disparate race and gender gaps in academic achievement, the federal Every Student Succeeds Act (ESSA) was signed into law in 2015, specifying that one way to support learning and

address the achievement gap is to curb the overuse of discipline practices which remove students from the classroom. In addition to PBIS, SEL is one approach schools have employed to address the achievement gap (Gregory et al., 2017).

For example, beginning in 2008-2009, the Cleveland School district adopted SEL to help address the achievement gap. Cleveland revamped its in-school suspension programs, turning them into "planning centers" to teach de-escalation strategies, social skills, and more. The district also taught all pre-K-5th grade students an SEL curriculum called Promoting Alternative Thinking Strategies, which promoted emotional literacy, self-control, social competence, positive peer relations, and interpersonal problem-solving skills. Concurrently, teachers were trained to use instructional strategies throughout the day to reinforce the SEL curriculum (Bartanen, 2016). Results from the aforementioned SEL efforts have been positive, yet mixed. Suspensions in Cleveland schools dropped by 60% over three years including a decrease in suspensions due to disobedience, fighting, harassment, and other offenses. However, as was the case with PBIS efforts in Syracuse, SEL efforts in Cleveland show that while substantially fewer students were excluded for discipline infractions, black students' exclusionary discipline rates remained substantially higher than that of white students (Gregory et al., 2017). Clearly, though some progress is better than no progress, racial inequity continues. Although the overall existing evidence finds that interventions designed to teach and support SEL skills produce positive effects, other studies show that some students benefit more than others (Jones & Doolittle, 2017).

A number of additional insights showcase the powerful role that teachers play above and beyond academics (Loeb et al., 2018) Interestingly, teachers who impact students' test performance are not necessarily the same ones who support their social and emotional

development. School leaders have the capacity to cultivate a student's sense of community which in turn can catalyze social and emotional skills (Waters, Marzano, & McNulty, 2003; Leithwood, Louis, Anderson, & Wahlstrom, 2004; and Hallinger, 2005,). Ultimately, "good teaching" does not simply boil down to an educator's capacity to produce academic achievement. Rather, effective teaching is thought to extend to other long-term success correlates related to emotions, social skills development and beyond (Chamberlain 2013).

When exploring methodologies which schools have adopted to cultivate wellbeing, the aforementioned CASEL's SEL framework is intended to serve as a guide to understanding what dimensions have been addressed, what outcomes have ensued, and what knowledge can be used to help empower students. However, CASEL's conceptual framework is not the only SEL model available for reference. For example, West, Buckley, Krachmann and Bookmann define SEL based on four components: growth mindset, self-efficacy, self-management, and social awareness.

Stephanie Jones of Harvard's Graduate School of Education has also developed an alternative SEL framework by organizing competencies into three categories. *Cognitive regulation*, as the first competency, is the ability to focus attention, plan, solve problems, coordinate behavior, make choices, and overrise a preferred response in favor of a more appropriate one. Competency in *emotional processes* involves the capacity to recognize, express, and regulate one's emotions while also understanding others' emotions. The third and final competency in Jones' model is *social and interpersonal skills*, which involves the ability to accurately interpret others behavior, navigate social situations, and interact positively with others (Jones & Doolittle, 2017). Though the frameworks share common themes involving affective and cognitive components, different conceptual frameworks can

lead to different research questions, intervention approaches, and beyond (Jones & Doolittle, 2017).

Unlike PBIS which focused primarily on behavior, all three SEL conceptual frameworks mentioned involve an emphasis on the ability to build awareness of emotions, focus attention, and extend newfound awareness to self-regulation and positive relationships as a means to affect overall wellbeing. PBIS did not strongly account for thoughts and emotions. These components, particularly the self-awareness and attention aspects, relate strongly to the core elements of mindfulness, explored shortly in this paper, which help a person increase self-awareness through non-judgmental awareness (Crescentini, Capurso, Furlan, & Fabbro, 2016). Such overlaps suggest that an integrative approach which streamlines and embeds the two processes, rather than compartmentalizing aspects of SEL and mindfulness, could prove fruitful. Creating a new, integrative conceptual SEL framework which also draws upon mindfulness and neurobiological considerations is a possibility explored later in this paper.

Certainly, understanding SEL efforts, which focus on emotions and social aspects related to self and others above and beyond behavior, can help us expand the evolving "story of wellbeing" in schools. Equipped with our increased understanding, we now turn our attention to explore mindfulness which involves the connection to present moment awareness.

Mindfulness

Mindfulness is defined by Jon Kabat-Zinn, commonly regarded as the "father of mindfulness," as paying attention in a particular way; on purpose, in the present moment, non-judgmentally" (Kabat-Zinn, 2003). An alternative definition defines mindfulness as intentionally directing one's attention to present moment experiences with an attitude of

curiosity and acceptance (Bishop et al., 2004). With the onset of increased levels of stress, depression, ADHD, and other mental health issues, mindfulness has gained popularity in recent years. The term has even become a bit of a 'buzzword' as people are finding their attention pulled in a myriad of directions in a fast paced, social media-rich society. One Harvard study found that people are lost in thought about half (47%) of the time. Eighty percent of that amount is composed of negative thoughts and over 95% of those thoughts are repeated negative thoughts, which they've had before (Bradt, 2010).

Mindfulness-based interventions, abbreviated as MBIs, stem from Vipassana Buddhist meditation practices which focus on connecting to the present moment. MBIs are known to increase the experience of positive emotions (To & Brain, 2017). Mindfulness involves maintaining non-judgmental awareness including remaining open and accepting what is. As part of this non-judgmental awareness, mindfulness also involves attunement to internal and external experiences occurring in the present moment (Tang, Hölzel, & Posner, 2015).

Mindfulness-based stress reduction (MBSR), the foundational mindfulness practice brought to the west decades ago, was initially developed by Dr. Kabat-Zinn for patients suffering from chronic pain conditions. MBSR was developed to facilitate people's propensity for pain reduction via detached observation (Kabat-Zinn, 1982). Since Dr. Kabat-Zinn's groundbreaking program was introduced, a plethora of MBI variations have since been brought to the West. More recently, mindfulness practices serve as an increasingly popular way to improve behavioral, cognitive, and mental health outcomes for children and adolescents (Dunning, et. al 2018). As the growth of the practice would suggest, mindfulness skills can be taught through training (Kabat-Zinn, 2003). Many argue that improved proximal

skills such as non-judgmental attention control may have downstream effects on distal outcomes related to wellbeing including behavior and mental health (Dunning, et al 2018).

Mindfulness skills can refer to specific practices such as mindful breathing which involves a person focusing attention on their breath. Another mindful practice involves a body scan exercise enabling the individual to gently bring attention to one body part at a time to hone awareness and bring that awareness back when it wanders (Eklund, O'malley, & Meyer, 2017). Both of the aforementioned practices can serve as forms of regular meditation. Beyond formal sitting meditation, other mindful practices involve connecting to present moment awareness including mindful eating, mindful listening, and mindful movement like yoga and mindful walking. On the surface, such practices have the effect of helping practitioners of any age achieve an immediate wellbeing enhancing effects such as reduced stress and calm cultivation (Renshaw & Cook, 2017). Deeper still, there are benefits related to neurophysiology behind de-stressing such as activation of the parasympathetic nervous system, which can be activated during mindfulness and yoga (Sapolsky, 2004).

The first published study investigating the effect of mindfulness on students in a school setting was conducted in 2005 (Napoli 2005). Focus within this study was on younger students in Grades K-3. Results from this pioneering study showed that, compared with the control group, students utilizing mindfulness techniques experienced moderate improvements in terms of attention, social skills, and test anxiety. These promising findings paved the way for follow-up studies over the last dozen or so years, which have focused on the promise of MBIs for positively influencing a variety of important social, emotional, cognitive, behavioral, and academic outcomes for students in school settings (Felver et al., 2016).

More recent systemic reviews focusing on the effects of MBIs in schools point to similarly promising outcomes (Black, 2015; Burke, 2010; Felver et al., 2016). Mindfulness practices have been shown to increase experiences of an internal locus of control for students which involves feelings of having control over one's life rather than having the external world dictate or control feelings of safety and contentment. The notion of internal locus of control vs. external locus of control has important implications for school efforts to improve behavior, social, and emotional outcomes for students (Carsley, Khoury, & Heath, 2017).

One recent meta-analysis, representative of a growing body of favorable results, offers substantive evidence illustrating that MBIs offer substantive benefits for students (Klingveil 2016). Such favorable conclusions upend previous assertions regarding the nascent research base and notions that the practices offer minimal or even neutral effects (Chadwick & Gelbar, 2016; Greenberg & Harris, 2012). Mindfulness also helps schools address the five core dimensions which were referenced in the Social and Emotional Learning (SEL) conceptual framework with specific emphasis on self and social awareness.

A wide array of school-based mindfulness programs exist including MiSP's "b" program which focuses on "stopping to just be," Mindfulness Education (ME), developmentally appropriate adaptions of Jon Kabat Zinn's Mindfulness Based Stress Reduction (MBSR) program, and more (Mckeering & Hwang, 2018). Such programs tend to teach a combination of mindfulness practices including those mentioned and can be characterized within three main categories: 1) formal activities such as sitting meditation, 2) informal activities such as mindful eating, and 3) experiential and moral learning components (Mckeering & Hwang, 2018).

Various other meta analyses point to the overall effectiveness of MBIs with youth. For example, Zoogman and colleagues reviewed 20 controlled and uncontrolled studies published between 2004 and 2011 targeting youth. Results showed that MBIs significantly improved psychological symptoms and attention with small to moderate effect sizes (Zoogman, Goldberg, Hoyt, & Miller, 2015). Other more recent meta-analyses, incorporating an increased data set based on growing popularity of MBI's in schools, showed significant positive effects across outcome categories including mindful attention and cognitive flexibility in controlled and non-controlled studies (Klingbeil et al., 2017). Data suggests that MBIs, as delivered, may be more effective in some developmental stages, particularly late adolescence from ages 15-18. It is hypothesized that these differences may partially be related to developmental differences in neurocognitive maturity and the development of self-concept. Importantly, the duration, format and structure of the programs delivered in the various studies differed significantly which may account for variant outcomes (Mckeering & Hwang, 2018).

Apart from the overall positive data and age-related variations, researchers have begun to zero in on nuances within different mindfulness efforts to identify possible enablers and barriers to successful outcomes. In terms of success enablers, data shows that the facilitator plays a crucial role (Hwang & Kearney, 2014). When the mindfulness facilitator or teacher has developed their own extensive and ongoing mindfulness practice, their effectiveness as a teacher is thought to increase (Segal et al. 2002). In one study, significant mindfulness improvements were seen only with an external mindfulness facilitator, whereas significant mental health outcomes were brought about only when trained teachers acted as facilitators (Carsley et al., 2017). Prompting students to practice mindfulness at home was another

important element which catalyzed success in past studies (Lee, Semple, Rosa, & Miller, 2008).

As identified through the meta-analyses, teachers identified a range of enablers which helped create environments conductive to MBI implementation. In addition to recognizing that their own capacity to embody mindfulness was key, other enablers identified by teachers included the collaboration with fellow teachers, support from school administrators and parents, relaxing physical environment, and student's willingness to learn (Joyce, Etty-Leal, Zazryn, Hamilton, & Hassed, 2010).

In terms of barriers, teachers identified time pressure and crowded curriculum content as the biggest barriers, along with student disengagement with the program (Joyce et al., 2010). In terms of positives, teachers also reported students being more relaxed and settled, ready to learn after practicing mindfulness with reduced disruptive behavior and reactivity and increased on task behavior (Costello & Lawler, 2014). Some assert that if a school is interested in introducing mindfulness, it is vital to begin with teachers first, inviting them to start their own practice before introducing mindfulness to children in the same way that "you wouldn't ask a teacher who cannot swim to teach a swimming class from a textbook" (Reynolds & Journals, 2018). This notion that mindfulness and other efforts with affective components require that teachers embody the skills prior to teaching students suggests important implications for future research and practice. The program studied in this research, 1-2-3 Wellness™, focuses first on educator mindfulness before asking educators to teach students the practice.

As mentioned, in some studies, students generally experienced strong positive effects on mental health and well-being outcomes, particularly in late adolescence, with mental well-

being as the most targeted intervention outcome. That said, meta analyses reveal that some students reported difficulties dealing with the wandering mind, often called "monkey mind," and underlying physical and emotional conditions (Mckeering & Hwang, 2018). Self-compassion, based on the three elements of mindfulness, common humanity, and self-kindness, also holds promise for adults and students alike (Neff, 2015).

In summary, mindfulness practices in schools have shown great promise with promising enablers, including teachers who embody mindfulness, schoolwide support and effort, home practice, administrative support, addressing crowded curriculum, and time demands and collaboration with other teachers. A relatively recent addition to discourse around preventing school exclusion and failure, mindfulness is gaining popularity for its potential to improve students' social, emotional, behavioral, and learning-related cognitive control, thereby improving academic outcomes. Experiencing mindfulness and understanding MBIs as potential approaches to support school wellbeing can help serve to further our understanding of the evolving "wellbeing in schools story". Next, turning our attention to the intricacies occurring within the physical bodies of students and educators, we focus to the brain.

Neurobiological Research

While PBIS, SEL and MBIs represent practical applications for schools as they seek to promote wellbeing, neurobiology, a field rather than a program, helps explain brain-body dynamics. Insights related to neurobiology can be helpful to researchers and practitioners working to cultivate wellbeing in schools.

Foundational neurobiological research paints a different, complex, yet symbiotic image for "how" student needs can be proactively nurtured over time and "why" processes in

the brain can affect wellbeing. In some ways, neurobiological insights can help provide the evasive "glue" to connects affective, cognitive and behavioral models. In other words, neurobiological research helps shed light on possible interconnected elements within each approach and illuminates prospects for the future.

With this in mind, it is important to remember that the mind and body are inextricably interconnected (Miller et al., 2008). Importantly, our brains are not just altered by our own direct experiences. *Epigenetics* is a term used in developmental psychology describing development as the continuous dual directional interchange between heredity and environment (Gottlieb, 1991). For example, a pregnant mother who is under constant stress can unknowingly translate her stress to the baby's genes (Blair & Raver, 2016). Going back even further, if a person's ancestors experienced toxic stress, her or his gene expression could be affected decades later. In a figurative sense, one might envision various green "on" buttons inside all of our brains for different stressors and diseases which can turn on or activate our predilections for certain anxieties and diseases.

Both mindfulness and SEL, described earlier, involve neurobiological considerations. Brain scans show that certain areas of the brain related to compassion and attention grow and thicken through meditation. Such neurobiological changes produce positive effects including improved focus and decreased stress, elements related to overall wellbeing (Reynolds & Journals, 2018). Some Social and Emotional Learning activities are thought to help students learn to increase self and social awareness which can help them calm the fight, flight or freeze response in the amygdala, access the prefrontal cortex, calm and become more receptive to learning (Weissberg et al., 2015).

In general, stress research shows that a person's own stress can make them sick. All people, including students in school, can experience three main types of stress (Sapolsky, 2004). *Acute physical stress* is a one-time, brief occurrence necessitating one's immediate action. A student avoiding possible harm from a rapidly approaching car, for example, is likely to experience acute stress. Hence, acute stress is prompted by an event and dissipates shortly thereafter. People are expertly adapted to handle acute physical stress because it comes and goes rapidly. The person's parasympathetic system, which is designed to promote calm, is reengaged and relaxation ensues. The second type of stress, *chronic physical challenges*, involves prolonged exposure to physical stress. If a student breaks his arm and has to wear a cast and go to physical therapy for a number of months, for example, they'll contend with chronic physical challenges. Our bodies are well adapted to handle such physical and temporal occurrences. We can quickly return to an allostatic state brought on by the activation of the calming parasympathetic nervous system. The third type of stress, *psychological and social stress*, involves situations that produce continuous mental worry such as the mental stress of not being accepted by one's peers or being disenfranchised or disconnected from the school or community. Unlike the first two types of stress, which are physical and dissipate more readily, psychological and social stress is apt to affect people longer such that their para-sympathetic nervous system, the body's calming mechanism, remains relatively dormant (Sapolsky, 2004).

All three types of stress activate the same stress response triggered to help people deal with an emergency. With all three types of stress, in the face of a perceived threat, the stress response evokes physiological adaptors associated with the sympathetic nervous system like activation of the amygdala which controls the fight, flight or freeze response, glucose

mobilization to the muscles to fight the emergency, increased cortisol levels, increased blood flow and more (Blair & Raver, 2016). When a person perceives that the perceived emergency has passed, her body naturally returns to allostasis, or a balanced system, referenced earlier as the foundation in Maslow's hierarchy of needs. When a person is in the midst of the stress response, her capacity to conduct higher level, problem solving work associated with the prefrontal cortex of the brain is inhibited. Importantly, unlike the first two types of stress, psychological and social stress is not quickly mitigated (Loman & Gunnar, 2010). In school settings, students who have experienced intense or prolonged exposure to toxic stress, may be operating most, if not all, days with activated stress responses. Their bodies are prepared for an internally perceived emergency when, from an outside perspective, it may appear that no emergency is impending (Blair & Raver, 2016).

Neurobiological research suggests that under resourced students who have experienced high levels of psychological and social stress, also called toxic stress, in their home environments are biologically poised to "fight, flight or flee" an emergency (Oral et al., 2015; Sapolsky, 2004) rather than "listen, learn and apply" a lesson. Such students are experiencing dysregulation in their limbic system, also called limbic dysregulation. Such research connects to *triune brain* research illustrating that the human brain can be understood in terms of three main components: the reptilian brain which is charged with autonomic functions such as heartbeat, the mammalian brain which is in control of functions such as fight, flight or freeze and the cortex which serves as the director of higher level thinking. Such research highlights that the brain can be understood according to a "three R's" structure. The reptilian portion of the brain is largely in charge of *regulation*, the mammalian portion of the brain is largely in charge of *relationships* and the cortex portion is in charge of *reasoning*.

Importantly, the first two Rs, regulation and relationship, can be regarded as gatekeepers or prerequisites for learning (Maclean, 1985).

Learners under regular social and psychological stress, including but not limited to those hailing from disadvantaged home or community environments, are apt to experience high levels of psychological and social stress. Devoid of regulation and healthy relationships, their brain's are apt to remain disconnected from the reasoning part of the brain in part because their limbic systems are dysregulated.

When such student's bodies feel under attack, even if ostensibly the school environment is calm, they will naturally and involuntarily respond with survival instincts. At the same time, students hailing from resourced communities are more likely to be regulated upon entering school (K. E. Grant et al., 2000). Concurrently, the school system, which has historically focused primarily on academics, has been apt to treat both sets of students the same by offering rigorous academic content from the onset, effectively moving to step three involving reasoning before addressing the two prerequisite areas of the brain involving regulation and relationship (Ferrer, 2005).

Often, students enter school without their basic psychological and physical needs met. Accordingly, those students are likely to need more opportunities and access to safety, shelter and food first and regulate their nervous systems as a prerequisite to academic learning (Maslow, 2008). When dysregulation occurs over time, social and psychological stress, meant to be healthy in small doses, can become unhealthy when it is activated long-term (Sapolsky, 2005). Research has shown that experiences of environmental chaos are especially common among low-income families (Coley, Lynch, & Kull, 2015). When unaddressed, toxic stress does not only inhibit learning, it also can lead to long term health issues which

inhibit wellbeing (Sapolsky 2004). Thus, learners who experience high levels of psychological and social stress in their home environments are apt to need schools to help them prime their brains with cultures of proactive wellbeing. Devoid of such an opportunity, these learners will likely remain in a heightened state of limbic dysregulation and ready to fight, flee, or freeze frequently. These students' brains are less concerned with the algebra, history or reading lesson and more concerned with survival. School cultures which promote wellbeing must thus connect students with the means to regularly return to allostasis, or balanced systems, before academic learning can occur. When a student's system is regulated through allostasis, their parasympathetic nervous system is activated, contributing to a host of health and learning benefits including reduced anxiety, calm demeanor and capacity to focus on the short and long term goals (Sapolsky, 2004).

Ultimately, for students facing toxic stress related to their dysregulated limbic systems questions such as "Am I ok? Am I safe? Is danger lurking around the corner?" can become constants. Importantly this reality may serve as a missing link helping leaders understand why the achievement gap persists (Dubow, Schmidt, McBride, Edwards, & Merk, 1993).

Integrating a neurobiological understanding of the stress response as inextricably tied to learning holds tremendous promise for school efforts related to wellbeing as well as broader societal efforts related to human flourishing. Such insights reveal that learning is partially a function of how emotionally regulated a student is and that educators have the power to facilitate such regulation regardless of race, gender or socioemotional status. Keeping the brain's functional structure, including connection to learning and wellbeing, in mind may hold promise inside and outside of the school setting.

From a practical standpoint, many students, particularly disadvantaged students, walk through the school door each day with dysregulated limbic systems (Loman & Gunnar, 2010). These students, fighting toxic stress, may literally walk into class and be greeted with an academic assignment when their body really needs a mechanism to upregulate their parasympathetic system to calm down (Dong et al., 2005). Arguably, our schools were historically designed to meet the needs of advantaged youth who entered school with healthy levels of past stress exposure. One upshot is that some schools remain unintentionally fashioned to retrigger the stress responses of disadvantaged youth which can effectively contribute to the country's academic and discipline gap.

Understanding epigenetics through a social justice lens, a student who was not even alive when their ancestors survived through traumatic events such as slavery, severe mental or physical abuse, transience, bouts of famine or the Holocaust can be born with negatively impacted genes which can increase certain aptitudes for stress, anxiety and disease (Holliday, 2006). In this light, it would be biologically incongruous to treat every student through a lens of equality whereby everyone gets the same treatment as opposed to a lens of equity whereby everyone gets what supports they need. Luckily, there is hope as epigenetic markings are potentially reversible (McGowan & Szyf, 2010). Taken together, we see how neurobiological insights can help shed light upon efforts in schools related to wellbeing including PBIS, SEL and mindfulness. Next, we take a look how trauma informed research has begun to help educators integrate neurobiological considerations into practice.

Trauma Informed Approach: An Example of a How Some Schools are Attempting to Integrate Neurobiological Considerations into Wellbeing Related Efforts

As the aforementioned considerations related to neurobiology, SEL, mindfulness and behavioral approaches help elucidate, schools have sometimes struggled to integrate neurobiological insights in practical ways. As schools look to understand dynamics related to neurobiological insights, promising research and practices are slowing making their way to practice. The trauma informed movement represents the most prominent and powerful example where researchers have showcased the connection between neurological dynamics related to wellbeing and school practices (Oral et al., 2015). Trauma informed work, in conjunction with efforts related to SEL and MBIS, serve as an illustrative bridge between mental health considerations and academic achievement.

In the 1990s, Dr. Vincent Felitti and Dr. Robert Anda, working for Kaiser Permanente and the Centers for Disease Control respectively, sought to understand the role of stress in youth health and wellbeing outcomes. Together, they developed a series of ten questions to form the basis of the Adverse Childhood Experiences (ACE) questionnaire which helps assess cumulated childhood stress (Oral et al., 2015). The ACE study measures exposure to different types of stress including *abuse* such as physical, emotional, sexual, *neglect* including physical and emotional neglect and *childhood dysfunction* such as having mental illness, an incarcerated relative, a mother treated violently, substance abuse or divorce. (Oral et al., 2015).

The seminal ACE study revealed that those who experienced four or more ACEs in childhood had a 1,220% greater risk of suicide compared to those with zero ACEs. Other health concerns including cardiovascular disease are also more prevalent for individuals who experienced a high number of ACEs in childhood. As medical epidemiologist and study lead

Dr. Robert Ananda articulated, “what we now know is that childhood adversity and stress can chemically change the way our brains work” (Oral et al., 2015). Other studies have made the explicit connection between psychological distress and low academic outcomes, problematic behavior and physical and mental health concerns (Aluja & Branch 2004; Kiselica, Baker, Thomas, & Reedy 1994). Schools nationally are beginning to implement trauma-informed initiatives based upon findings from the ACE study. Understanding adverse childhood experiences can help educators recognize that youth experiencing high levels of continued social and psychological stress can experience altered brain functioning related to stress and trauma (Sapolsky, 2005).

In one relevant study, researchers used a retrospective cohort study of 8116 participants to answer questions about their own ACEs. In this study, high residential mobility, or moving frequently, during childhood was determined to be a cause for adulthood health risks (Dong et al., 2005). Such findings have relevance for underserved communities that, for socioeconomic or race related reasons, might have needed to be highly transient. Researchers and educational leaders continue to look for practices which can serve to mitigate damage caused by trauma students face in order implement new, wellbeing enhancing programs accordingly.

One promise of the trauma-informed research, which relates to SEL, mindfulness and neurobiological work, is the focus on holistic components involved in each student’s life. Such work underscores that neurobiological considerations are drivers of sickness or wellbeing. With the aforementioned research in mind, school leaders seeking to create intentional pathways to staff and student wellness have many options and possibilities at their disposal including PBIS, SEL, MBI’s and trauma informed work.

Gaps and Opportunities Leading to the Study

With robust research and successes related to school wellbeing related efforts including mindfulness, social and emotional learning (SEL), positive interventions and supports (PBIS), trauma informed practices and neurobiology in mind, it is important to also note that such research is sometimes viewed in fragmented ways and thus used in compartmentalized fashion (Mckeering & Hwang, 2018) (West et al., 2018) (George Sugai & Simonsen, 1995) (Chafouleas, Johnson, Overstreet, & Santos, 2016) (Adolphs, Tranel, Damasio, & Damasio, 1995). Arguably, some of the persistent gaps relate not just to a lack of research but to a lack of integrative connections. In other words, the different domains are sometimes seen as separate and, in practice within an educational community often facing information overload and initiative fatigue, housed in distinct initiatives thus preventing synergy (Ng, 2008).

Arguably, the neuro-biological research suggests that the pervasive school structure in our country is inadvertently set up to fail students who have consistently experienced toxic stress and limbic dysregulation. Future research bridging educational efforts with neurobiological understanding could assist in elucidating one of the underlying dynamics or "missing links" contributing to the confounding achievement gap and aid educational leaders in reimagining how to cultivate wellbeing for all students.

Thus, as explained further in chapter three, the current study addresses gaps and opportunities to further wellbeing efforts in schools based on insights from the research presented. For example, the study explores ways to integrate and streamline research and practice, with a specific focus on how the awareness aspects of SEL, awareness and attention aspects of mindfulness and neurobiological considerations can work in a cohesive manner.

Another opportunity explored in the current study, based on research showing the vital need for teachers to first embody wellbeing before teaching, focuses on *adult* wellbeing as a prerequisite and foundation for student wellbeing (Sanger, Thierry, & Dorjee, 2018). Based on research showing the importance of home practice for students, creating mobile, practical tools for all stakeholders to use inside and outside of school, this study will focus on tools appropriate for anyone, anywhere and anytime (Lee et al., 2008). Further, given educator time constraints, the present study explores a resource which seeks to present mindfulness and SEL in a user-friendly manner allowing educators and students to acquire skills in a short segments of time integrated throughout the school day (Mckeering & Hwang, 2018). With the last opportunity in mind, referencing the sequential nature of awareness and attention, the following new conceptual framework is presented. The conceptual framework and study that follows attempts to weave together an integrative model for researchers and practitioners.

Towards a New Integrative Conceptual Framework

A number of conceptual frameworks have been promulgated in this paper including the CASEL SEL framework which offers 5 components of SEL including self and social awareness (Oberle et al., 2016). Taken in sum, the robust scholarly literature related to human flourishing, PBIS, SEL, mindfulness and neurobiology offers interesting integrative opportunities for exploring research and practical resources to further propel holistic wellbeing in schools. Below, a simple chart in Table 1 summarizes key components of the aforementioned research and sets the tone for exploring holistic wellbeing practices and opportunities in schools further:

Table 1. Strengths and Limitations of Current School Wellbeing Initiatives

	Strengths	Possible Limitations	Implications for Future Research and Practice
Positive Behavioral Interventions and Support (PBIS)	-Consistency of language, expectations and thorough teaching and reinforcement of common expectations	-Can fail to account for affective and cognitive elements	-Consistent systems are well received by staff and students -When behavior is addressed without addressing emotions and thoughts, this represents a void
Social and Emotional Learning (SEL)	- The five core competencies address holistic aspects beyond academics and behavior	-Implementation can be challenging given vast competing needs	- SEL often "competes" with academics and other initiatives. Simple, easily implemented systems are practices are well received by educators and students.
Mindfulness	-Helps teachers and students become present and develop awareness	- Sometimes seen as esoteric or eschewed because it is "different" or difficult to embed in a busy school day	-Educators must "embody" mindfulness to teach it
Neurobiological Insights	-Helps reveal the holistic, interacted nature of thoughts, emotions and learning	-Complexity: Educators can have difficulty translating insights into practical, daily wellness practices	- Empowering all learners to activate their parasympathetic nervous system as needed is key.

Table 1. can help illuminate areas of strength and opportunity in each school program. Though each individual initiative offers value to schools, the disconnect between approaches arguably serves as an impediment to cultivating student and educator wellbeing.

With this context in mind, amid the backdrop of the evolving "wellbeing in schools story" this study tests an integrative model which seeks to draw upon insights and strengths of different approaches presented thus far in the paper.

Chapter 3: Methods

This chapter presents the mixed methodology study testing an integrative, holistic approach to school wellbeing which incorporates SEL, mindfulness and neurobiological considerations presented thus far. In delving into the research, it is clear that each individual approach and initiative mentioned in chapter two offers unique and promising strengths which can support a school in creating cultures of wellbeing. However, as described in the strengths and limitations information in chapter two, efforts and initiatives can sometimes be viewed as and implemented in a compartmentalized fashion. Put simply, in many cases, efforts are not always treated as interconnected and, consequently, learners can be less apt to receive holistic support to propel wellbeing and human flourishing (Vanderweele, 2017). Since learners are multifaceted, interconnected, dynamic and *whole*, it makes sense to approach learning with a multifaceted, interconnected, dynamic and *whole* lens and requisite supports. For these reasons, the current study tested an integrative approach to school wellbeing.

In terms of the broader significance of this study, school leaders across the globe are searching for ways to cope with increasing instances of suicide, depression and anxiety. Concurrently, people of all ages contend with problems related to stress and engage in communication marked by vitriolic tones and animosity. Amid a flurry of health issues, access to practical wellbeing-based tools is valuable for students and educators alike (Carsley and heath 2015; Koller and Bertel 2006; McMartin et al. 2014). Additionally, since this research focuses on a potentially scalable effort that can be utilized by young students as well as adults of every age, the implications for school districts and community leaders are vast. Given each individual, teacher and student, faces a complex tapestry of multifaceted and interconnected needs, it seems fitting to mirror the multifaceted nature of human beings with resources that are equally multifaceted and interconnected. Thus, the purpose of this study

was to explore propellants of wellbeing for educators and students alike and examine a potentially high leverage, integrative and holistic approach to promoting wellbeing in schools which will ideally translate to benefits to society more broadly. With this context in mind, utilizing both quantitative and qualitative methods, I tested an integrative schoolwide system based on holistic considerations related to mindfulness, SEL and neurobiological research insights called 1-2-3 Wellness™.

What is 1-2-3 Wellness™?

1-2-3 Wellness™ *is a brain-based wellbeing program which empowers people to develop internal resources which give rise to healthy habits and connected relationships.* The program is designed to help "prime the brain" for regulation and healthy relationships, ultimately paving the way for learning and thriving. This trifecta is based on the idea that the human brain has evolved in a triune composed of three main components known as the three r's: the reptilian brain functions best when *regulated,* the mammalian brain functions best amid healthy *relationships* and the cortex, which is in charge of *reasoning* and learning functions best when the two aforementioned parts of the brain have their needs met (Maclean, 1985).

The 1-2-3 Wellness™ program was created based on the integration of research from neurobiology, mindfulness, social and emotional learning and behaviorist approaches in order to promote healthy emotional, cognitive, social, behavioral and academic outcomes. In so far as the program is intended to empower people of all ages and positions including students, educators, non-educators, parents and community members cultivate healthy habits throughout the day no matter the location, the program is billed as a AAA approach for Anyone, Anywhere, Anytime. Thus, the program is applicable for any setting – work, school,

home, military and beyond. Such an approach aligns to the integrative framework model presented, addressing SEL, mindfulness, behavior and neurobiological considerations concurrently (see table 2).

Table 2. Integrative Elements of the 1-2-3 Wellness™ Program

	Strengths of Existing Efforts	**Integrative Elements in 1-2-3 Wellness™**
Positive Behavioral Interventions and Support (PBIS)	Consistency of language, expectations and thorough teaching and reinforcement of common tier one, proactive practices	Utilizes consistent language, clear teaching and, proactive tier one practices designed to impact behavior (along with other holistic considerations such as emotions and social connection). Healthy behavioral outlets are provided.
Social and Emotional Learning (SEL)	The five core competencies address holistic aspects beyond academics and behavior	All five core SEL competencies, intended to positively affect academics and behavior, are practiced via daily habits
Mindfulness	Helps teachers and students become present and develop awareness	Mindful practices focused on developing a connection to the present moment are embedded
Neurobiological Insights	Helps reveal the holistic, interacted nature of thoughts, emotions and learning	Daily habits designed to impact the mind body connection activate the parasympathetic nervous system are embedded (labeling emotions, deep breathing, connecting with senses, etc.)

Prior to this study, as of March 2019, 1-2-3 Wellness™ had been utilized by over 100 teachers in 11 States with teachers reporting positive results. With anecdotal positive evidence serving as the backdrop, this study offers a systematic examination of the impact of the 1-2-3 Wellness™ program on student and educator mindfulness, self-care and social and emotional learning. The present study involves one-hundred and fifty-four second grade students and eleven educators. The present research is intended to help us better ascertain the effectiveness of the integrative approach, offer insights to improve its effectiveness and springboard future efforts to propel wellbeing in schools and other environments.

In addition to serving as the primary investigator in this study, I created the program based on 20 years of work with schools on school climate and wellbeing. The program itself

is structured to first present educators with supportive tools to help them experience, and eventually embody, social and emotional learning, mindfulness and self-care. As the research described in chapter two showed, it is important for teachers to first embody wellbeing tools before teaching them to students. (Zenner, Herrnleben-Kurz, & Walach, 2014) .

The program must be supported by a certified 1-2-3 Wellness™ consultant. Educators who participate in the 1-2-3 Wellness™ program are guided through a 21-day self-care challenge online video course. The course is accompanied by a 50-page wellness workbook in order to support educators, mental health professionals and parents in learning and embodying wellbeing related habits prior to teaching students similar strategies. This video course is a core, proactive element of the program, laying the foundation for positive student outcomes. In addition to the course facilitating participants understanding of SEL, mindfulness, neurobiology and self-care research, each video concludes by offering opportunities to practice and reflect. Throughout the course, educators are guided to create their own personal self-care plan. Guided by a certified wellness consultant, educators are taught to practice, and eventually internalize, mindfulness-based questions related to 1-2-3 Wellness™.

The process is intended to help learners develop self-awareness and regulation. In terms of social and emotional learning with respect to the psychological and neurobiological benefits of "dropping in" to the present moment, the 1-2-3 Wellness™ program is designed to empower educators to develop habits of self-awareness (Kabat-Zinn, 2003). In terms of social and emotional learning, the 1-2-3 Wellness™ program is also designed to help learners develop social awareness of other's possible feelings and needs. Eventually, these foundational habits within 1-2-3 Wellness™ empower the participant to create their own personalized bridge to self-care to support self-management, responsible decision-making and

relationship skills (Durlak et al., 2011). Taken together, the steps of the program are intended to help adults and students cultivate healthy internal processing mechanisms which give rise to other positive wellbeing related outcomes including social, emotional, behavioral and academic effects.

As part of the program, educators collect data on their experience and progress, charting their emotions and self-care practices over the course of 21 days. Video topics include connecting to your purpose, healthy thoughts, mindful practices, processing emotions in a healthy manner, self-compassion, emotions and the brain, appreciation, movement, processing stress in a healthy manner and more. Throughout the course, participants are guided to answer self-reflection questions about what helps them cultivate wellbeing. At the end of the course, each participant's self-reflection answers from the course of their 21-day challenge populate at the end of their wellness workbook to form their own three-page, personalized self-care plan. Ultimately, supported by a trained consultant, the video course offers educators guidance on how to begin teaching wellbeing to their students.

Equipped with their own self-care plan, a certified 1-2-3 Wellness™ consultant then supports teachers in introducing the program to their students since students do not take the video course. In addition to the "prep" from the video course and initial introductory support, a 1-2-3 Wellness™ consultant coaches educators to embed holistic wellness into their daily routine. In the case of this study, I served as the school's consultant.

When introducing 1-2-3 Wellness™ to students, teachers draw upon their own self-care plan and teach students to engage in mindful practices throughout the day. Each classroom teacher works with their students to create a self-care area or hub which includes a 1-2-3 Wellness™ poster as shown in Figure 2 which features dozens of self-care strategies

appropriate for different emotions including angry, sad and happy. Various versions of the poster are available for students of different ages and abilities. Additionally, students are provided with resources to document their emotions and wellness practices over the course of 21 days. Educators are provided with a 1-2-3 Wellness™ poster resource to display on their classroom wall. Each individual student is also provided with resources to guide their progress. As students document their emotions and the corresponding self-care practices, teachers, students and other participants including counselors and parents are able to see a visual representation of the student's emotions and wellbeing progress over time, offering support as needed. Invariably, patterns begin to emerge whereby, for example, data will show that one student has been sad thirty-six percent of the time and her use of specific strategies such as positive affirmations and giving compliments to friends are particularly helpful in supporting her wellness. Ultimately, teachers aim to help students develop self-care, self-efficacy and self-determination with their own social and emotional wellbeing

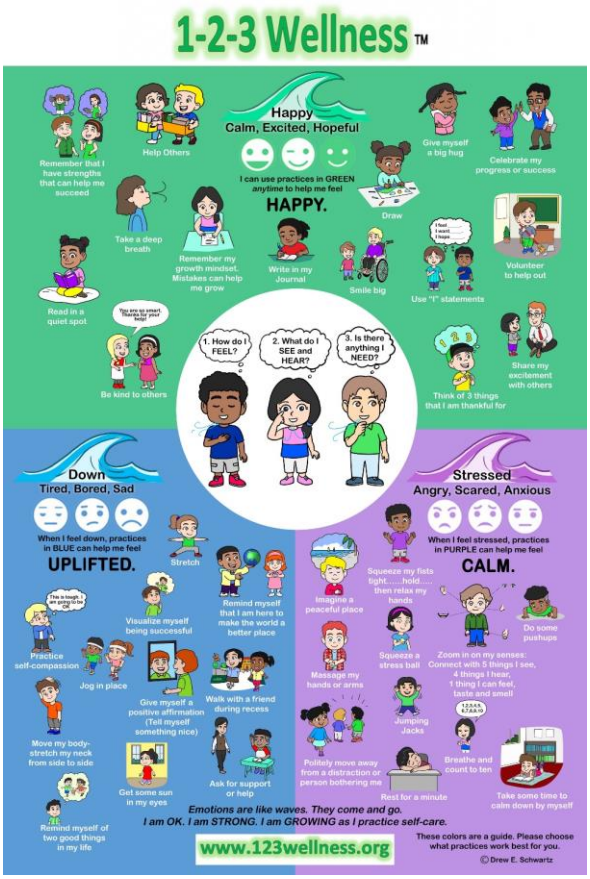


Figure 2. 1-2-3 Wellness™ Poster

With this larger context in mind, this chapter discusses the research study's three basic phases: preparation, implementation and reflection. Data, collected in the form of surveys, observations and interviews, was gathered in three basic phases beginning in April 2019 and concluding in June 2019. *Phase one* included a *presurvey* for students and teachers to better ascertain baseline wellness information. *Phase two* involved teacher and student *implementation* of 1-2-3 Wellness™ in seven select classrooms as well as implementation *observations*. *Phase* three involved *post-surveys* as well as *interviews* with ten educators and five students. Additional information regarding all three phases is expounded upon later in this chapter.

Research Study and Design

This multiphase, mixed methods study of 1-2-3 Wellness™ draws partly upon a qualitative approach predicated on an asset based model which maintains that a learner can cultivate her or his ability to draw upon internal resources to thrive socially and emotionally (Creswell & Clark, 2011) (Rath & Conchie, 2009). The chapter also presents the other methodological pathways utilized to test the viability of the integrative 1-2-3 Wellness™ program including quantitative elements. As part of this methods chapter, study information related to participants, pre and post survey questions, interviews, observations, limitations and implications are included below.

Participants and Setting

The researcher invited seven Elementary classroom teachers, three counselors and one district leader to participate in all components of this study along with one hundred and fifty-four second-grade students. Initially, second grade teachers were invited to participate because prior to and independent of any their knowledge of this study they approached their Assistant Principal to initiate a request for practical tools which integrate SEL, behavior and self-care in January 2019. This particular school setting was also selected because of the district's diverse population. "Example School" setting, described in greater depth below, was chosen partly because it ranks among the top ten percent of diverse schools in the state of Missouri. Example School is located about 20 minutes from the heart of a large urban area, St. Louis, Missouri. The school district covers 2.6 miles, includes a population of 12,866 with a median age of 39.3 and a median household income of $53,192 (Census Reporter 2019). School attendees originate from urban, rural and suburban settings. The school was thus a particularly fitting survey site to study if the 1-2-3 Wellness™ program could prove valuable

for students from diverse backgrounds experiencing different levels of stress exposure. Within the study and to help facilitate a bigger picture understanding of program implications, teachers, students, counselors and an administrator were included in data collection involving surveys, interviews and observations.

Bosnian populations, along with families from Mexico, Albania, Vietnam, Pakistan, Germany, China, Iraq, Afghanistan and Somalia all call Example District home. Of Example's nearly 1,800 students, 48% speak one of 32 different first languages and 19% receive English Learning (EL) services and 67% of students receive free or reduced-price lunch. Today, according to Assistant Superintendent Amy Ruzicka, approximately 66% of the district's students are white, with nearly half of them being Bosnian. Asian, Middle Eastern, and African American students make up 12%, 10%, and 14% of the student body, respectively, and are the fastest growing populations. (Ruzicka 2018). According to Kelly Klocke, Director of Reading and EL Services, "with an increase in refugees from countries such as Iraq, Afghanistan, and Somalia, Bayless has enrolled more students with interrupted formal education and trauma." I, as the PI, worked in collaboration with district leaders to proactively ensure that materials would be translated into the native languages of parent/guardians if there was a need.

In preparatory discussions, Example School District administrators indicated that the district was eager to begin the study. Administrators also indicated that they had preexisting methods to obtain parent permission for similar undertakings and that they did not foresee any problems with obtaining parent permission for this wellbeing study. As mentioned, the school district self-selected and voiced interest in being studied. See Appendix H, a letter from district administrators.

Though the last six weeks of school is not ideal to introduce a new program, working in collaboration with the School District Superintendent, Chief Academic Officer and Building principals, we determined that there was a strong need and desire for tools related to wellness. Given the staff desire for practical tools, I, as the PI, began the study with educators and students in April 2019. Participants were chosen based on their voluntary desire to participate and assured, verbally and in writing, that the research would be conducted in a morally upright and constructive manner to support their academic, social and emotional goals as teachers and students.

Through this case study, I attempted to understand the implementation and impact of the 1-2-3 Wellness™ program wellbeing in all seven participating classrooms. As mentioned, the multiphase, mixed methods study involved three basic phases: preparation, implementation and reflection. In the following pages, "Activities" in all three phases are described. Next, in a section entitled "Data Collection" the data collection methods which include surveys, observations and interviews are outlined in greater detail. Finally, a section entitled "Data Analysis" outlines how data was analyzed throughout the study. The following pages further explain each phase of the mixed methods study.

Overview: Three Phases of the Study

Activities

In *phase one*, the preparation phase, a meeting with the team of five school administrators was convened to further explain the wellbeing study and answer any questions. Principals scheduled a one-hour orientation meeting to describe the study, answer questions and receive written consent to participate.

Once teachers agreed to participate in the study, and prior to beginning pre-training in the form of the wellness video course mentioned earlier, teachers were asked to send information to parents/guardians related to the purpose of the study, consent forms and any needed multilingual information for parents to peruse. Parents/guardians who wished to have their son/daughter participate signed the appropriate consent forms and returned them to the teacher within one week. Please see Appendix D for further information. The letter informed parents/guardians about the purpose of the study, explained that student participation in the study was voluntary and completely anonymous, and also communicated that there was a possibility that their student would be interviewed briefly. The information also clarified data collection procedures including the following information. Students were provided with a consent form which explained the study and offered them a chance to opt out. See Appendix E. If a student opted out, he/she could participate in an alternative activity so that they still felt a part of the group. All participating students completed their surveys online within the Qualtrics online survey system. Students who opted out of the online survey were provided with a similar activity during the time that other students filled out the online survey. The alternative activity lasted just as long as the online survey which lasted approximately 5 minutes.

Additionally, teachers and admin were informed of the study approximately two weeks before the data collection commenced through an email. See the recruitment materials, informed consent and confidentiality in Appendix F. The document informed teachers about the purpose of the study, explained that participation in the study was voluntary and anonymous and conveyed that teachers could decide when and where to fill out the survey. The document also asked teachers if they would consent to being audio or video recorded

when they were interviewed. Of the seven participating adult educators, three - a teacher, a counselor and assistant principal - voluntarily agreed to be interviewed in depth over the phone after program implementation. The remaining seven educators agreed to provide written interview answers. Interviews were scheduled during phase three of the study. Interviews, voluntary and semi structured, lasted approximately 30-45 minutes per person.

In the preparation phase, each participating educator participated in a 21-day wellness video challenge with required them to watch one video per day for 21 days. Further information about the topics of the "pre-training video course" can be found in Appendix A. Educators were then introduced to thirty-six practical wellness practices for themselves and their students. Based on research indicating the imperative nature of a teacher "embodying" a mindful approach before teaching it to others, the video course guided educators to experience these concepts themselves before teaching them to students (To & Brain, 2017). As part of this preparation phase, educators were guided to create their own personalized self-care plan. Through the video course, workbook, and conversations with the PI, they were guided to experience the power of mindfulness, SEL and self-care over the course of 21-days.

Additionally, as part of the preparation phase in the video course, educators were offered instructions on how to transfer their learning to the students in their classrooms. The first phase of the study, the preparation phase, was intended to set the tone for activities involving students which commenced in phase two.

In the *phase two*, the implementation phase, educators introduced the 1-2-3 Wellness™ program to their students based upon their preparation from phase one. As part of this phase, for example, educators taught students the program's main approach, how to deep breath to activate the calming parasympathetic nervous system and how to view emotions and

stress in a healthy manner. Students practiced choosing wellbeing practices which were part of the 1-2-3 Wellness™ resources provided during the online-video course. Students were offered strategies to mindfully meet their individual needs when they felt stressed such as massaging their hands, breathing and counting to ten, connecting with their five senses or engaging in a physical activity such as jumping jacks. They were offered activities to help promote increased happiness including expressing gratitude and helping others celebrating success as well as invited to practice activities if/when they felt down such as utilizing positive affirmations, practicing self-compassion or reminding themselves of positives (Seligman, Park, & Peterson, 2004; Neff, 2011). Participating educators displayed a 1-2-3 Wellness™ poster on their classroom walls to offer students practical strategies related to mindfulness, SEL and self-care. Educators also provided each student with program resources to facilitate wellness practice. During the implementation phase and based upon tools learned in the preparation phase via their workbook, educators also prepared their classroom with a wellness area to support student's wellness and displayed student artwork related to wellness. Teachers and students continued engaging with the 1-2-3 Wellness™ program process, moving from teacher led directives to student led efforts, continuously as students begin to internalize the self-care and wellbeing strategies.

In the *third and final phase* of the study, the reflection phase, students and educators were asked to reflect on their experiences with 1-2-3 Wellness™, including possible constraints, growth and general wellbeing. As described in the preparatory materials in phase 1 and in line with the gradual release method of instruction, phase three was marked by an intentional transference from adult initiated wellbeing activities to student initiated ownership of wellbeing activities (M. Grant, Lapp, Fisher, Johnson, & Frey, 2012). The aforementioned

components represent the "activities" involved throughout the 3 phases of the study. The next section details the data collection methods undertaken in each of the three study phases.

Data Collection

In the first phase of the study, the preparation phase, adult and student participants were given information about the study and offered the ability to consent to participation according to IRB guidelines. Appendices E and F outline these consent parameters. In terms of study data, all participants were asked to complete a "pre-survey".

Phase One Data Collection: Pre-Surveys

The presurvey was designed to garner baseline wellbeing information for both groups, educators and students. Appendix B describes the teacher survey and Appendix C describes the student survey. Surveys were based on the five core-competencies of Social and Emotional Learning, mindfulness and self-care practices. Although at the time of the study there was not one singular assessment tool recommended for measuring social and emotional learning or mindfulness, the Center for Academic and Social and Emotional learning, (CASEL) offered guidance ("CASEL_metaanalysis," n.d.). CASEL recommended assessments which consider taking a strengths-based approach, understanding self-regulation and feelings, whether competency measures should be used for high-stakes decision-making, understanding how SEL competencies develop over time in students, and the role of equity and cultural factors, such as bias, that can impact SEL. The surveys used in the present study were developed with the aforementioned considerations in mind as well as fundamental tenets related to wellbeing such as mindfulness and self-care (Carsley et al., 2017). As shown in Appendices B and C, sample items from the student and educator surveys include the

following questions with an answer of 1 representing “almost never” and an answer of 5 representing “almost always”:

Student Survey Sample Questions

I take care of my wellbeing.

1. I stop to ask myself how I am feeling.
2. I know how to deal with difficult emotions (like stress, anger and sadness) in healthy ways.
3. I understand how other students are feeling.

Teacher Survey Sample Questions

1) I have different self-care tools to choose from that help me make responsible decisions.
2) I practice mindfulness.
3) I support my students with practical self-care tools.
4) I meet my students’ social and emotional learning (SEL) needs.

Phase Two Data Collection: Classroom Observations

Phase two involved implementation of 1-2-3 Wellness™ in seven second-grade classrooms. In terms of data collection, phase two involved observations. The same classroom teachers and students implemented using a nine-step process consistent with the program roll out guidelines. Observation guidelines are outlined in Appendix J.

Observations

With respect to study observations, as the researcher, I looked for fidelity of implementation as well as student and teacher actions related to mindful learning and wellness. Wellness habits included taking deep breaths, using self-care strategies and discussing their emotions, for example. Observations took place in five participating

classrooms. During these observations, as the researcher I collected field notes (Emerson, 2011) to help understand application of wellness strategies. The addition of field notes helped provide a more robust picture of mechanisms related to wellbeing that may not have emerged via other data collection methods alone. Each observation lasted between 10-30 minutes and followed the observation protocol included in appendix E.

Phase Three Data Collection: Post-Surveys and Interviews

Phase three involved post-surveys and interviews. One-hundred and nineteen students participated in both the pre survey from phase one as well as the post survey from phase three which was identical to the pre survey. Five students participated in interviews following program implementation. Eleven educators participated pre and post surveys, while three participated in 30-45-minute phone interviews including an assistant principal, a teacher and a counselor. Seven additional educators participated in written interviews including five teachers and two counselors. As mentioned, post-survey questions, represented on Appendix B, were identical to survey's taken prior to implementation during pre-surveys. Surveys were designed to help illustrate, quantitatively, what changes, if any, occurred with respect to student and teacher wellbeing after program implementation.

Interviews

Generally, interviews serve to allow researchers to better understand the world from the study participant's perspectives and gain an improved comprehension their experiences (Kvale and Brinkmann, 2009). As mentioned, three voluntary semi-structured educator interviews were conducted to help the researcher understand teacher and student perceptions regarding their wellbeing. See appendix F for more information. As the researcher, I conducted semi-structured interviews over the phone and recorded interviews using the Rev

phone application with the interviewees consent. Interviews were chosen as a data collection method because they offer respondents the flexibility to discuss thoughts, feelings and experiences in a flexible manner and illuminate subjective ideas that may not have been captured via observations and surveys. The semi-structured interview approach was chosen because the approach offers the ability to guide specific questions and also allow for adaptation based upon interviewee insights and experiences (Merriam and Tisdale, 2016). Interviews were semi-structued to offer interviewer and interviewees basic guidance while also allowing for autonomy and flexibility to learn more about the study participants unique perspectives related to wellbeing generally and the 1-2-3 Wellness™ program specifically.

Educator written interview questions can be found in Appendix E and student interview questions, based on the literature review and proposed model presented earlier, can be found in Appendix F. Example interview questions are included below.

Questions for educator and admin particpants:

1. What are your thoughts on the importance of social and emotional learning, mindfulness and wellbeing in schools?
2. What beneifts, if any, did you personally notice for yourself as a talented educator while using 1-2-3 Wellness™?

Questions for student participants:

1. You have been practicing 1-2-3 Wellness™ with your class. Can you please tell me about 1-2-3 Wellness™?
2. What does 1-2-3 Wellness™ help you learn or do?

Throughout all three phases of the research, interviews and observations, as outlined in the appendices, enabled qualitative data collection illuminating participants perspectives

regarding the limitations and growth related to their own wellbeing and, in the case of teachers, perceptions regarding student wellbeing. Pre and post survey data collected during phases one and two helped inform potential follow-up questions in phase three interviews (Creswell and Clark, 2018). Taken together, data from pre and post surveys, observations and interviews helped lead to a more holistic understanding regarding the study research questions related to teacher and student wellbeing.

Data Analysis

Now that study activities and data collection components have been described, data analysis considerations related to surveys, observations and interviews are explained in the following section.

Surveys: Pre-Surveys (Phase 1) and Post-Surveys (Phase 3)

During the survey portions of phases one and three of this mix methods study, quantitative data was collected and analyzed in the form of pre and post surveys to better understand teacher and student wellbeing before and after 1-2-3 Wellness™ program implementation.

Quantitative data from the comparisons between the pre and post surveys was analyzed looking for similarities and/or shifts in student, teacher and admin perceptions of wellbeing. Quantitative data was collected from questions, answered on a Likert type scale of 1, representing almost never to 5, representing almost always. Example survey questions included:

1. I pause to check in with how I am feeling.
2. I take care of my self-care needs.
3. I manage stress in healthy ways.

Variables measured included the five core competencies of social and emotional learning as identified by CASEL along with self-care and mindfulness practices (Gregory et al., 2017) (Kabat-Zinn, 2003). For students, statistical data was measured using a factor analysis and paired T-tests. For educators, descriptive statistics were used to better understand educator experiences and the larger wellbeing story. Taken together, data from pre and post surveys helped reveal whether learners experienced changes related to wellbeing throughout the course of the program implemented within the study. Quantitative survey data was then compared with qualitative data originating from observations and interviews within the study.

With qualitative research, "the critical question is whether the meanings you find in qualitative data are valid, repeatable, and right" (Miles and Hubrerman 1994). In terms of observations conducted in phase two, I analyzed data according to the five core competencies describe by CASEL along with other holistic measures related to mindfulness, self-care and behavior ("CASEL_metaanalysis," n.d.). Data was analyzed qualitatively via CASEL themes as well as quantitatively by counting the number of students who participated in integrative wellness practices.

In terms of interviews conducted in phase three, researcher questions, described in Appendix E, invited the interviewee to expand upon their experience with an integrative approach, assess their wellness and describe the benefits and/or shortcomings of their approach to wellness. Using grounded theory, interview data was open-coded allowing for the codes to emerge from the data. Next, codes were reviewed for larger themes. Ultimately, codes were collapsed and presented in a table to present larger themes in the results section of the paper (Miles, 1994).

Taken together, the three phases of the study represent synergistic components designed to support us in uncovering answers to the fundamental research questions in this study. Table 3 below illustrates how research questions within each of the three phases were aligned to data collection methods.

Table 3. Research Questions and Methods

		Surveys	Observations	Interviews
1.	In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) affect teacher and student wellness?	X	X	X
2.	What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?	X	X	X
3.	What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?	X	X	X

Results from this research are intended to support researchers and practitioners in identifying systems and practices which best propel student, teacher and administrator wellbeing. This newfound knowledge may have promising implications and be translated into tools and programs like 1-2-3 Wellness™ program which can be utilized by other grades within the Example School district as well as other school districts and organizations throughout the country.

Study Limitations

That said, there are some limitations to be considered throughout this research study. First, certain participants may have had the opportunity to have learned wellbeing related skills in the past while others may have not. Secondly, with a great deal of academic stressors on their plates, school leaders may not have had the opportunity to "take away" other

initiatives in order to implement this new opportunity. Thus, some educators may have experienced “initiative fatigue” during the study.

Additionally, issues of “sample bias” may be relevant as some of the educators involved have worked with me, as the principal investigator, in the past and I am currently still working with the district at present. Thus, positionality and objectivity issues may affect the study. As the principal investigator, I’m an educator who has worked in the field of education with a focus on holistic social and emotional wellbeing in schools and arrived to the research with assumptions. Secondly, in terms of positionality, I created the 1-2-3 Wellness™ program, have received a robust amount of feedback about the program from educators over the last year and a half, and want the effort to succeed. Acknowledging my subjectivity in the research process is vital, particularly for the qualitative elements that may be more subjective. Thirdly, and in terms of sample bias and generalizability, some interviewees may have felt that that certain desired or “correct” answers to survey and interview questions existed and may have therefore attempted to craft answers accordingly.

In Example school’s case, teachers and administrators approached me as the study investigator, asking for practical tools related to social and emotional learning, behavior and self-care. District participants were also entirely supportive and showcased leadership throughout the process. Given the participating teachers strong request for practical tools related to wellbeing and the national trend towards an increase in disease and mental health issues, benefits of this study were seen as far outweighing potential risks (Sapolsky, 2004).

While offering further detail related to each of the three phases, this chapter reiterated the research problem, research questions pursued and offered possible methodological pathways to testing the viability of a new, integrative and holistic approach called the 1-2-3

Wellness™ program. As part of this methods chapter, a number of additional details were presented including information related to research participants, the inclusion of surveys, observations and interviews along with insights related to possible limitations related to all three phases of the study. Additionally, the significance summary was included to help situate this research within the realm of possible benefits to schools and society broadly moving forward. Table 4. below offers an overview of the aforementioned activities, data collection and data analysis of all three phases.

Table 4. Mixed Methods Research Phases

	Phase 1: Preparation	Phase 2: Implementation	Phase 3: Reflection
Activities	*Educator Preparation (meetings and video course taken)	*Student and Educators began utilizing 1-2-3 Wellness™	*Student and Educators continued implementing and began to internalize new skills
Data Collection	*Pre-Surveys	*Classroom Observations	*Post-Surveys *Student & Educator Interviews
Data Analysis	*T-Test based on survey data	Descriptive data analysis based on observations	*T-Test based on student survey data (quantitative) *Quantitative data from surveys and qualitative data from interviews and observation

This study was designed to build upon the emerging story related to wellbeing in schools and help practitioners and researchers take another small step forward in uncovering whether integrative tools which honor the whole student and educator might serve to support happy, healthy learners.

Chapter 4: Research Findings

Introduction

This chapter presents the findings of this multiphase, mixed methods study which explores the following research questions: 1) In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing? 2) What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights? 3) What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?

As described in the preceding chapter, three types of data were collected in this multiphase, mixed methods study: 1) classroom pre and post *surveys* 2) classroom *observations* and 3) *interviews* involving both students and educators. Of the aforementioned data sources, quantitative data was elicited from the surveys. Qualitative data was collected via observations and interviews.

This chapter is structured by first describing study participants, next presenting quantitative survey results and finally presenting qualitative results derived from classroom observations and interviews.

Participants

A total of one-hundred and fifty-four students participated in the study which included seventy-two males and eighty-two females. All students were second graders. Of the one-hundred and fifty-four students who participated in the study, one-hundred and nineteen students participated in the both the pre and post surveys. See Table 5. For more information about student demographics.

Table 5. Student Participant Demographics

Total Study Participants	Gender	Ethnicity	Age
154 Students total*	82 females 72 males	74 White 37 Black 17 Asian 14 Hispanic 12 Other	112 eight-year old students 42 seven-year old students

*119 students participated in the surveys

A total of eleven adults participated in the study. Specifically, all seven second-grade teachers at the school participated along with three school counselors and the school's assistant principal participated. The school district's Assistant Superintendent served to help organize and coordinate study participants. In terms of the gender and ethnicity of participating educators, all seven teachers were Caucasian females. Among the counselors, one was a Caucasian male and two were female including a woman of Indian decent and a Caucasian woman. The Assistant Principal was also a Caucasian female. In light of the fact that seven out of ten adults asked to take the educator survey were able to complete both the pre and post surveys, the response rate for educator surveys was 70%.

As mentioned, data from the study was collected in three distinct phases. During phase 1, quantitative data was collected as educators and students completed the pre-survey which included twelve questions related to their wellbeing. See appendices D and F for more information. During phase 2, observational data was collected via classroom observations. During phase 3, quantitative data was collected in the form of post-surveys and qualitative data was collected in the form of educator and student interviews. In light on the fact that phase one included quantitative data from the surveys, survey data results comparing pre-

surveys from phase 1 to post-surveys from phase 3 are described below followed by data related to observations and interviews from phase 2. Describing quantitative data last also allows us to explore the nuanced nature of the complete wellbeing story as it unfolded during the study with educators and students explaining their experiences, beliefs and reflections in greater depth and adding life to the numbers.

Surveys: Student and Adult Student Pre and Post Surveys

We now turn our attention to examining the results of survey data. Survey questions related directly to the primary research question in this study: 1) In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing?

For second grade students, statistical data included descriptive statistics, a factor analysis and paired T-tests. For educators, descriptive statistics were used to better understand their experiences and the larger wellbeing story.

Quantitative Analysis: Student Surveys

Students who participated in the survey portion of the study were asked twelve wellbeing related questions in addition to self-reporting their gender and teacher's name. See Appendix B for further information. Since 119 students participated in both the pre and post surveys out of a possible 154 that were asked, the student survey response rate was 77%. Questions related to the five core competencies of social and emotional learning, mindfulness, general wellbeing and classroom and school culture. Pre and post-survey questions were identical. Students answered the same pre-survey questions in April 2019 that they answered after six weeks of 1-2-3 Wellness™ program implementation in the post-survey in May 2019. Due to absences, one-hundred and forty-eight students participated in the pre-survey and one-

hundred and thirty-seven participated in the post study. In total, 119 students, fifty-seven male and sixty-two female students, participated in *both* the pre and-post surveys (total n =119).

Initially, data was entered into an excel spreadsheet and "cleaned" to ensure that each student who completed the "pre" survey also completed the "post" survey following the six-week implementation of the 1-2-3 Wellness™ program.

Descriptive statistics were run in SPSS to assess if data distribution was normal for student survey data for both the pre and post mean distributions. For both the pre and post-tests, histograms validated nearly normal distributions. See Distribution Chart Figure 3 below:

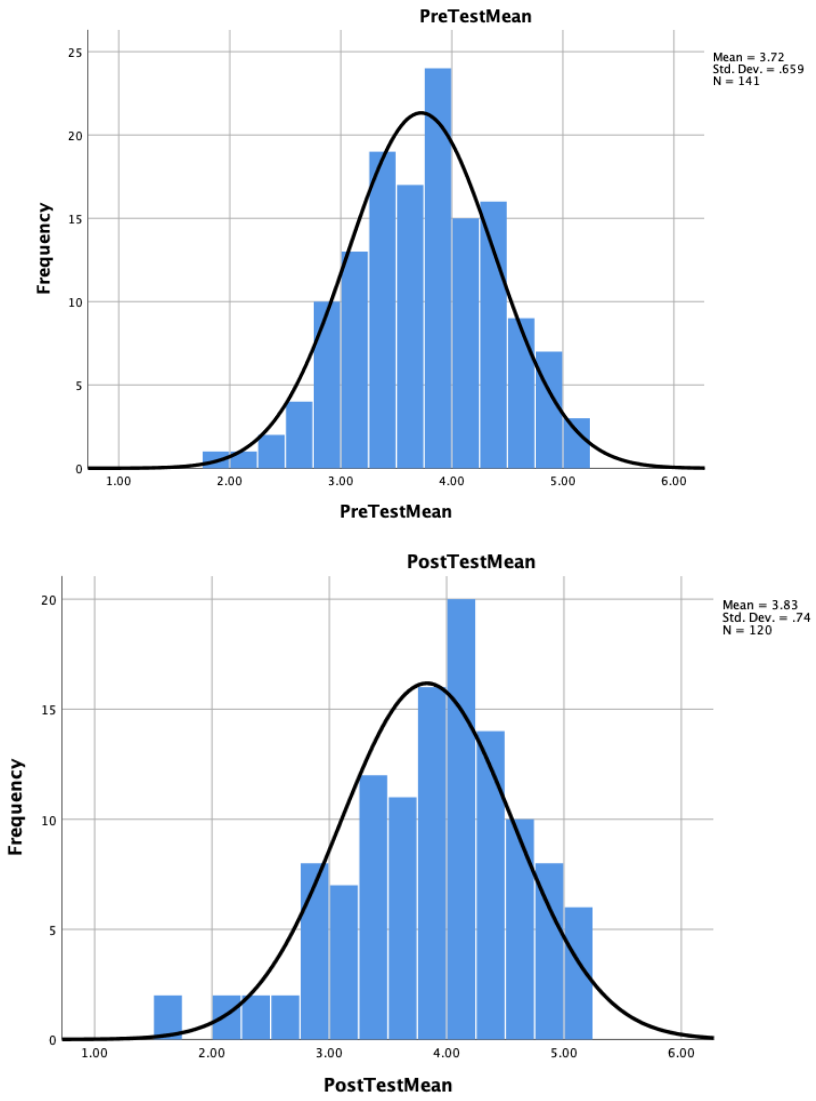


Figure 3. Normal Distribution Charts: Pre and Post-Surveys

Next, a correlation matrix for all 12 questions was conducted in order to determine which type of factor analysis to run. Since the data displayed as mainly not correlated, with an r- value generally below .4, an orthogonal varimax factor analysis was conducted accordingly.

When the exploratory factor analysis was run on the 12 items (survey questions) to see how they loaded together, 2 factors were found. One of the questions, question six on the survey, was the only question to load in a third factor. This question was thus dropped accordingly, leaving two factors. Based on question similarity, the two constructs were named

1) Self-care, 2) Mindfulness and Social and Emotional Learning (SEL). Next, composite scores were determined for each of the factors at time 1 representing the pre-surveys and time 2 representing the post-surveys.

For factor one, self-care, repeated measures, or paired T-tests, were then conducted using SPSS to compare means from time 1 to time 2 on the students' wellbeing survey. For factor one, self-care, T-tests did not reveal a statistically significant difference in means scores from pre-test (M_{Pre}= 3.67, SD_{Pre} =.95) to post-test (M_{Post}=3.84, SD_{post} .89); t (119) = -1.758, p= .081.

For factor two, mindfulness and social and emotional learning, repeated measures, or paired T-tests, were conducted using SPSS to compare means from time 1 to time 2 on the students' wellbeing survey. In terms of mindfulness and social and emotional learning, T-tests revealed a *significant* increase in means scores from pre-test (M_{Pre}= 3.46, SD_{Pre} =.86) to post-test (M_{Post}=3.63, SD_{Post} .83); t (119) = -2.479, p= .015. Please see Table 6. which depicts factor analysis data for each survey item along with Table 7. and Table 8. which offer further information related to T-test results.

Table 6. Student Survey Factor Analysis Table

Survey items	1	2
Self-Care		
I take care of my wellness.	**.588**	.240
I know how to deal with difficult emotions (like stress, anger and sadness) in healthy ways.	**.746**	.106
I practice self-care.	**.731**	.153
If I feel sad or angry, I know what to do.	**.736**	.003
Mindfulness & Social and Emotional Learning		
I stop to ask myself how I am feeling.	.117	**.538**
I understand how other students are feeling.	.000	**.653**
I tell my teacher what I need.	.335	**.567**
I have different self-care tools to choose from that help me make responsible decisions.	.384	**.448**
I take a wellness break at least once a day. (a deep breath, stretch, etc.)	.435	**.479**
My teacher shows me ways to take care of myself.	.063	**.710**
My classroom is happy and healthy.	.118	**.483**

Table 7. Composite Scores General Information

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Composite 1: Self-Care	3.6771	120	.95012	.08673
	Composite 1 Post: Self-Care	3.8458	120	.88947	.08120
Pair 2	Composite 2: Mindfulness and SEL	3.4583	120	.86052	.07855
	Composite 2 Post: Mindfulness and SEL	3.6345	120	.82634	.075434

Table 8. Paired Samples Statistics T-test

		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference Lower	Upper	t	df	Sig. (2-tailed)
Pair 1	Composite 1: Self-Care – Composite 1 Post: Self-Care	-.16875	1.05179	.09601	-.35887	.02137	-1.758	119	.081
Pair 2	Composite 2: Mindfulness and SEL – Composite 2 Post: Mindfulness and SEL	-17619	.778667	.07108	-.31694	-.03544	-2.479	119	.015

Thus, as revealed by the fact that the p score was found to be below .05 for the mindfulness and SEL factor in factor two, the differences between student pre and post tests were significant. In order to analyze the reliability of both factors, a Cronbach's alpha was run in SPPS. A .846 score indicated that the factors were indeed reliable.

Figure 4 below showcases the differences in means scores related to student's mindfulness and social emotional learning from pre and post. Pre-survey results are (represented in the blue column and post-survey results are represented in the green column.

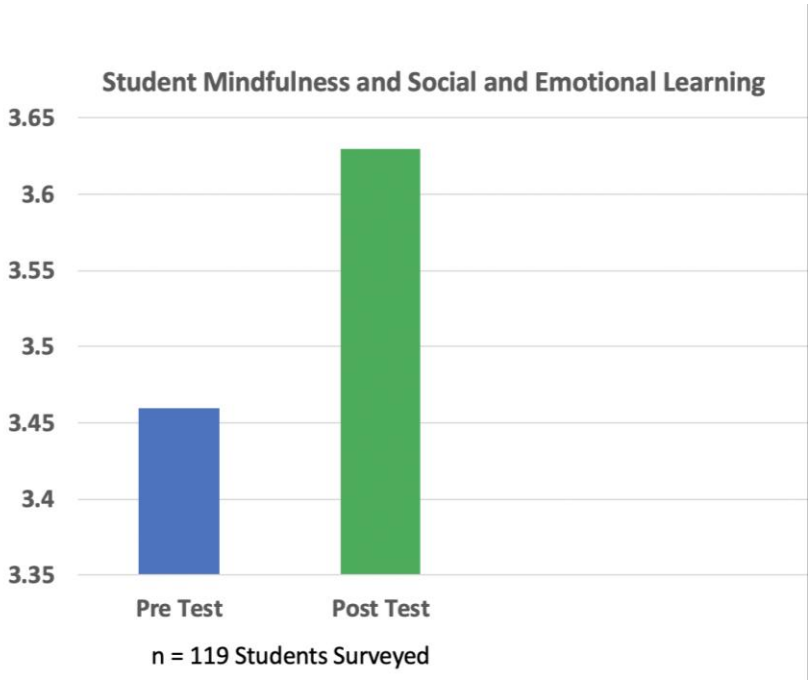


Figure 4. Student differences in Mindfulness and Social and Emotional Learning after Participation in the 1-2-3 Wellness™ Program

As mentioned, mean growth rose from 3.46 in the pre-test to 3.63 in the post-test as shown in Figure 5 representing *statistically significant* student growth in social and emotional learning and mindfulness after participating in six weeks of the 1-2-3 Wellness™ program. Please note, all twelve survey questions utilized the same Likert scale as follows:

1. Almost never
2. Not very often
3. Somewhat often
4. Very often
5. Almost Always

Thus, in Figure 5, a "3" answer represents "somewhat often" and a "4" answer represents "very often". Next, the Pearson correlation coefficient was conducted for time 1 and time 2. A strong correlation was found for the two factors (r= .736 for time 1) and (r =.928 for time 2). The two variables are thus correlated strongly for time one and very strongly correlated in time two since .8 to 1 is considered very strongly correlated. See Table 9 below:

Table 9. Pearson's Correlation

	Composite 1: Self-Care	Composite 2: Mindfulness and SEL	Composite 1 Post: Self-Care	Composite 2 Post: Mindfulness and SEL
Composite 1: Self-Care	1			
Composite 2: Mindfulness and SEL	.736**	1		
Composite 1 Post: Self-Care	.395**	.353**	1	
Composite 2 Post: Mindfulness and SEL	.388**	.398**	.928**	1

Stepping back to take stock of quantitative student data, the main finding was that students reported significant changes related to their mindfulness and social and emotional learning after participating in the 1-2-3 Wellness™ program. Next, qualitative data related to educators is presented to help determine illustrate themes and patterns emerge related to the study's research questions.

Quantitative Analysis: Educator Surveys

Following the finding that pre and post-survey data revealed significant growth related to *student* mindfulness and social and emotional learning, two essential factors within wellbeing, data from e*ducator* surveys was examined. A total of seven adults participated in the survey portion of the study including five teachers and two counselors. Of the seven second-grade teachers who participated in the overall study including observations and interviews, five completed both the pre and post surveys. Not all educators completed both pre and post surveys due to logistical factors such as pregnancy. Both counselors who directly work with second grade students also participated in the survey. All seven adult survey participants were asked twelve questions related to their own mindfulness, social and emotional learning and their capacity to support their students in these areas. See appendix H for more information. Due to the smaller number of educators who participated in the surveys, with n = 7 as compared to students where = 119, simple quantitative descriptive were utilized

for educator survey data rather than more complex statistical analysis. All seven adult survey participants were asked twelve questions related to their wellbeing. In terms of the adult surveys involving 5 teachers and 2 counselors, means were calculated. A general upward growth trend was found. Specifically, growth was found in these 4 areas related to educator wellbeing:

a. **Teacher mindfulness** "I practice mindfulness"
b. **Student Support** "I support my students with practical self-care tools"
c. **Meeting Student's Social and Emotional needs** "I meet my student's social and emotional needs"
d. **Healthy Classroom Culture** "Social and Emotional learning, mindfulness and self-care are a part of my classroom/school"

In terms of the question measuring educator mindfulness, growth was reported in the time span between the pre and post-tests. The mean increased from 2.71(not very often or somewhat often) often to 4.0 (very often). In Figure 6. below, the blue columns are presented to represent the pre-tests compared to the green columns which are presented to represent post-tests. Figure. 5 help illustrate the score increases showing that teachers self-identified increased mindfulness practice following six weeks of 1-2-3 Wellness™ implementation.

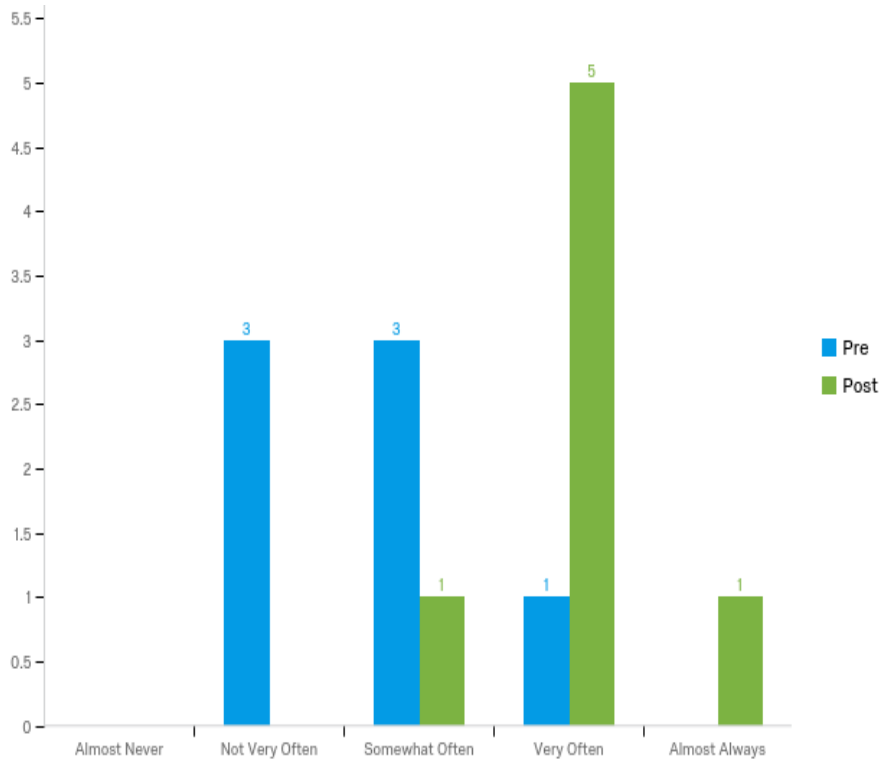
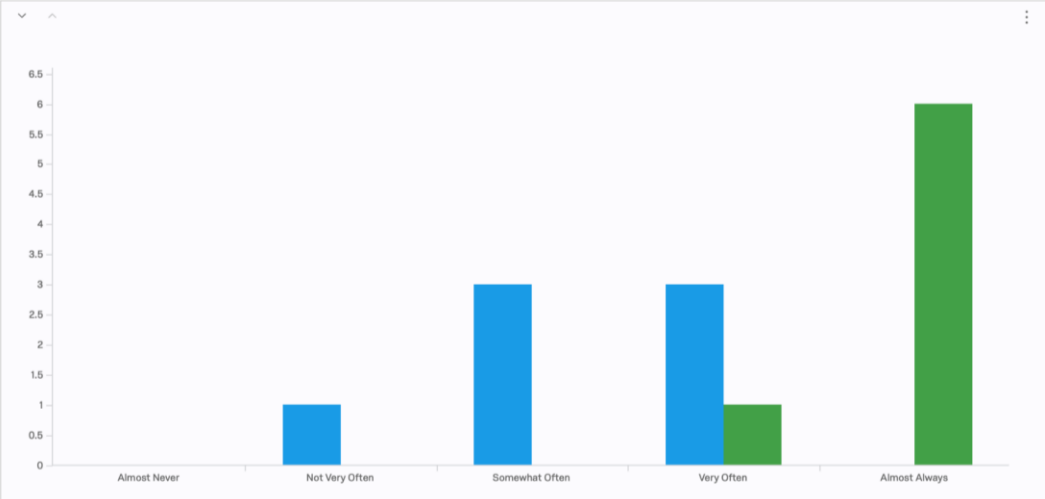


Figure 5. Educator mindfulness "I practice mindfulness"

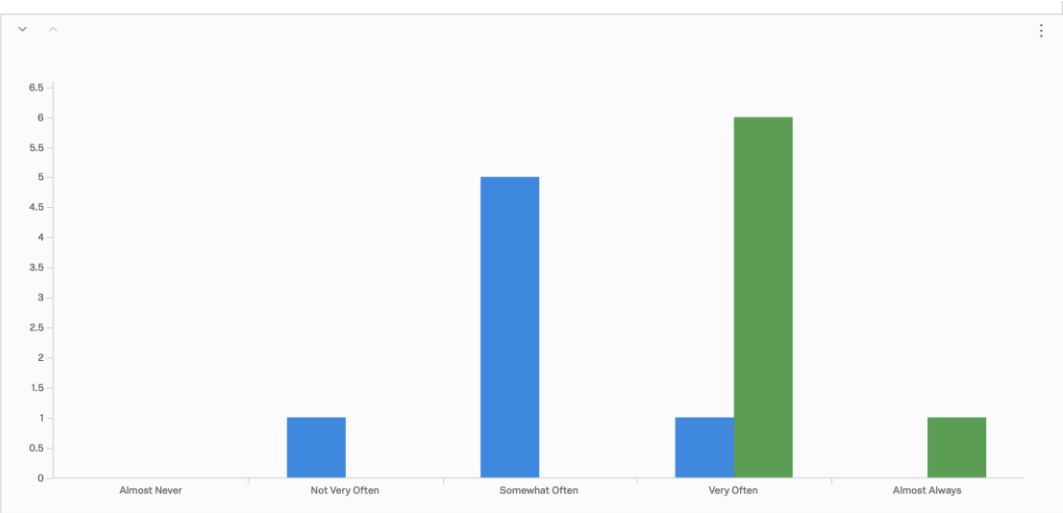
In terms of the question measuring the teacher's ability to support students' self-efficacy and wellbeing, growth was reported in the time span between the pre and post-tests. The mean increased from 3.29, representing "somewhat often" to 4.86 representing "almost always". In Figure 7. below, the blue columns representing pre-tests are compared to the green columns representing post-tests. Figure 6 helps illustrate the score increases showing that teachers felt better equipped to support students with practical self-care tools after six weeks of 1-2-3 Wellness™ program implementation.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Pre	2.00	4.00	3.29	0.70	0.49	7
2	Post	4.00	5.00	4.86	0.35	0.12	7

Figure 6. Supporting Student's Self-Efficacy and Wellbeing
"I support my students with practical self-care tools"

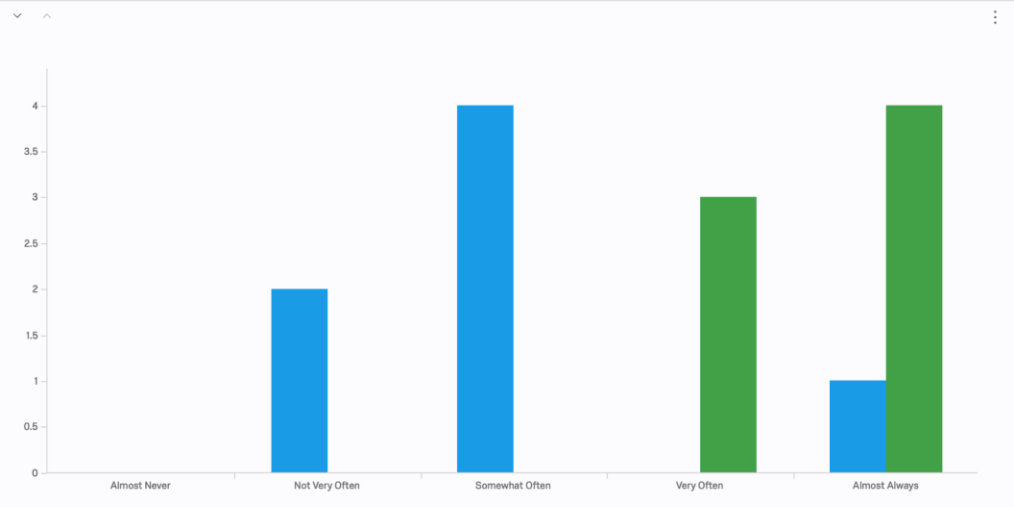
In terms of question eleven measuring educator's ability to meet student's social and emotional needs, growth was also reported in the time span between the pre and post-tests. The mean increased from 3.00 or somewhat often to 4.14 or very often. This growth shows that educators felt they are able to meet students social and emotional (SEL) needs more frequently after 1-2-3 Wellness™ implementation. In Figure 8 below, the blue columns once again represent pre-tests compared to the green columns representing post-tests. Figure 7. illustrates score increases following program implementation.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Pre	2.00	4.00	3.00	0.53	0.29	7
2	Post	4.00	5.00	4.14	0.35	0.12	7

Figure 7. Educator's Ability to Meet Student's Social and Emotional Needs
"I meet my student's social and emotional needs"

In terms of perceptions of a healthy classroom culture, growth was also reported in the time span between the pre and post-tests. The mean increased from 3.00, or somewhat often, to 4.57, or almost always, revealing that teachers and counselors reported increased SEL, mindfulness and self-care in their classrooms after 1-2-3 Wellness™ implementation. In Figure 8 below, the blue columns represent pre-tests compared to the green columns representing post-tests. Figure 8. illustrates increases following program implementation.



#	Field	Minimum	Maximum	Mean	Std Deviation	Variance	Count
1	Pre	2.00	5.00	3.00	0.93	0.86	7
2	Post	4.00	5.00	4.57	0.49	0.24	7

Figure 8. Healthy Classroom Culture
"Social and Emotional learning, mindfulness & self-care are a part of my classroom"

Thus, based on quantitative data derived from the educator's surveys, the upward trend suggests positive wellbeing outcomes for adults who participated in the program. Due to the small adult sample size, descriptive statistics were used instead of complex statistical methods.

Overall, coupling the statistically significant growth revealed in the *student survey* data with the general growth trends revealed in the *adult survey* data, survey data suggests that the 1-2-3 Wellness™ program was indeed supportive of both student and educator wellbeing. In other words, both students and educators benefited from the integrative program concurrently. Next, we look to observational data to help develop a more comprehensive picture of school wellbeing from the study.

Observations

Observations of five second grade classrooms were conducted as part of the second phase of the mixed methods study. Each classroom was observed for approximately 30 minutes per classroom. The five core competencies of CASEL's social and emotional framework along with mindfulness criteria helped guide the focus of the walkthroughs ("CASEL_metaanalysis," n.d.) (Bishop et al., 2004). See Appendix G for more information. In total as part of the five classroom observations, five teachers and one-hundred and fifty-four students were observed. The remaining two classrooms were not observed due to logistical constraints. Additionally, a school counselor, supporting one of the teacher's efforts in class, was involved in one observation.

Immediately following each observation, as the PI, I recorded detailed field notes to capture the setting, context and important points that should be revisited when analyzing the data thereafter. To help generate well-rounded ideas related to the three primary research questions, the first observation was conducted while the teacher *introduced* the 1-2-3 Wellness™ program to students. Four additional observations were conducted in four separate teachers' rooms later in the process after students had already been introduced to the 1-2-3 Wellness™ program and had time to practice.

The five observations of 2nd grade classrooms at Example Elementary School were conducted in April 2019. In classroom one, the observation took place on the first day as the teacher introduced 1-2-3 Wellness™ to her students. In classrooms two and three, observations took place after the program had been taught earlier in the week. In classrooms four and five, the program was introduced to students earlier in the day to begin the six weeks of program implementation.

Classroom One:

Entering the room, students were sitting cross-legged on the carpet at the front of the room while classroom teacher 1 was in front of the class sitting on a chair overlooking her class. After finishing her math lesson and with a child friendly and upbeat, approachable tone, classroom teacher 1 began discussing what the terms "wellness" and "self-care" mean. She then asked students to think about what self-care strategies they already use in their lives and draw pictures of their wellbeing practices. Classroom teacher 1then showed her class the 1-2-3 Wellness™ poster and asked students to choose where on the classroom wall their class might "find a home" for their new 1-2-3 Wellness™ poster. After students raised their hands and voiced ideas including "in the front of the room" and "by the entrance", the class decided to hang their poster in the back corner of the room by their family pictures. As one female student said, the family pictures "make them happy".

Next, the classroom teacher asked students what they might do with the self-care drawings and artwork that they made to help them feel good. Initially, students decided to hang their self-care artwork by the 1-2-3 Wellness™ poster. However, later they decided that each student could choose where to hang their artwork which the teacher described as "beautiful artwork that puts you in a happy mood". Examples of the wellness ideas they brainstormed included taking a deep breath, walking away, daydreaming about a happy place, reading a book, asking to play with someone, doing pushups or exercising.

The teacher from classroom 1, echoing words from the 1-2-3 Wellness™ video course for educators that she'd taken in the preceding three weeks, told students that "emotions are like waves that don't last forever. They go away." She talked through the different colors/ and waves of emotions and the colors depicted on program resources.

Next, after the teacher introduced the class to the idea of deep breaths and the three-step process of 1-2-3 Wellness™, the whole class practiced 1-2-3 Wellness™ together. She reminded students to take a deep breath for each of the three steps, imagining smelling a rose for the inbreath and blowing out a candle for the outbreath. The first time, the teacher modeled how to identify one's emotion. Modeling for her students, the teacher said that she felt a bit nervous because her dog may be chewing things at home. She then pointed to the "visualization" wellbeing option on their poster within the "nervous" portion, explaining that she found a practice to help her address her nervous emotion in a healthy way. Then she led her students through a visualization walking peacefully through the woods with her dog and incorporated "the sounds of the rustling leaves, the feel of your feet against the dirt path the smell of the fresh air".

After the visualization, the teacher asked her class how the wellbeing practice made them feel. One boy with brown hair and a blue and green shirt said, "It made me feel so happy." The teacher asked, "Can you do this when you are at the grocery store? At home?" The students answered "Yes!". One student said, "You can do this anywhere." The teacher said that students can use 1-2-3 Wellness™ to "check in with ourselves all throughout the day". The class then tried three different wellbeing practices together, picturing a happy place, practicing positive self-talk and stretching.

Next, students were asked to practice independently, document their emotion on their "My Self-Care Chart" and choose their own wellbeing practice. Students chose practices to match their emotion. One young girl with a purple shirt and ponytail stood up to stretch. One boy, who identified his emotion as hopeful did a happy dance. A second young girl identified her emotion as happy, so she decided to "help others", asking another student if she wanted

support. A different boy, in a striped shirt and black pants, identified his emotion as anxious and decided to take time to calm down alone and stretch.

Classroom teacher one, developing her own social awareness of her student's needs, walked around her class and saw what emotions students identified. She saw that one young boy, wearing a hoodie covering his eyes, wrote down a painful emotion. The teacher asked him if he was ok and if he could speak with her later about his emotions. Following their first time practicing 1-2-3 Wellness™, students were asked how that can use the program and provided the following answers.

A. "When I get angry."
B. "I can use it to help me calm down and so I don't get suspended."
C. "I can use it even when I am older as an adult."

Classroom Two:

The teacher from classroom two stood before her class as students sat in their desks. She reminded students of the three 1-2-3 Wellness™ questions and the importance of taking a deep breath amid each step. The counselor, counselor one, entered the room to check on student's progress and provide support as needed. Each student had two items on their desk, their personal, paper sized 1-2-3 Wellness™ poster and a "My Self-care Chart" to monitor their emotions and use of wellbeing practices. See Figure 3. For more information.

Classroom teacher two led her class to practice together. "Ok, let's first take a deep breath and follow the steps we learned. Please chose a wellness activity from your poster."

The classroom mood was calm and focused with students quietly taking deep breaths. One girl decided to think about 3 things that she was thankful for. One boy identified his emotion as excited and decided to draw for a minute. Another girl felt tired and put her head

down to rest for a moment until she spoke again. A second boy wrote down “calm and happy” and decided to write down three things that he was thankful for. He wrote 1) My parents 2) My Cat Micky 3) (difficult to read). A third boy wearing purple t shirt described his emotions as angry and bored on his paper and decided to put his head down for a minute. Another boy identified that he felt fidgety and decided to stretch his arms and legs. After one minute, the teacher raised her hand to get the classes’ attention and said: “You are becoming problem solvers on your own”. The teacher then asked students how they can use 1-2-3 Wellness™: Students raised their hands and provided the following answers:

A. One young boy said “We can use it now or as an adult or teacher to stay calm”.
B. One young boy said “If I get mad, angry or sad I know how to calm myself”.
C. One girl said “If I miss my mom I can picture a happy place”.

After students left for P.E., counselor one walked over to me and indicated that students were beginning to become more self-efficacious since being introduced to the 1-2-3 Wellness™ program. The “students are not saying Mrs., Mrs., Mrs! I need help! Instead, they’re self-managing their own behavior and needs.” The teacher from classroom two then mentioned that at first students were walking up to the wellness area with the resources. Her first inclination was to scold students for leaving their seats without permission. When she asked a student, “What are you doing out of your seat”, one young lady said “I was upset and I am practicing wellness”. At that point, the teacher indicated that she changed her viewpoint and approach. The teacher praised the girl for managing her emotions in a healthy way and asked her to carry on. The girl stretched and then went back to her seat and got back to work. The teacher noted that students are “taking ownership of their emotions and responsible decision

making. Students are initiating wellness practices themselves rather than waiting for a direction".

Classroom Three:

The teacher from classroom three's students were working on a reading assignment when I entered the room. Some of the students were sitting in their seats reading and some of the students were standing above their seats reading or writing. One girl was standing and swaying her hips wildly side to side, not focused on her work. Another boy was walking around the classroom at a somewhat rapid pace. The teacher stood at the front of the room and told her class that it is time to practice 1-2-3 Wellness™. All of the students stopped what they were doing and went back to their desk. The teacher asked the students to take out their charts. Students took out charts and sat down. She led her class through the program's process: "Let's take a deep breath with each step." Students took deep breaths as they followed the process, practiced the steps and began to choose individualized wellness practices.

Sitting at a U-shaped table in the back of the room, a girl was coloring, a boy was playing with playdough, another girl was squeezing a stress ball, another girl with pigtails and a tutu did jumping jacks and another boy ran in place. The teacher walked around her class and smile at students. As I stood up to walk around, the teacher called me over and said:

> "Earlier in the day a young girl stared crying a bit and I asked the student what was wrong. The student said that she was crying about her mother who had passed away 2 years ago. I asked her if the 1-2-3 Wellness™ process could help her. The student said yes, engaged with the process and chose the strategy to journal. I asked her how she felt after and the student said, 'I feel happier now."

Reflecting to me, the teacher said that "as her teacher, I am happy because as she practices more and more, she will be able to use the process anytime, even when I'm not there".

In this example, the student learned to take care of her emotions to help her process the traumatic loss of her mother. Her teacher learned a process to empower the young lady in processing difficult situations and emotions.

Classroom Four:

I entered classroom four in the afternoon and students were curious about "who is our visitor". I sat down in the back of the class to let the excitement and novelty dissolve. I was told that the class had just been taught 1-2-3 Wellness™ earlier in the day. Students went back to work for a few minutes, focusing on a worksheet. Students displayed varying levels of engagement. After about 5 minutes, the class was directed to please practice 1-2-3 Wellness™ together. The teacher asked "Do you remember the 3 questions we ask? Let's do it together."

One student was fidgety during the questions, but eventually focused back on his sheet. I walked around the room, noticing words that students wrote for their emotion. Students wrote down emotions such as bored, happy, angry and excited. Students stretched, took more deep breaths, gave each other high fives and hugs. I went back towards the seat in the back when one boy motioned me over and asked me "Can I have a hug?". So I gave the young man a hug.

As students finished up with their wellness practices, the teacher asked the students: "How can 1-2-3 Wellness™ help you?"

A. One girl said: "You can know your emotion to relieve stress."
B. A boy said: "Help you if you're mad or sad or have extreme emotion."

C. A girl said: “Mad or sad or help you know how other people feel.”

The teacher said, “all great ideas and answers.” Now let’s get ready to go.” As I was walking out of the class, I thanked the teacher and she responded, referring to the boy who’d asked me for a hug after practicing the program: “That boy has never asked anyone for a hug before today. I will try to integrate more sensory activities with him like hugs and pushups for the rest of the year”. This interaction led me to believe that the boy’s self-awareness and self-advocacy increased in that experience and this teacher’s social awareness of her students’ needs had also expanded. The boy wanted to connect and the teacher was beginning to see that sensory connection was important to him.

Classroom Five:

I walked into classroom five with about five minutes left in the school day. Students were all sitting cross legged on a circular rug with their backpacks in hand or on their backs. Their teacher was sitting in a chair next to her students. I positioned myself in a seat behind the students, facing the teacher. She had introduced 1-2-3 Wellness™ that morning and, here at the end of the school day, reflected with her students. “Class, how can we use 1-2-3 Wellness™?” Sitting cross legged, seven student hands raised. The teacher called upon students individually. Student responses included:

A. “If you are angry, you can get your wellness back.”

B. “If you are sad and need a break.”

C. “Make a good choice and see how you feel.”

D. “If you’re sad or disappointed, you can write down your feelings and find what helps you feel better.”

The bell rang and students were dismissed. As students left classroom five, the teacher approached me to say that the day went well. As students were leaving, she pointed to a boy

as he was leaving and said “Earlier, Michael came and showed me his wellness poster because he was proud.”

While each of the five classroom observations were illuminating in their own right, it is critical to look across the data in search of possible patterns and meaning related to this study’s research questions. In doing so, three main themes emerged: *choice, connection* and *safety*. In terms of *choice*, students strongly enjoyed the opportunity to *choose* a wellness practice that met their needs. As shown by their fast-paced walks to different wellness tools and excited facial expressions, students enjoyed taking ownership of their needs and the opportunity to have choice amid the school day. During their wellness breaks, students were able to be their own “boss” for a moment, with dozens of options offering the opportunity to develop self-efficacy. Students seemed to revel in the opportunity to individuate, choosing practices that reflected their own needs, curiosity, personality and desires.

A second theme that emerged in the classroom observations was *connection*. Throughout the observations, connection was found to involve multiple student components: connecting with *others* through interactions like hugs, compliments, and high fives, connection with *self* including developing mindful self-awareness and responsive self-care. On one hand, many students chose wellness practices that involved connections, or interactions, with peers or adults. The boy who eagerly asked for a hug, for example, seemed by be yearning for positive contact and connection. Other students chose to use their wellness break to talk to one another or give high fives or handshakes.

In addition to connecting with others, students also seemed to intuitively grasp the value of *connecting with oneself.* After teachers introduced the program, students understood the value of internal connection immediately. Throughout the observations, students

mindfully identified different emotions that were personal to them in that moment and chose wellbeing related activities in alignment with their choices. In such a scenario, information was not being disseminated to them by an external teacher or expert. Rather, students cultivated the practice of looking inside themselves to connect what was happening within and provide responsive self-care accordingly. Students became their own teacher. Students discovered that they were the only one who could directly connect with their unique emotions and needs. Students were eager to connect to their internal feelings and needs, voicing ideas during reflection such as "If I get mad, angry or sad I know how to calm myself." Together, the choice and connection themes both highlighted the student's desire to integrate their newfound knowledge of mindfulness with actions that connect to healthy habits.

A third theme that emerged from the observations was *safety*. In one example, the young girl was sad because she'd recently lost her mother. She later chose a wellness strategy to help her cope with her emotions in a healthy way. In another example, the young boy asked for a hug for the first time in eight months. He became aware that he wanted a hug and summoned the courage to ask for one. In these examples and others, educators and teachers felt comfortable and safe enough to acknowledge and pursue what they needed related to their own personal, sometimes vulnerable situation. Interestingly, and in alignment with the neurobiological research referenced earlier which emphasizes the healthy value of upregulating one's parasympathetic nervous system during times of stress, students seemed to gravitate towards wellness activities involving movement such as stretching and squeezing a stress ball. Such activities helped them access calm by upregulating of their parasympathetic system (Sapolsky, 2004). Such an observation may suggest that students, when offered the opportunity to pause and become attuned to their needs, realized that they needed to move

around and expend excess energy in order to feel safer in the learning environment. Student's practice of pausing, mindfully connecting with their emotions, having choice and a mechanism for addressing difficult emotions appeared to serve as a high leverage mechanism to cultivate feelings of safety.

Stepping back, the quantitative data derived from the surveys support findings derived from the five classroom observations. The surveys revealed that both educators and students developed skills related to social and emotional learning and mindfulness. Observations in the study support this finding and offer additional, nuanced data showcasing the intricacies of their collective growth related to wellbeing. Students appeared eager to practice the program in part because it offered a clear pathway to connection, choice and safety. Students knew that they could connect with their own emotional needs and choose a wellness habit in alignment with what they "found" inside themselves. If one student mindfully paused to notice that he was angry, for example, he could choose to expend energy on a physical activity like pushups. If another student found that she was lonely, for example, she might choose to talk with a friend. In a world where students are so often told "the way it is" or "what you need to do" by others, the 1-2-3 Wellness™ program allowed students to discover for themselves.

Themes that emerged from observations highlight the formative value within Maslow's Hierarchy of needs (Maslow, 2008). Importantly, Maslow identifies love and belonging, a type of connection, as a core need. Observations in this study suggest that connection is a multifaceted factor with *self-connection* and *connection with others* serving as two vitally important wellbeing components. Additionally, the finding that students gravitated so strongly to choose suggests that perhaps, in terms of developmental growth, choice is an important factor in esteem and self-realization for kids in this age range. Equipped with this

data in mind, we now continue to expand upon our understanding of the interconnected nature of wellbeing by focusing on data derived from educator interviews.

Educator Interviews

In phase three, the final research phase which took place following six weeks of 1-2-3 Wellness™ program implementation, educator interviews were conducted. Educator interviews were conducted in order to offer teachers, principals and counselors the opportunity to reflect and provide their unique perspectives following six weeks of program implementation.

In total, five students were interviewed. In total, ten educators were interviewed via written form using six primary questions. Additionally, three educators, a teacher, a counselor and assistant principal from Example School, were interviewed for 30-45 minutes a piece over the phone. With the interviewee's permission, all three phone interviews were recorded via the Rev phone application and annotated thereafter using Rev software. Additionally, phone interviews were then coded using the web based Dedoose software platform. Some basic codes were created a priori including behavior, SEL and mindfulness while others, based on themes that emerged after review of the interview data while others, including self-efficacy, were added ex posteriori.

The following paragraphs describe data that emerged from student and educator interviews. First, interview data from the five structured student interviews is shared with reference to direct student quotes. After the five student interviews are described, data from the three, semi-structured 45-minute educator phone interviews are presented. Insights from Assistant Principal one is shared first followed by insights from classroom teacher three and school counselor one. Next, the additional interview data is shared from the 7 educators who

provided written answers to their interview questions. All interviews were conducted in English. At the end of this chapter and into chapter five, macro themes and patterns which emerged from the interview data are discussed and compared to the other data collected, surveys and observations. Chapter five also includes discussion about the big picture implications of this study.

Student Interviews

Student interview questions focused primarily on the first and third research questions involved in this study: 1) In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing? 3) What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?

Given the busyness of the time of year since students were interviewed in mid-May just before summer break for Missouri schools, interviews were kept concise. In order to expedite the process and given logistical realities, a school counselor interviewed students and documented their answers using a combination of verbatim student answers along with paraphrased ideas articulated by students. Next, the counselor emailed student responses to the researcher in a secure manner. Students were selected by the second-grade teachers as students who were representative of the grade level in terms of gender, race and age. Student participation was strictly voluntary.

In terms of what helps students feel happy and healthy, some of the main practices identified by students were playing with peers, connecting with adults and staying active through playing sports, jumping jacks and being outside, for example. Highlighting the benefits of *connecting* with others, student one, a young lady, mentioned that “at school,

playing with and talking to friends and participating in recess helps me feel happy. At home, playing sports and playing outside helps me feel happy". In terms of the integrative program studied, 1-2-3 Wellness™, students noted that the well needs activities helped them feel more happy, calm and excited. Four students, or eighty percent of those interviewed, identified the ability to *choose* a wellness practice as a propellant of their wellbeing.

Many students, in kid friendly language, identified *connecting with themselves* through emotional awareness, self-regulation, self-compassion and self-care was a wellness propellant. For example, student three, a young man, noted that "I liked that if you are sad you can talk to yourself kindly or draw a picture. It helped me to be happy". While students differed in what wellness activities, they chose such as push-ups, dancing, deep breaths, drawing or connecting with a friend, the option to choose was key. Student five, a young man, "liked getting to do push-ups. I can do a lot of those. I liked looking out the window for the sun, too. Learning the breathing helped me." Other students learned that different wellness practices suited their personal needs. For example, student two noted that "my favorites were stretching, drawing and reading."

Additionally, students interviewed described how they were more emotionally self-aware and were learning that they could have a hand in influencing their emotions. For example, student two, a young lady, articulated that "I learned to think more about my feelings." Emphasizing the power of the integrative 1-2-3 Wellness™ program's social and emotional and neurobiological benefits, student four, a young man, noted that "I learned that you can calm your body. It makes people happy and made me happy." Students also described specific practices they can turn to when experiencing different emotions. During difficult times, students were able to self-regulate and cultivate healthy relationships. For example,

student three, a young man, noted “I learned to be kind and not fight with others. I learned that when I get angry, I can do jumping jacks. I learned that when I get sad, I can rest for a minute.” As they developed social awareness, students interviewed developed the appreciation that their peers’ needs might be different from theirs, and that is ok. As student one noted, “I learned that even though other people are using 1-2-3 Wellness™, not everyone needs to do it at the same time.”

Stepping back, the main themes that emerged from student interviews dovetail cohesively with data derived from surveys and observations. *Choice* and *connection*, including connection with self and others, rose to the surface as themes within the student interviews. Additionally, utilizing age-appropriate language, students described their cultivation of *mindfulness*, *social and emotional learning* and *neurobiologically* based wellbeing practices. Specifically, in terms of the five core competencies of SEL, students described their cultivation of self-awareness, self-management, social awareness, relationship skills and responsible decision making (“CASEL_metaanalysis,” n.d.). Importantly, and in line with considerations related to mindfulness, students articulated the benefits of pausing to get in touch with what was happening in the present moment related to their emotions and needs. Specifically, *emotion regulation* and *self-care* played a prominent role in student’s capacities to develop a connection within themselves. Students were attuned to the value of emotion regulation as a springboard for their own self-care as well as in terms of the benefits for relationship cultivation. Thus, paralleling findings from classroom observations, students valued their ability to *choose* wellness practices as well as the opportunity to *connect*, both with others and with their own internal needs. Self-connection skills related to emotion regulation and self-care played a prominent role in student wellbeing.

Educator Interviews

Educator interview questions were designed to elicit answers related to the three research questions within this study. 1) In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing? 2) What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights? 3) What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights? Thus, educator interview responses are organized by describing each educator's responses to each of the three research questions.

The demographic data of the three educators who participate in phone interviews are provided below in Table 10. All three of the educators who provided phone interviews were female and their ages ranged from 30-40. Their years of experience ranged from 9 years to 17 years. All three educators identified as Caucasian.

Table 10. Educator Interviewees

Participant	Position	Age Range	Years as an Educator	Ethnicity	Highest Degree
Assistant Principal one	Assistant Principal	35-40	17	Caucasian	Masters
Counselor one	Counselor	30-40	12	Caucasian	Masters
Classroom three teacher	2nd grade Teacher	30-40	9	Caucasian	Masters

Assistant Principal one (phone interview)

1. Effectiveness of the 1-2-3 Wellness™ program.

Assistant Principal one serves as the Assistant Principal of the kindergarten through second grade levels at Example Elementary School which is one of the largest elementary schools in St. Louis County, Missouri. She began the interview by offering an overview of the

student body for context. She mentioned that students of different identities and backgrounds come to the school speaking over 32 different languages. A lot of students come from war torn areas. Many students are refugees. Many students receive special education services and a large number take part in the voluntary transfer program to integrate students from the city into county schools like Example Elementary.

With the aforementioned as a backdrop, Assistant Principal one referred to the interconnectedness of affective and academic considerations, mentioning that in many cases "it's impossible to have any type of academics without addressing social and emotional learning in school". Highlighting the symbiotic nature of student needs, she mentioned that before addressing student's academic needs, we must address their own internal needs including the need for love and care. Assistant Principal one noted that the integrative 1-2-3 Wellness™ program empowered her teachers and students to address social and emotional needs while pursuing academic goals concurrently. The integrative framework within the program also supported wellbeing by offering simple, specific pathways to address SEL, mindfulness and brain-priming activities concurrently.

Assistant Principal one highlighted that one of the benefits of the integrative approach throughout 1-2-3 Wellness™ is that student's internal needs including self-awareness and self-regulation as well as external needs related to responsible behavior and self-care practices can be met in concert. Assistant Principal one noted that the holistic nature of 1-2-3 Wellness™, supporting social and emotional learning, mindfulness and even trauma, was helpful to students and educators. The ability to support students in practicing mindfulness and getting in touch with their social and emotional needs was a propellant for connected wellbeing. Assistant Principal one noted:

> We were so cognizant at the beginning of the day, assessing where students were, how they feel and what they see and hear. It became normal to assess if you were down, if you were stressed, where you were at. It was okay if you had those feelings. It was okay to see what you needed. Students learned that no one would judge you.

Supporting student's ability to see their emotional state as non-threatening and a part of being human was helpful. As a school leader, Assistant Principal one voiced that over the course of the six-week research period, she had multiple students enter her office in a state of meltdown who noticed the 1-2-3 Wellness™ poster on the wall and began to calm using the program process. These students were reminded of the program steps which helped them calm their bodies and brains through activities rooted in mindfulness and SEL.

Additionally, she also witnessed peer intervention in the classroom which propelled other student's wellbeing. For example, following the 1-2-3 Wellness™ protocol to mindfully identify emotions, many of the teachers would ask students to share how they were feeling each day. One student shared that she was angry one morning because she couldn't find her backpack. Assistant Principal one noted that another student, a young man who regularly experienced anger, heard the young girl talk about her emotions. Having access to an accessible, integrative framework which combines mindfulness, social and emotional learning and neurobiology helped the young man and his peers develop wellness skills.

> He was able to see that its ok to be angry sometimes. It lets other kiddos know that everyone experiences emotions and they are not alone, even students who sometimes have emotional problems. The program kind of brings it home for everybody.

Given that her students come from challenging backgrounds including trauma, PTSD associated with refugee transitions to a new country, the integrative approach has helped these students find calm amid the storm. For example, one student who is prone to eloping, has found that the integrative program has helped him with self-awareness and responsible

decisions. Though he still elopes at times, the situation is improving. That particular student realizes that “squeezing his fists tight and releasing stress” as well as “imagining a peaceful place”, simple strategies rooted in SEL and neurobiological considerations which the sympathetic nervous system have helped him calm down a faster and return to the learning environment. In many ways, wherever he goes becomes his “learning environment” because he is learning mindfulness, social and emotional skills and trauma informed approaches anywhere he practices 1-2-3 Wellness™. The Assistant Principal noted that he will be able to take those integrative wellbeing skills with him beyond the confines of the school.

In terms of constraints, the time that it took to teach the integrative effort was a factor for some educators. Undoubtedly, the Assistant principal described, teachers have a lot of their plates. She mentioned that during the after-school reflection among second grade teachers, some teachers wanted to limit the amount of times practicing the integrative approach or eliminate certain portions to focus directly on academics from the onset. Busy teachers experience initiative fatigue. Thus, offering ways to fit additional professional development time into the process is a factor to consider. Given the amount on their plates, some teachers wanted to limit the use of the integrative 1-2-3 Wellness™ program while others were perfectly happy and gained what they considered to be valuable benefits that extended to student behavior, attention and academics. Given that integrative programs address multiple factors concurrently including behavior, SEL, academics and neurobiology, perhaps eventually educators could save time by decreasing use of other strategies such as traditional behavior management.

Another constraint Assistant Principal one mentioned related to change as a process. The idea of social and emotional learning and mindfulness are relatively new and will take

time to become a part of the culture and climate of the school. Some educators may maintain the notion that social and emotional learning and mental health-oriented programs are "enabling students". Assistant Principal one noticed that while teachers and students who took part in the study benefited greatly from the integrative program, some teachers in other grades who did not receive the program's professional development have asked about the program. Some educators, accustomed to programs which focus on one goal (reading, writing, behavior, etc.) at a time, seem to harbor some reservations about what the integrative, brain-based program is all about. Assistant Principal one mentioned that offering teachers the tools and support to implement with fidelity will be a challenge and opportunity to overcome such stigmas moving forward.

In general, Assistant Principal one noted that the integrative 1-2-3 Wellness™ program was a strong success. In fact, Assistant Principal one noted that because of the success that second grade teachers and students cultivated with the integrative 1-2-3 Wellness™ program during the study's six-week implementation window during the 2018-2019 school year, she and the teachers plan to expand implementation of the 1-2-3 Wellness™ program across grades k-3. Thus, they plan to serve 600 students with the program next year compared to 150 this year. Ultimately, the integrative framework combining SEL, mindfulness and neurobiology helped promote student and educator wellbeing for the aforementioned reasons.

In terms of factors that support or constrain *teacher* wellness, Assistant Principal one noted that "teachers want to feel valued, appreciated, safe and feel like they are needed". Oftentimes, regardless of one's age, whether they are a student, teacher, board member or whomever, feeling appreciated is foundational. In one example, Assistant Principal one

recently brought in gooey butter cakes for her staff on the last day of school to show her appreciation. She said, based on the teacher's reactions, you would have thought that she spent thousands of dollars. Her teachers knew what was expected in terms of their responsibilities, another key pillar that supports teacher wellness according to Assistant Principal one. Plus, they felt happy and appreciated. These ingredients made a world of difference for their wellbeing.

In terms of factors that support or constrain *student* wellbeing, she noted that students need to recognize their own feelings and know what to do next. Like educators, young people also need to feel valued, appreciated and safe. All students, including those who have experienced difficult challenges deserve school and home environments where their basic needs are met.

In summary, the Assistant Principal was clear that the integrative approach found in the 1-2-3 Wellness™ program served as a propellant to staff and students wellbeing because it allowed them to address deep needs related to emotions, behavior, neurobiology and academics concurrently in a streamlined fashion. She also noted that connection, appreciation and safety, along with other basic Maslow's needs, are critical elements within school wellbeing efforts.

Classroom teacher three (phone interview)

Due to feelings of initiative overload, classroom teacher three expressed that she was initially hesitant to add another program to her busy workload. However, soon after implementation commenced, she noticed that the integrative program began to become second nature and her default shifted to one marked by wellbeing. She began to mindfully pause, take deep breaths and initiate conscious responses to challenges.

After she began implementing with her class, classroom three teacher noticed her students wellbeing improved and that benefits related to SEL, mindfulness and even academics emerged. As a result of the integrative framework, the educator noticed positive changes related to SEL, mindfulness and neurology which ultimately helped students focus academically. My "students were able to focus on the here and now when they used the 1-2-3 Wellness™ program and ground themselves by tuning into their senses. After practicing 1-2-3 Wellness™, my kiddos seemed more calm, focused and ready for the lesson."

She also noted that students who were historically a bit rowdier during lessons were able to showcase more self-control after accessing integrative tools related to deep breathing and mindfulness-based practices. As a teacher, she expressed that her own awareness of student emotions also increased. She was able to see a trend in student emotions and help them address the root of their issues rather than just manage surface behaviors. Thus, the integrative approach supported adult and student mindfulness which in turn led to an increase in SEL which in turn supported positive behavioral outcomes. She noted that the integrative framework helped students expand their awareness of different emotions and the plethora of wellness strategies available to them to address varying emotional needs.

Rather than requiring multiple programs to address multiple student needs, the integrative program helped with a wide array of student needs concurrently. Students developed self-efficacy through choice as they mindfully identified their emotions and chose fitting self-care strategies. The teacher realized that students were making connections within themselves, understanding that their emotions, thoughts and behaviors are intertwined. The teacher from classroom three also expanded her own insights related to the symbiotic nature of her mindfulness and connection with students.

> I feel like it helped me realize what some of my kids were feeling more often. I didn't know that some kids were sad or stressed out as much as they were. I was able to help them more. I was able to build a better relationship with them because I was ... Although I've always cared about my students, it's made them feel more cared about knowing that I was able to help them more. It gave me the tools to say, "Hey, what's truly bugging you? Why have you been so sad for the past three or four days?" It was something about friends, and I had no idea. They didn't tell me, and then they finally told me, and we fixed ... Not fixed, but we worked on the problem. We talked it out with those friends, and we were able to help them. It brought some light to my eyes that I didn't even know I was missing.

The integrative framework also supported students in developing self-awareness of their emotions as well as empathy and care for others. Classroom three teacher noted that the 1-2-3 Wellness™ program did not only benefit students when they were experiencing difficult emotions such as sadness, stress or anger. The program also helped them utilize moments of happiness as a springboard for expanded wellbeing into the future. In the past, students did not necessarily know how to utilize positive emotions as a springboard for more positive emotions and connection with self and others. The program taught them a system for how to build connection and share their happiness more through gratitude, smiles, compliments, high fives and hugs. The educator articulated that students learned empathy and built connection together.

> I think overall, having my students able to think about how they're feeling and wanting to share how they feel let them empathize with others more too. Like 'hey, my friend is sad and we know that so let's plan to help her'. They cared for each other more. They took more ownership in their emotions. Instead of saying, 'Well, he called me a name first', they said 'I was mad. That is why I called him a name'. So, students took ownership with their actions and emotions.

Thus, integrative nature of the program, fitting in well with PBIS, character education and academics, was viewed as a strong feature promoting connection with self and others. In terms of potential drawbacks of the program, the teacher from classroom three mentioned that

the integrative approach was novel and thus involved a learning curve. Looking forward, if the program were to scale to other educators, they might need additional support including scaffolding the wellness lessons over a longer period of time when the program is utilized over the entire school year.

With respect to factors that support or constrain *teacher* wellbeing, classroom three teacher noted that the amount of stress that comes from an ever-evolving job creates more stress as does the workload teachers contend with. When the teacher from classroom three knows that her work is contributing to students feeling successful in life and develop feelings of care, safety and stability, it helps her connect to her purpose.

Classroom three teacher noted that some of the same factors which support educator wellbeing such as structure, routine and schedules also benefit students. Additionally, the teacher highlighted that *connection*, with others and self, as well as *safety* are vital propellants of student wellbeing.

> Students feeling cared about is one of the biggest things- knowing they have a safe place to be cared about. It is vital to know that emotions are an important part of our life, even our classroom, and learning that we're going to learn how to deal with these emotions, not only about content and curriculum but ... Emotions will be there forever, if not longer than algebra. That is why it's important for students to learn about emotions. I really like when I led my class through 1-2-3 Wellness™. Afterwards they were able to come back to the lesson a little bit more focused.

The classroom teacher also identified constraints to student wellbeing. When factors such as structure, care and emotion regulation are lacking, student wellbeing suffers. The educator from classroom three also highlighted the importance of systemic factors and self-efficacy as they relate to student wellbeing. She noted that when students lack *choice* and the accompanying *feelings of control*, wellbeing can suffer.

> Students are bombarded with so much information every day and every week, and then they test on Friday, and then it's all over again with a new subject. There's just so much going on in a little kid's life that they're expected to know and they don't have any say-so. They can't control that. "You're going to learn 5+5, and you have to know it by Friday, and that's it." They are told what to do, and it kind of stinks. I mean, we let them choose rules. We let them vote. I let my kids vote all the time, but they don't really vote what they learn.

In summary, classroom teacher three noted that the integrative approach at the core of the 1-2-3 Wellness™ program offered substantial benefits to her and her students in helping synergize SEL, mindfulness and neurobiological growth. Classroom teacher three also noted that providing students the opportunity to cultivate connections, internally and with others, to access a safe space and have a choice in their day can all help lead to student wellbeing according to classroom teacher three.

Counselor one (phone interview)

Counselor one provided feedback from the perspective of a school mental health professional. In terms of her own self-care, the counselor noted the integrative program's inclusion of educator wellness efforts as a prerequisite to working with students was key. Embodying wellbeing first allowed her to better support students. "When I pause and reflect, it does help calm me and it helps me regulate. As a counselor, we hear all these issues that the kids are having and it's hard to not internalize some of that. So, going through the workbook and watching the videos, I was able to think about what I could do to take care of me. That was good".

In terms of students, she supported a number of second grade students with a focus on classroom teacher two's students. The counselor discussed the notion that if a student is not emotionally regulated, they are less likely to do well in school. If students are focused on being mad or angry about something that happened the night before, they're likely going to perseverate and have difficultly focusing on schoolwork. Counselor one articulated that the

integrative approach, combining SEL, mindfulness and neurobiology also helped her students develop an internal locus of control, expressing that "1-2-3 Wellness™ supports teacher and student wellbeing because it gives a child a tool to figure out how to regulate their feelings on their own. Then, they can just kind of do it on their own pace and then go back to learning.". She also mentioned that many students who need more intense tier 2 and 3 supports are able to access the support of school mental health professionals.

Counselor one noted that the program can also help students who are dealing with trauma process their emotions in a healthy way. For example, as mentioned in the observations earlier, the counselor shared a story from that day in which a young student utilized the program to deal with trauma in a healthy manner.

> Earlier in the day a young girl stared crying a bit and I asked the student what was wrong. The student said that she was crying about her mother who had passed away 2 years ago. Mrs. R asked her if the 1-2-3 Wellness™ process could help her. The student said yes, engaged with the process and chose the strategy to journal. Mrs. R asked her how she felt after and the student said, "I feel happier now".

Thus, the integrative program offers a solid, universal approach to students dealing with difficult issues, including trauma. In terms of program limitations, the counselor noted that students who are dealing with more severe traumas will likely need the support of talk-therapy and other modalities provided by school counselors and other mental health professionals. Thus, it is recommended that integrative efforts focused on universal, tier one practices are also accompanied by supports and structures which address tier two and three needs. Specifically, 1-2-3 Wellness™ is not appropriate as the sole support for a student who has experienced severe trauma.

The counselor also mentioned that the integrative nature of the program which included SEL related strategies and mindfulness brain-based practices eventually helped

individual students contribute to a healthier overall classroom culture and climate. Effectively, the counselor explained, healthy self-connection eventually manifests as healthy connection with others.

> When a student is using 1-2-3 Wellness™ and they take the deep breaths and they think about what they're feeling and what they see and hear, and then they decide what they need, they're doing those steps internally on their own instead of being external and maybe lashing out on a peer or wandering around the classroom or things like that. So, being able to do that internally and regulate themselves and come back to the task as opposed to the teacher needs to call the office and find a counselor or get a principal to come down because this escalated into something that it really shouldn't have. Then, everybody else in the class stops what they're doing to look at what's going on, and the teacher can't teach. It's kind of like a domino effect. This (program) helps get that taken care of at the beginning so it doesn't escalate to that.

In other words, students are learning to put themselves in other people's shoes and develop social awareness. In terms of the importance of a holistic approach, the counselor reiterated that academics, behavior, mindfulness and social and emotional learning cannot be compartmentalized. Wellbeing involves connection. "They're *interrelated* to one another because, like I said at the beginning, without student's social and emotional needs addressed, they're not going to be able to do the rest, do the school thing, because it falls into place once all that's taken care of. We focus on interventions and 1-2-3 Wellness™ and trauma, teaching them how to identify trauma. Then, all of that will help us be more successful as a whole school".

In summary, the counselor noted that it was fulfilling to see the growth and progression of students utilizing the integrative program and she looks forward to more students and educators using the program next school year. As a school counselor who speaks with students about tough times regularly, she also noted that there are many factors that may hinder her feelings of calm, happiness, and overall wellbeing. It is difficult for her

to understand why bad things happen to young children and she views part of her job as being able to respond quickly to student crises as they arise. When she is faced with challenges to help these students, it can negatively impact her overall wellbeing.

The counselor noted that it is important to remember self-care when getting through the rough spots. Having the support of and connection with her counseling and administration team helps support her when necessary at school. She also noted that family support and connection is also foundational.

Drawing upon Maslow's seminal work, the counselor expressed that the most common factor that hinders student's feelings of calm, happiness, and wellbeing is when their primary needs like health, hunger and hygiene are not being met (Maslow, 1943). If a student does not have basic needs fulfilled, they will not be successful in the classroom. As a school counselor, a large role she plays is helping to identify these issues among students and support students through the rough times in their lives.

Broadening our perspective to take all three educator phone interviews into account, a number of big ideas surface. With respect to this study's first research question, though educators experienced apprehension initially, the integrative nature of this program ultimately allowed educators to better support student's holistic needs. Since efforts were not compartmentalized to one domain, focusing exclusively on student behavior in isolation, for example, educators were able to avoid taking a reductionist approach to student achievement. Thus, equipped with a program flowing from an integrative lens and framework helped educators avoid treating academic, social, emotional, neurobiological and behavioral needs and goals as separate. Educators were positioned to honor the complexity of their student's needs including the mind-body connection.

Additionally, throughout the interviews, educators mentioned that the integrative approach supported them as they empowered students to develop an internal locus of control related to their emotional, social, neurobiological and behavioral needs. Subsequently, students were not only apt to develop a healthier *connection to self* including emotional awareness, emotion regulation and self-care. Students were subsequently also able to organically extend wellbeing benefits to *connections with others* which effected the classroom climate in a "ripple" fashion.

With respect to the second research question related to factors that propel or inhibit educator wellbeing, additional themes emerged. In terms of educator wellbeing, *safety*, *connection* and *meaning*, or higher purpose, emerged as themes. Based on the interviews and in terms of connection, educators articulated that they value the opportunity to *build connections or* relationships with students in a safe environment. Knowing that their work is oftentimes stressful, educators also acknowledged that it is important to build a *connection with self* amid the busy school year. Additionally, a third type of connection, connection to a larger purpose or meaning, was expressed as significant Admittedly, educators are in the "helping profession" and often focused on supporting others. Thus, supports and structures offering educators the opportunity to connect with themselves and offer appropriate self-care is vital.

With respect to the third research question focused on factors which propel or inhibit student wellbeing, similar themes emerged including *safety* and *connection*. Additionally, educators mentioned that students greatly value *choice*. With respect to connection, educators agreed that *self-connection*, specifically self-awareness, emotion regulation and self-care, is imperative and that sometimes conventional approaches have fallen short in supporting youth

with self-connection cultivation skills. Interestingly, in addition to physical safety, educators acknowledged that offering students choice and the tools to develop both types of connection, with self and others, can ultimately increase student feelings of safety. Rather than believing that the world is happening to them and they are somehow resigned to passively accept what ensues, choice and connection offer students the ability to develop self-efficacy, becoming active participants in their wellbeing journey of which learning is a part.

Equipped with these insights in mind, we now explore data related to written interviews provided by seven additional educators.

Written Educator Interviews

Next, additional interview data is shared from the seven educators who provided written answers to their interview questions.

Classroom One Teacher

The teacher indicated that the 1-2-3 Wellness™ program had a strong positive impact on her classroom. Specifically, the educator noted that the integrative program "allows the students to be aware and in charge of their own feelings and actions instead of the teacher always stepping in and problem-solving for them." The integrative approach allowed the educator to address the SEL, mindfulness and behavioral component in class in a streamlined fashion.

In terms of mindfulness:

> The students were able to focus on the here and now when they use the 1-2-3 Wellness™ program and ground themselves by tuning into their senses. After practicing 1-2-3 Wellness™, my kiddos seemed more calm, focused and ready for the lesson.

Specifically, students responded to the 1-2-3 Wellness™ program with the following quotes:

"1-2-3 Wellness™ helps with our emotions"

"This helps us to control our anger"

"I have tools to help calm me when I feel anxious"

In terms of constraints, the teacher noted that additional time to engage with the integrative program, beyond the six weeks of implementation, would be helpful. She noted that the process could be extended throughout the entire school year to allow students time to scaffold student's emotional growth.

The educator from classroom one also articulated that addressing SEL, mindfulness and neurobiology positively affected student wellbeing and also carried over to academics. The teacher described that "students love having a wellbeing break integrated into the day. After the break students are more focused". She noted that engaging in the video course as a teacher preparatory component prior to implementing with her students was key.

The educator from classroom one indicated that routines and quiet are the two main supports for teacher feelings of calm, happiness and overall wellbeing. Conversely, she communicated that stress and a lack of structure are hindrances to educator wellbeing.

In terms of student wellbeing, the educator from classroom one indicated that routines, a quiet classroom and solid relationships serve as key factors. Conversely, unstructured settings and environment defined by disagreements were two factors identified as inhibitors to student wellbeing.

Classroom Two Teacher

The educator from classroom two noted that after utilizing 1-2-3 Wellness™ students were able to connect their mindful awareness to social and emotional growth. Specifically,

"students were able to name their emotion and try a strategy to help them handle their emotion in a healthy way".

The teacher also identified routines and quite as supports to educator wellbeing. She identified stress and a lack of structure as hindrances to educator wellbeing. Similarly, for students, the educator from classroom two communicated that routines, quiet and relationship building were wellbeing supports. Unstructured settings as well as disagreements were factors identified as hindering student wellbeing.

Classroom Four Teacher

Please note that classroom teacher three was included earlier in the phone interviews. The teacher from classroom four noted that the opportunity to practice mindfulness, develop SEL skills and engage in brain primers concurrently offered many benefits which led to positive implications for lessons. She articulated that "1-2-3 Wellness™ has helped my students focus better, especially when it comes to academics". In general, the educator was cognizant of the synergy between this wellbeing work and academics, noting that "I love 1-2-3 Wellness™ and students really benefit from the wellness breaks".

The educator from classroom four indicated that she feels most calm, happy and well when people support her and her decisions. She did not mention wellbeing constraints in the written interview. Student wellbeing is constrained, she expressed, when the routine is disrupted, or people do not use kind words when communicating with one another.

Classroom Five Teacher

The teacher from classroom five noted that connecting affective components with cognitive components was effective. Specifically, offering a system to help the students identify where they are and emotions that they are feeling was helpful in multiple ways. She

noted that “when the students are aware of their emotions and are calm, academics come easier”.

The educator from classroom five noted that her wellbeing is supported when she sees her students successful and happy. Students influence one another and, thus, other students’ emotional needs can either support or constrain classmate’s wellbeing.

Classroom Six Teacher

The educator from classroom six noted that an integrative approach which streamlines SEL, mindfulness, self-care, behavior and wellbeing helped her students become more aware of their emotions and needs. She also indicated that students particularly enjoyed the 1-2-3 Wellness™ program as a means of connection. She noted that she’s excited to start 1-2-3 Wellness™ next school year and curious to see what develops after implementing for multiple months.

Factors identified as supporting teacher wellbeing include routines and procedures, an organized and structured environment and having students who are respectful towards peers and adults. Similarly, having a classroom with routines and procedures, clear expectations, healthy relationships with teachers and peers and having a safe environment were noted as factors which support student wellbeing.

Counselor Two

The counselor noted that the holistic 1-2-3 Wellness™ program has helped students prime their brains for learning. The integrative approach “has helped the students because they are able to stay more focused in their schoolwork when their emotions are regulated. Doing mindfulness helps them check to see what they need to get their minds ready for learning”. Empowering students to mindfully increase their connection to the present moment

and label their emotions was particularly helpful for many students to help springboard healthy decisions and relationship building. In terms of possible drawbacks, while he appreciated the preparatory video course, the counselor noted that the time constraints of all efforts must be considered as schools seek to prioritize programs and initiatives.

In general, he noted the importance of first investing in staff wellbeing when rolling out integrative efforts which incorporate affective elements.

> As a school counselor, I have appreciated 1-2-3 Wellness™ and how the approach first looks at educators in how they do self-care and then transfers it to teaching students. This program reminded me how essential it is for me to practice good self-care if I'm going to be effective as an educator. Furthermore, I like how we are first instructed to model these steps before we teach the kids how to do them. Overall, this was a great program and I'm thankful we have had an opportunity to introduce it to our students.

Thus, self-connection is a vital component for adults creating a healthy classroom environment for students to learn and replicate wellbeing practices. The counselor shared that maintaining a thankful and positive perspective is key to promoting educator wellbeing. He also noted that taking the capacity to take others' perspectives promoted educator wellbeing. Busyness and having a lot on one's plate can take away from wellbeing. Student wellbeing is supported when they have the tools to know what they are feeling, a list of coping skills and healthy emotion regulation skills.

Overall Qualitative Results

Stepping back, it is clear that data elicited from the six written educator interviews reaffirms the same basic themes derived from the three phone interviews described earlier. In terms of the first research question, focused on wellbeing in terms of an integrative framework, educators once again spoke favorably about the supportive nature of an integrative approach to wellbeing. Data from written interviews drove home the notion that the integrative wellbeing program studied is particularly well suited to prime student's brains for academic focus. At this point, data from all nine interviews, three oral and six written interviews, has been presented.

In Table 10. below, we see educator interview data related to research question one combined with data derived from classroom observations described in a simple chart form. Thus, offering a summarized answer to research question one, Table 10. illustrates main themes derived qualitative data sources in this study related to the effectiveness of an integrative framework (1-2-3 Wellness™) in supporting wellbeing.

Table 11. Themes: Effectiveness of 1-2-3 Wellness™ According to Educators

Data	Did the integrative 1-2-3 Wellness™ program effectively promote wellness?	Themes: Supportive factors within the Integrative framework (1-2-3 Wellness™)	Themes: Inhibitive factors within the Integrative framework (1-2-3 Wellness™)
Nine Educator Interviews and Five Classroom Observations	Yes 9/9, or 100% "Yes" answers in interviews	Offered Students: Improved focus on academics (brain priming) Feelings of safety Supports connection with Self Supports connection with others (relationships) Increased choice Supports self-efficacy Supports self-care Supports mindfulness Supports internal locus of control development Supports improved behavior Supports emotion regulation Supports relationship building Offered Educators: Supports Connection with self Supports Connection with students (relationships) Improved awareness of student needs Increased feelings of meaning Increased structure Feelings of safety Improved self-care Improved mindfulness	More time: whole year implementation (not starting for 6 weeks at the end of the school year as was the case with this study) Program requires upfront "investment" in time Program not designed for *intense* trauma (needs to be supplemented by counselor support for students who've experienced intense trauma)

Data derived from written and oral educator interviews sheds light on the second research question related to factors that propel or inhibit educator wellbeing. Taken together, the nine interviews affirm three main themes related to educator wellbeing discussed earlier: *safety*, *structure*, *connection* and *meaning* or higher purpose. Taking interviews and classroom observations into account, it is clear that educators value their connection with students. Given the high stress work environment at schools, educators also recognize that it is important to build a connection with self (including self-awareness and self-care) and that this internal connection ultimately helps lead to healthy relationships with students.

Another theme that emerged from the educator interviews was the importance of *structure*. Integrative efforts which combine elements from different disciplines like

mindfulness, SEL, behavior and more can be cumbersome. Such elements are often reduced and compartmentalized into separate programs or initiatives, based on a goal such as improving behavior, which allow for cleaner structure and understanding. Interviews highlighted that the 1-2-3 Wellness™ program, even though it is integrative and drew upon various complex theories and frameworks, offers teachers a simple, repeatable structure that taps into their own, as well as their students', holistic needs. Throughout interviews, teachers expressed comfort in teaching the basic components of the program and reflecting on the value of the activities with students. Whereas topics like mindfulness can sometimes seem overwhelming or even esoteric, the simple structure fostered ease when propelling wellbeing. Interview data combined with data from observations and surveys suggests that utilizing a clear, step-by-step structure is important in integrative school wellbeing efforts because it serves to ground practices in practical phases. Interestingly, although structure and choice can sometimes be seen as mutually exclusive, observations showed that the simple structure made wellbeing activities more accessible for educators and students alike and afforded students choice in a way that was organized. Thus, quantitative data derived from educator surveys suggests that the integrative program studied, 1-2-3 Wellness™, served to support pivotal factors that propel educator wellbeing: safety, structure, connection and, in many cases, offering meaning in their work with students.

Additionally, extrapolating from the qualitative data shared via interviews and derived via observations, it is clear that the ability for an educator to *connect* with meaning or a larger purpose serves as a key wellbeing propellant. This research study provides preliminary evidence that "meaning" involves a micro component "I am appreciated. I am seen and heard and respected by those I interact with daily" as well as a macro component "My life and work

has meaning in the world" in a global or universal sense." As the principal shared during the interview portion of the study, for example, the simple act of showing colleagues that they are appreciated can produce a significant ripple effect in terms of the "daily" micro component of meaning. As teachers expressed, feeling that their work matters in the "scheme of things" suggests that a macro component of meaning making also serves as a wellbeing propellant. Thus, importantly, just as connection with self and connection with others were found to be vital, connection with larger meaning or purpose represents a third vital component.

Taken together, the finding that there are three vital types of connection represents a key finding in this study. Jointly, these three elements can be viewed as the *connection triad*, offering three vital elements of connection, a concept that will be elaborated on in chapter five with a fourth type of connected added based on the research.

In terms of the third and final research question related to student wellbeing, *safety* and *connection* were once again identified as themes throughout. Furthermore, the formative power of *choice* as a means for propelling student wellbeing was evidenced repeatedly during observations and interviews with students and educators. Interviews and observations also suggest that *self-connection* is a vital, sometimes prerequisite ingredient for student wellbeing which can later help translate to *connection* with others. Thus, the present research both reaffirms seminal work related to basic needs brought forth in Maslow's well-known hierarchy of needs as well as adds to the research in terms of differentiating connection as composed of internal and external elements.

Table 11. presents a summary of educator and student interview data coupled with classroom observation data related to research questions two, dynamics related to educator wellbeing, and three, dynamics related to student wellbeing, described in a simple chart form.

Table 12. Themes: Dynamics that Propel and Hinder Educator and Student Wellbeing

Dynamics that propel educator wellness	Dynamics that hinder educator wellness	Dynamics that propel student wellness	Dynamics that hinder student wellness
Safety Connection with self Connection with others Structure Meaning (Higher Purpose)	Absence of wellness propellants (safety, connection, structure, meaning) Toxic Stress	Safety Connection with self Connection with others Choice	Absence of wellness propellants (safety, connection, choice)

Stepping back, another key finding of this study was that safety, connection, structure, meaning and choice emerged as *the five essential elements of school wellbeing*. Coupling qualitative research data presented above with quantitative survey results indicating that the 1-2-3 Wellness™ program was successful in promoting educator wellbeing, results become clearer. Given that all five main themes identified as propelling educator wellbeing including safety, connection with self, connection with others, structure and meaning were present in the program studied, it is not surprising that educators achieved positive wellbeing outcomes. Similarly, all four factors that were identified as promoting student wellbeing, safety, connection with self, connection with others and choice, were found in the integrative 1-2-3 Wellness™ program. The fact that the program led to significant student wellbeing growth in the realms of mindfulness and social and emotional learning is a natural extension of that finding.

Bringing the research together, third key finding shows that integrative approaches to wellbeing such as the 1-2-3 Wellness™ program studied are indeed effective. In terms of the integrative components of the program studied, educators made the direct connection between

the program and academic achievement. Taken together, qualitative and quantitative data indicates that an integrative approach to wellbeing supports both educator and student wellbeing. Honoring the complexity of the human experience, integrative wellbeing efforts which honor systems of connection (with self, others, meaning) better position educators to help cultivate wellbeing outcomes.

Overview of Findings

The findings for research question one, "In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing?", suggest that the integrative 1-2-3 Wellness™ positively impacted educator and student wellbeing. The principal finding for question one is that 1-2-3 Wellness™ supports educator and student's capacities to be more mindful, cultivate social and emotional learning, support self-efficacy and build a healthy classroom culture.

Within the sample of eleven *educators* (seven teachers, three counselors and one assistant principal), quantitative and qualitative findings strongly indicate that *educator's* overall wellbeing increased after program implementation. Specifically, findings illustrate that educator wellbeing grew in four key areas related to their ability to: a) be more mindful b) support student wellbeing and self-efficacy c) meet student's social and emotional needs and d) cultivate a healthy classroom culture. The finding that the educator's ability to cultivate their own mindfulness (a) would translate to their ability to effectively teach students mindfulness related skills (b, c, d) aligns with existing research which suggests that educators who first embody mindfulness as a prerequisite are more effective in teaching mindful skills to students (Segal et al. 2002).

Data derived from educator interviews also support the finding that educator wellbeing was positively supported by the 1-2-3 Wellness™ program. Paralleling survey findings, data derived via interviews shows that educators concluded that their own self-care and mindfulness practices evolved as part of the program. Additionally, and in line with past research showing the vast benefits of mindfulness (Zoogman et al., 2015) cultivation, educators reported that the integrative 1-2-3 Wellness™ program supported a healthy classroom climate with a focus the five core competencies of social and emotional learning (Klingbeil et al., 2017): self-awareness, self-management, social awareness, relationship building and responsible decision making. Educators noted that a key element of the integrative program was that it first addresses adult wellbeing as a springboard for translating wellbeing skills to students.

In terms of how research question 1, "In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing?", relates to *students*, findings suggest that the 1-2-3 Wellness™ program positively impacted *student* wellbeing as well.

Within the sample of one hundred and nineteen participants, survey findings indicate that students showed strong (statistically significant) growth related to mindfulness and social and emotional learning (SEL). Though not statistically significant, students also showed pronounced growth in terms of their own self-care.

Classroom observations and interviews also supported the finding that student wellbeing improved after participation in the integrative program. Findings suggest that student's social awareness, empathy and self-efficacy also grew. During observations, students displayed the five core competencies of social and emotional learning (Klingbeil et

al., 2017) along with mindfulness practice (Kabat-Zinn, 2003) in each of the five classrooms observed. Specifically, in terms of self-awareness, with educator guidance, all 115 students observed were able to identify and write down their emotional state at the time. This finding is noteworthy in so far as research shows that identifying and labeling one's emotion helps one calm their stress responses in the brain (fight, flight, freeze) and activate the higher order thinking portion (prefrontal cortex) area of the brain responsible for concrete and abstract thought, problem solving and memory (Maclean, 1985).

With respect to self-management and responsible decision making and with educator guidance, all 115 students observed were able to choose a wellbeing practice to address their current emotional state. With respect to mindfulness, and with educator guidance, all 115 students observed were able to pause, take three deep breaths, identify their emotion and visually and auditorily connect with what happening in their environment in the present moment.

During interviews, students indicated that the integrative 1-2-3 Wellness™ program supported their ability to be more mindful and practice social and emotional learning. Findings suggest that the program can support students who have experienced trauma. That said, as counselors involved in the research reiterated, the program is not intended to be the sole support for those who have experienced severe trauma.

Broadly speaking, this study suggests *five key elements which lead to successful school wellbeing efforts: Safety, Connection (with self and others), Routines, Meaning and Choice*. These five elements, described in relation to research questions two and three, are described in depth in the pages that follow. The findings for research question 2, "What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based

upon cutting-edge insights?", suggest that although educators cultivate wellbeing in a myriad of way, certain commonalties exist.

Different elements support both educator and student wellbeing, while other elements apply more aptly to one group. We first turn our attention to educators. Specifically, findings suggest that common factors which propel wellbeing and limit wellbeing constraints for educators can be broken down into five categories: safety, structure, connection, choice and meaning. In terms of *safety* considerations, findings in line with formative research (Maslow, 1943) suggest that when educators feel safe and cared for they are more likely to experience wellbeing. Secondly, and also related to the foundational influence of Maslow's hierarchy of needs, educators reported the when structure was in place (routines, procedures, clarity of job responsibilities) they were able to build upon these basic elements as a ground to construct and propel wellbeing. The research suggests that cultivating the capacity to deal with stress in a healthy manner (or minimize stress) was a key element of safety. This finding is supported by existent mindfulness and neurobiological research showing that an overly stressed mind does not feel safe whereas a person equipped with self-care tools to process stress in healthy ways will reap vast benefits (Sapolsky, 2004). In terms of *connection*, educators indicated that they cultivated connection internally (tools and time to practice their own self-awareness and self-care) as well as support and connection from others (colleagues and family members). This finding is in line with research which shows the formative power of self-efficacy and self-care (West et al., 2018) as well as the vital importance of developing and investing in social network connections (Daly, 2015) since relational ties can support factors including the pace, depth and direction of change.

In terms of *meaning*, findings suggest that educators who have a connection to a larger purpose (i.e. I am here to help students reach their potential) are more likely to experience wellbeing. This research study provides preliminary evidence that "meaning" involves a micro component "I matter. I am seen and heard and respected by those I interact with daily" as well as a macro component "My life has meaning in the world" in a global or universal sense.

The findings for research question 3, "What classroom factors support or constrain *students'* feelings of calm, happiness, mindful learning and overall wellbeing?" suggest that, like educators, some common themes deserve strong consideration. Interestingly, wellbeing propellants for students uncovered in this study closely mirror those explored in reference to educators. Though students expressed their needs with different, developmentally appropriate words, basic themes emerged. Two of the four basic wellbeing propellants were the same themes we uncovered with respect to educators. Specifically, like educators involved in this study, students identified *safety* and *connection* as key wellbeing propellants. However, unlike educators in this study who identified structure and meaning as a key wellbeing determinant, students identified *choice*, closely related to self-efficacy, as a key wellbeing propellant.

In terms of *safety*, students who participated in this study appreciated times when they felt calm and happy. With respect to *connection*, students who participated in this study valued access to tools that supported them in processing their emotions and taking action to feel better (connection to self) as well as opportunities to connect (play or speak) with friends, teachers and parents through relationships. Thus, for both educators and students, this preliminary research hints that two types of connection are valued propellants of wellbeing: connection within self (namely, self-awareness and self-care) as well as connection with

others (relationships). For educators, a third type of connection, *connection with meaning* (purpose), was also identified as a wellbeing propellant. This finding is in line with research by Simon Sinek which emphasizes the benefits of finding one's purpose, or "why" (Sinek, 2013). In terms of *choice*, students appreciated the opportunity to explore what worked best for their individual tastes and predilections. Students expressed that they experienced wellbeing when they had "options" and "got to do" certain wellness activities such as pushups while peers chose different practices like deep breathing, reading, affirmations, jumping jacks and more. Thus, findings suggest that student wellbeing is promoted when students have access to *safety, connection and choice.* With respect to all three student wellbeing propellants, safety, connection and choice, students who were offered support and the opportunity to cultivate *self-efficacy* with regards to their wellbeing appeared to feel most in charge of their success. Broadly, the shared need for *connection* and *safety* were found as wellbeing propellants for students and educators alike while *meaning* and *structure* were propellants for adults and *choice* was a propellant for students.

Summary

The mixed methods study described utilized quantitative and qualitative research methods to investigate the effectiveness of an integrative approach to educator and student wellbeing called the 1-2-3 Wellness™ program. Additionally, the study explored what classroom dynamics support or constrain teacher and student feelings of feelings of calm, happiness, mindful learning and overall wellbeing. As described in chapter four, the study utilized pre and post-surveys to identify and document changes in student and educator wellbeing with a focus on mindfulness, self-care and social and emotional learning. Student and educator interview data was collected in both verbal and written form to uncover

experiences, perspectives and concepts that may not have arisen through survey data alone. Classroom observations were also conducted to gain a more nuanced understanding of wellbeing outcomes and themes which emerged. All three forms of data (surveys, observations, interviews) were analyzed to better understand wellbeing outcomes in the second-grade classrooms studied. Collectively, data derived from this study allowed the researcher to rigorously explore the research questions with an eye towards better understanding wellbeing in schools for all students and educators.

Four Key Findings

Ultimately, the study helped us identify four key findings. The study suggests that:

1. The 1-2-3 Wellness™ program, an integrative approach, was indeed successful in promoting wellbeing
2. Five elements are essential to school wellbeing
3. Wellbeing involves multiple types of connection and can be redefined accordingly
4. People's intrapersonal and interpersonal regulation skills affect one another and the group's ability to regulate more broadly. This dynamic is introduced as "collective limbic regulation" in the following chapter.

With the aforementioned data and considerations in mind, chapter five explores the key findings and their implications for research and practice related to wellbeing in schools and society broadly.

Chapter 5: Discussion and Implications

This purpose of this multiphase, mixed methods study was to explore the following research questions: 1) In what ways does an integrative framework combining SEL, mindfulness and neurobiology (e.g. 1-2-3 Wellness™) support or constrain teacher and student wellbeing? 2) What classroom dynamics propel *teacher* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights? 3) What classroom dynamics propel *student* wellbeing and how might we reimagine wellbeing based upon cutting-edge insights?

In the preceding chapters, quantitative and qualitative evidence was presented related to all three aforementioned questions posed in the research study. With this data in mind, the present chapter is structured to briefly reiterate the problem studied, discuss key findings and discoveries, suggest specific implications for future research and practice and explore big picture ideas related to wellbeing in schools and society broadly. At this point, we are also positioned to discuss how we might reimagine wellbeing based upon cutting-edge insights.

Overview of the Problem

Recent mental health data reveals that one in 5 children have reported significant mental health difficulties during their school years (Carsley and Heath 2015; Koller and Bertel 2006; McMartin et al. 2014; CMHA 2014; NIMH 2015). Stress exposure has a negative effect on a child's brain and students from disadvantaged environments are disproportionately affected by toxic stress (Blair & Raver, 2016). Such negative results related to an academic achievement gap, failing test scores, behavioral problems and more represent a fierce "storm" with far reaching socio-emotional, behavioral and academic implications for schools. Educational leaders are thus scrambling to deal with the prevalence of depression, anxiety and suicide and are turning to a wide range of programs and initiatives that sometimes address factors in a piecemeal fashion treating academics, behavior, social and

emotional learning, mindfulness and character as isolated topics. Some educational leaders are increasingly recognizing our students require our adoption of a broader, integrative educational lens to understand students more holistically and offer supports leading to academic and broader wellbeing outcomes (Greenberg et al., 2017b).

Fundamental Research Discoveries

Four fundamental discoveries rose to the surface within this study. The first two discoveries represent contributions to the field that can be applied immediately. Discoveries three and four are presented as new theoretical frameworks offered to help us conceive of wellbeing from a new, innovative lens which invites new ideas and solutions.

First, the 1-2-3 Wellness™ program is effective in propelling wellbeing among students and educators. More broadly, the program serves as a representation of the influence and potential of integrative approaches to wellbeing. Secondly, five essential elements form the basis for school wellbeing: safety, connection, routines, purpose and choice. Thirdly, *collective limbic regulation* is suggested to occur when healthy micro interactions within and between individuals help society operate in a state of wellbeing. Lastly, wellbeing is reconceptualized with a new definition: the expression of interdependent systems of connection working in harmony. As an upshot of this reimagined view of wellbeing, the concept of selfless actualization is also introduced. All four study discoveries are expounded upon below.

Applicational Contributions to the Field

1-2-3 Wellness Program Effectiveness

The first research discovery is that integrative approaches such as the 1-2-3 Wellness™ program are effective in cultivating school wellbeing. Thinking broadly about

integrative efforts, this finding suggests that rather than compartmentalizing different efforts related to behavior, academics, neurobiology, SEL, trauma informed practices and conceiving of them as wholly separate entities, treating these dimensions as interconnected elements can prove synergistic. In this study, the 1-2-3 Wellness™ program produced benefits for students and educators related to mindfulness, social and emotional learning and overall wellbeing. Specifically, findings suggest that *educator* wellbeing grew in four key areas related to their ability to: a) be more mindful b) support student wellbeing and self-efficacy c) meet student's social and emotional needs and d) cultivate a healthy classroom culture. Findings also indicate that *student* wellbeing increased markedly after participating in the 1-2-3 Wellness™ program. Within the sample of one hundred and nineteen participants, survey findings reveal that *students* showed strong, statistically significant growth the domains of social and emotional learning and mindfulness. In terms of the power of integrative approaches, while affective elements represented the primary focus of the study, interestingly students and educators also reported cognitive and behavioral benefits including increased focus and preparedness for academics as well as relationship building and on task behavior. Thus, efforts which honor the complexity of the human experience are apt to produce complementarity, interconnected benefits across different domains.

Five Essential Elements of School Wellbeing

Seeking broader propellants of wellbeing, this study led to the identification of *five essential elements for school wellbeing: safety, connection, routines, purpose and choice*. Specifically, the study suggests that common factors which propel wellbeing and limit wellbeing constraints for *educators* can be broken down into four categories: *Safety, structure, connection* and *purpose*. Student related findings show that common factors which

propel wellbeing and limit wellbeing constraints for students involve three elements: *safety, connection* and *choice*. Thus, as represented in Figure 9 below and in line with seminal research regarding human needs discussed, this study helped us build upon existing research to identify five essential elements of wellbeing in schools and better understand how certain elements are particularly poignant for students and/or educators (Maslow, 1943)(Tschannen-Moran & Tschannen-Moran, 2012)(Neff, 2011). Interestingly, and related to choice, students and educators both expressed the important role of self-efficacy on a student's wellbeing. *Safety* and *connection* were also found to be important for propellants of students and educators alike. Wellbeing propellants for educators also included *meaning/purpose* and *structure* while *choice* was found to be a propellant for students.

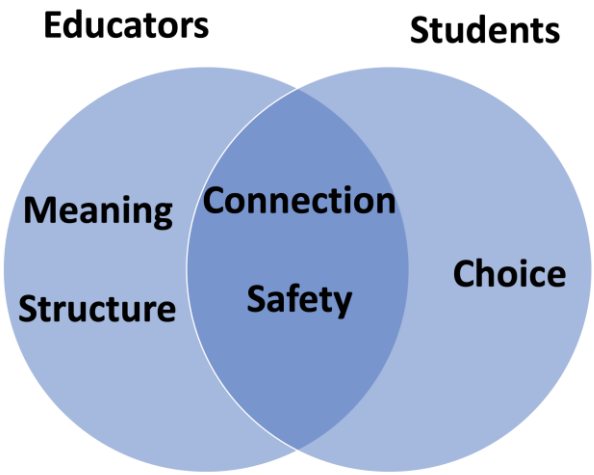


Figure 9. Five Essential Elements of School Wellbeing

Theoretical Contributions to the Field

Collective Limbic Regulation

The third discovery leads me to introduce the concepts of *collective limbic dysregulation* and *collective limbic regulation*. ***Collective limbic dysregulation*** occurs in a state where individual intrapersonal and interpersonal micro-interactions marked by

dysregulation are transferred to the larger group identity. Such a dynamic is suggested to occur when a group of people is not functioning optimally because the threshold for individuals experiencing heightened stress responses repeatedly, over time, infiltrates the group dynamic, creating a new, collective "normal" marked by dysregulation. In laymen's terms, this means that a group (i.e. a family, organization or society broadly) is stuck in a state of stress.

To understand this dynamic, it may be helpful to widen our lens to reexamine how dysregulation works on the micro, individual, rather than collective, level. As was considered throughout this paper, data reveals that depression, anxiety, suicide and even school shootings are high and on the rise (Texas, 2017). Drawing upon neurobiological insights, we know that when an *individual* person experiences toxic stress, their amygdala will be triggered repeatedly leading them into a state of fight, flight or freeze. Overtime, that individual's body will attempt to protect them from perceived threats by activating their sympathetic nervous system and shutting off resting mechanisms within the body (McGowan & Szyf, 2010). On the individual level, if social and psychological stress becomes the norm, chronic sickness emerges as the body attempts to protect itself (Blair & Raver, 2016). Sickness often manifests psychologically and physically as anxiety or depression. In this case, the individual is apt to develop "perpetual amygdala hijack", otherwise known as limbic dysregulation. In laymen's terms, this means that they are in a constant state of stress, whether consciously or unconsciously. Effectively, their calming mechanisms, the parasympathetic nervous system which offers rest and digest, is not able to promote healing since the body is focused on survival first and foremost (Sapolsky, 2004). The person is literally disconnected from their own parasympathetic system, leaving them disconnected from self. Specifically, they are

disconnected from healing mechanisms within their bodies and minds associated with the parasympathetic nervous system.

Widening the lens back to view the *individual* dynamic described above as a microcosm for the situation we are confronting as a larger society, it appears that we are facing a *collective limbic dysregulation* emergency**.** In other words, society has stressed itself into sickness. While the term *collective limbic dysregulation* is new, the concept builds upon previous research showing that when a single person, ie. a mental health professional, is working with traumatized clients, psychological and physiological changes can be transferred from the client to the professional (Tyler, 2012). Additionally, research related to emotional coregulation and attachment suggests that within interpersonal relationships, through interaction, one regulated person can support the second individual in developing emotion regulation skills (Bowlby, 1958). Emotional coregulation, which once again relates to only two individuals, is often described as an infant's relationship with her/his parent or between two adults in a romantic relationship (Butler & Randall, 2013). The concept of collective limbic dysregulation suggests that this dynamic, described in the research as affecting one or two individuals, is also occurring at a larger scale, constructed through micro interactions marked by individual dysregulation.

Promising Upshot of the Theory Being Proposed: Collective Limbic Regulation

In our recent past, many people are walking (or running) around not feeling well, stressed and without a robust set of strategies and support systems that align with getting well (Sapolsky, 2004). Fortunately, as this research study suggests, there is hope. We can begin to tackle this emergency by acknowledging and naming what is happening: our bodies and minds are dysregulated (disconnected). With such thoughts in mind, ***collective limbic***

regulation can be thought to occur in a state where individual intrapersonal and interpersonal micro-interactions, marked by regulation, are transferred to the larger group identity. In other words, c*ollective limbic regulation* occurs when a group of largely regulated people engage in micro interactions which infiltrate the group dynamic to help create a group homeostasis marked by high emotion regulation and stress modulation. In laymen's terms, this means that a group (i.e. a family, organization or society) is operating in a state of wellbeing. When one individual is dysregulated, the community around her is so well that she is lifted too.

The concepts of collective limbic regulation and collective limbic dysregulation are not offered as a binary, one or the other, proposition. Though there may be certain important thresholds, which future research could examine, the dynamics likely occur on a continuum. As Barbara Fredrickson and her colleagues found, everyday positive emotions like happiness and hope are found in daily micro interactions. One by one, over time, these positive micro interactions can help initiate a cascade of psychological processes that produce enduring impact on people's subsequent emotional wellbeing (Fredrickson, 2004). *One of the hopeful upshots of the concept of collective limbic regulation is that through wellbeing practices that support us as individuals in regulating ourselves, each of us, through positive micro interactions, can begin to heal ourselves and others around us while manifesting this wellbeing into the world like a ripple.*

Building upon this research, instead of solely attempting to frantically address individual maladaptive effects with band-aid solutions and initiatives for separate issues, we can calmly seek to address interconnected root causes. For example, we can create largescale efforts to learn and teach strategies for activating our parasympathetic nervous systems which control rest, digest and springboard healing in many ways. This can also afford us the

opportunity to address high incidences of trauma which many humans store in their bodies (Overstreet & Chafouleas, 2016). We can invest in integrative solutions which are focused on healing limbic dysregulation, preventing toxic stress and cultivating proactive and sustainable healing mechanisms on individual and societal levels. Such a change may allow us to cultivate wellbeing so that we can, figuratively speaking, get out of the emergency room and transfer to the wellbeing center, focusing on proactive solutions moving forward. This concept of collective limbic regulation suggests that people's systems affect one another, a notion that will now be expounded upon when wellbeing is reconceptualized in the fourth discovery.

Reimagining Wellbeing

The new definition of wellbeing presented here is based on a systems of connected wellbeing framework detailed below. Through such a lens, we can reimagine and define ***wellbeing*** *as the expression of interdependent systems of connection working in harmony*. As an upshot of this new view of wellbeing, we can ultimately reimagine the epitome of wellbeing as **selfless actualization**, a term that is also introduced and explained in this section.

Just as it would not make sense to treat the body exclusively as discrete, unrelated organs, it does not make sense to treat wellbeing as a set of discrete entities or actions alone. When we view wellbeing in terms of isolated variables, we are apt to look for ingredients alone. When we view wellbeing in terms of systems of connection, we are apt to look for complementarity within relationships with self, others and a greater purpose.

Thus, the fourth discovery from this study, theoretical in nature and promising in potential, suggests that wellbeing can best be understood in terms of systems of connected

being rather than simply in terms of discrete ingredients alone. Namely, we can reimagine wellbeing as the natural expression of four main types of connection to being: being connected to *body*, being connected to *mind*, being connected with *others* and being connected to a larger *purpose*. This discovery was guided by integrating key research findings from this study along with research related to neurobiology, needs, attachment and connection (Sapolsky, 2004; Maslow, 1943; Bowlby, 1958) . As discussed within this study, different types of connection related to wellbeing repeatedly surfaced within the data. Namely, connection with one's own mind and body, connection with others and connection with higher meaning or purpose were expressed as themes throughout. Each type of connection can rightly be understood as system in and of itself. For example, as we saw in this study, when a person is in connection with his or her own mind, he or she is apt to connect to awareness of thoughts, emotions, needs and more. In terms of self-connection related to the *mind*, "building blocks" of self-awareness, self-efficacy, self-esteem, self-compassion, self-regulation and more aren't really discrete "blocks" per se, but rather interwoven connections that form different aspects of self. Self-compassion, for example, offers one benefits in a myriad of ways throughout their mind and body (Neff, 2011). Together, different variables like self-compassion help form a larger system of self-connection. Similarly, connection with *others* involves an interdependent network of relationships (Daly, 2015). As we saw in the study, students and educators expressed a desire to connect with one another in different ways, through conversation, high fives, hugs, etc.. Interview and observational data revealed their self-connection, or lack thereof, either inhibited or propelled connection with others. In terms of connection to *purpose*, study participants, namely educators, expressed a desire to feel connected to greater meaning, i.e. I am helping make the world a better place. (Sinek,

2013). This third type of connection, too, affected, and was affected by, connection to self and others.

A fourth system of connection to the *body*, expressed in research related to neurobiology and trauma, relates to the innerworkings of our bodies including conscious as well as subconscious, autonomic systems (Sapolsky, 2004; Oral et al., 2015). Namely, our bodies contain systems such as the limbic, circulatory and digestive systems which are themselves interconnected. For example, as was mentioned previously, a person's connection to their parasympathetic nervous system in times of stress enables their ability to rest and digest. On the other hand, a person who is disconnected from their parasympathetic nervous system will instead experience long term connection with their sympathetic nervous system and disconnection with their calming mechanisms. They are likely to experience dysregulation. As we see with the prevalence of anxiety, depression, suicide and more, disconnection on the body level affects other aspects of connection as well.

Commonalities and differences exist between the proposed *systems of connected wellbeing* framework, focused on four primary types of integrated being, and Abraham Maslow's hierarchy of needs (Maslow, 1943). With profound reverence to Maslow's paradigm shifting work, similarities and differences are discussed below. First, in terms of similarities, both models highlight the importance of physical, emotional, social and cognitive needs. Second, just as Maslow's framework highlights the foundational role of basic human needs, the systems of connected wellbeing framework emphasize the foundational role of basic, often invisible, yet primary bodily systems with emphasis on whether they are regulated and working in harmony. Additionally, both models emphasize the role of a person's relationship with self as well as the highly important nature of purpose/self-actualization.

Other aspects serve to delineate distinctions between the frameworks. Namely, the proposed model emphasizes *connections and systems* rather than hierarchical components, views interactions primarily in terms of *relational connections* rather than discrete entities, describes wellbeing in terms of *micro and macrocosms* which are interconnected and views *connection or disconnection in the past*, namely attachment, trauma and epigenetics as key drivers of wellbeing.

Promising Upshot of the Theory Being Proposed: Reconceptualizing Wellbeing

The proposed model is intended to complement rather than undermine Maslow's seminal hierarchy of needs. Importantly, the proposed (systems of wellbeing model) offers a lens to account for the role of the *past.* As one example, if a parent gives birth to a baby after experiencing a history of pain and trauma, it is likely that the baby's formative years will be marked by dysregulation which affects later years and interactions with others in future years, forming a cascade of limbic dysregulation. Therefore, in so far as the proposed model accounts for the past, it may be better positioned to help open the door for a more nuanced understanding the causation of many problems in society such as anxiety and depression while offering a framework to springboard solutions which require an understanding of the larger context of wellbeing including past, present and future. Articulated differently, the model proposed suggests that while factors such as food, safety, sleep, safety, esteem and belonging are vital to a person's wellbeing, we will not fully understand wellbeing if we simply look wellbeing as the summation of these key parts or ingredient.

We can reimagine wellbeing by looking at the relationship of systems of being, namely being connected to mind, body, others and purpose. Alone, to use the analogy of music, these ingredients are powerful notes in the song of wellbeing. That said, by widening

our lens to see the systems of connection that these vital components form, we will open up the possibility of creating cacophony of wellbeing. In this model, each person is an orchestrator in a connected symphony rather than an individual responsible for disparate sounds.

Taken together, the systems of connected wellbeing model, by focusing on the interplay of interconnected systems of being, is offered to help illuminate possible reasons why some people cultivate wellbeing while others find it elusive. Figure 10. below, displaying the four connections discussed in wheel format, suggests that wellbeing can be understood as the interplay of connections. While this understanding reconceptualizes wellbeing in terms of systems, it also views ingredients of wellbeing as complementary. The visual is not intended to suggest that the four connected systems offered serve as an exhaustive list of systems which ultimately affect wellbeing. Certainly, there are other systems. That said, the visual is intended to highlight the interdependence of systems.

Viewing wellbeing through our reimagined lens leads us to a paradigm shifting upshot. Whereas the top of Maslow's hierarchy of needs maintains "self-actualization" as the highest human stage, our new lens suggests a different epitome (Maslow 1954). Whereas Maslow's model encapsulates needs in terms of individual people, our reimagined lens views wellbeing in terms of individual people who are composed of and part of systems. When we acknowledge that we are all inextricably connected by different systems, *selfless* actualization rather than self-actualization, becomes the highest level of human experience. **Selfless-actualization** is introduced here as the expression of a human being in harmony with connection such that views of separateness dissolve. As many religions and spiritual teachings have affirmed, when we realize our common humanity, we treat others as if they are

a part of us and vice versa. This realization, built on the shoulders of scholars before us merged with present day cutting edge research, leads to the most significant contribution within this paper: what it *means to be well, or wellbeing, and what it means to be human, or a human being, converge into one.*

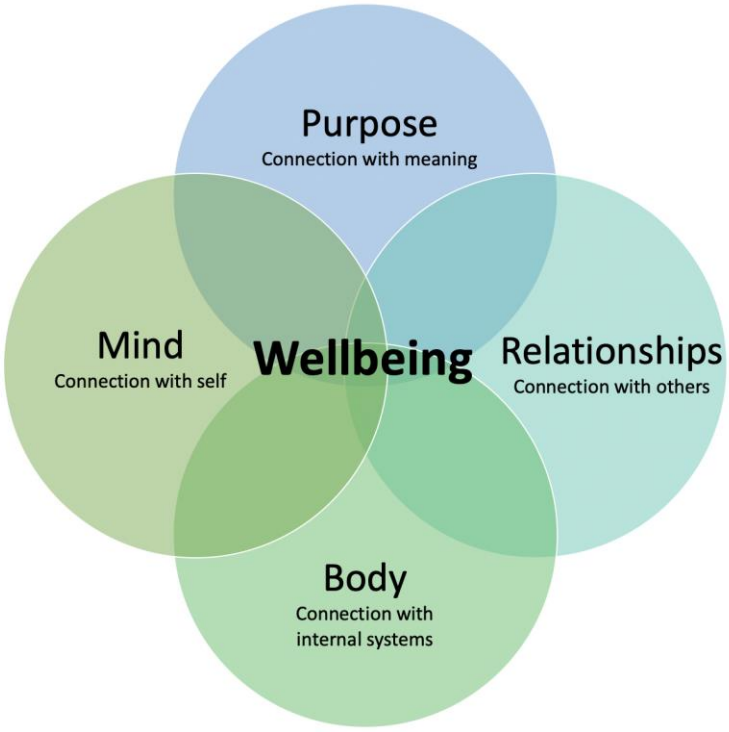


Figure 10. Example Systems of Connected Wellbeing Framework

When people feel connected, they often lift one another up. In such a positive sum game scenario, success in one realm actually propels success in other realms. When people feel disconnected or disenfranchised, on the other hand, a zero or negative sum often game ensues whereby one person's victory causes a loss for someone else. Importantly, as individuals and groups who have felt disenfranchised can attest to, certain systems of connection or disconnection are exogenous, meaning that they occur outside of the person. For example, historically when the school system was structured such that students of color did not learn together with Caucasian students, a system of disconnection affected the

wellbeing of society. Conversely, examples of an exogenous systems of connection which connected or enfranchised people occurred when African Americans and women were eventually afforded the right to vote. They were literally and figuratively connected further into the system. According to the definition of wellbeing offered in this paper, such action which enfranchises and connects people also serves to cultivate wellbeing.

With the aforementioned in mind, key research discoveries are depicted in Table 13:

Table 13. Fundamental Research Discoveries

Research Discovery:	More information
Integrative approaches such as the 1-2-3 Wellness™ program are effective	The 1-2-3 Wellness™ program produced benefits for students and educators related to mindfulness, social and emotional learning and overall wellbeing.
Five essential elements for school wellbeing	There are five key elements for school wellbeing which apply to educators and students differently: Safety, Connection, Routines, Meaning and Choice.
Collective Limbic Regulation	Occurs when large groups (i.e. a family, an organization, society) are operating in a state of wellbeing.
Reimagining Wellbeing	Wellbeing: the expression of interdependent systems of connection working in harmony. Selfless-Actualization is the epitome of wellbeing.

Taking all four fundamental discoveries into account concurrently, it is perhaps not surprising that the present research shows that the 1-2-3 Wellness™ program was effective in promoting wellbeing given that the program concurrently offers schools access to the *five essentials elements of wellbeing* as well as a means of support interdependent systems of connection to work in harmony which is the proposed *definition of wellbeing*. Future efforts related to wellbeing broadly might reference the five essential elements for school wellbeing and *connected systems-based definition of wellbeing* proposed in this study, either as a proactive guide or a reflective tool.

Moving Forward

School leaders, teachers, parents and policy makers play formative roles in shaping student wellbeing outcomes. A substantial amount of existent research discusses the myriad approaches, interventions and initiatives that leaders employ, with varying degrees of success, to cultivate conditions which lend themselves to a healthy school culture and climate (West et al., 2018; George Sugai & Simonsen, 1995; Mckeering & Hwang, 2018). Progress is underway.

Given the steady increase in depression, anxiety and suicide in schools it is urgent and imperative that policy makers deepen their understanding of not just the manifestation of dis-ease surfacing pervasively in schools including behavior problems, depression, suspension and suicide, but also in cultivating an interdisciplinary/integrative understanding of the complex causation of these disturbing trends including trauma, lack of connection, neurobiological factors, technology factors and overemphasis on academics at the expense of affective components (Persson & Rossin-slater, 2018). The social implications of these dynamics, particularly for underserved communities, are substantive. In order to address the enormity of the problems and opportunities we are facing, it is imperative for policy makers, researchers and educators work strategically in concert. With this in mind, it is worth noting that while my own position as researcher and consultant within this study offered benefits in terms of connecting research to practice, positionality is important to consider.

As mentioned previously, at the time of this study and to this day, I had been employed as a consultant supporting educator professional development within the research school district for almost two years. My role with the district has been focused on highlighting and building educator strengths and has never been evaluative or corrective in nature. At the time of the study, I did not ever work with students directly. Additionally, prior

to the study, I did not work with the district on the topic of wellbeing. That said, my positionality at the time of the study may have prevented teachers and school staff from being completely honest in their survey and interview responses. I attempted to minimize these limitations in a variety of ways which are discussed in the educator portion of the study implications section below.

With the aforementioned in mind and with reverence to the enormity of the problems and opportunities we are facing, we now turn our attention to implications this study offers for policy makers, researchers, educators and students alike.

Specific Implications: Policy, Research and Practice

While this research focused predominantly on schools, the concepts explored and the 1-2-3 Wellness™ program studied can be applied to families, organizations, businesses and communities to promote wellbeing broadly. With our reimagined lens for how we approach wellbeing, we are better positioned to also reimagine solutions to help human beings live healthier, happier lives across the globe. In a big picture sense, viewing wellbeing in terms of connected systems of being drives home the notion that we rise or fall together. Implications for climate change, poverty, kindness, fiscal structures and beyond abound. Below, specific, grounded implications are discussed as they relate to policy makers, researchers and practitioners in educational settings.

Policy makers wishing to draw upon insights related to the reimagined view of wellbeing might start with the simple question: How might this policy either nurture or impede connections? Such an approach might be utilized to create policy geared towards prevention of future problems or policy aimed at ameliorating existing problems. For example, if an existing problem was identified in a school or community such as high rates of

mental health issues or high absentee numbers, policy makers might be better positioned to trace back the roots of those problems by asking: What systems might be involved in this dynamic? Do people feel disconnected in any ways? Such an approach might help policy makers better determine causal relationships or antecedents related to lack of connection which, when addressed through cohesive policy, could help springboard movement towards desired outcomes.

In so far as policy can serve to support systems which unintentionally lead to inequities and disenfranchisement, policymakers can seek to invest in policy and infrastructure which helps create systems whereby all are afforded access to the vital components of connection. Given the multi-faceted nature of connection, policymakers might begin to intentionally invest in policies and programs that propel all types of connection. Policy makers might also think about how exogenous systems like climate change or race related systems are designed to either create or inhibit harmony.

Policy makers might also look to intentionally invest in *integrative programs* and incentivize their usage in schools. Additionally, they might concurrently revisit the efficiency and value of reductionistic school efforts which, devoid of an integrative framework, may not be as effective in some instances. Policy makers can also seek to evaluate school efforts in terms of the *five essential elements of school wellbeing* offered in this research, investing more heavily in efforts that do (or could) offer students and educators access to all five elements which propel wellbeing. Similarly, in terms of integrative, resource rich programs like 1-2-3 Wellness™, policymakers might make it easier for programs to scale throughout schools and community organizations alike with support, pecuniary and otherwise. In general, policymakers might look to create or revise policy to actively promote the five essential

elements of wellbeing, the connection triad and integrative approaches to wellbeing in schools.

In terms of the five essential elements of wellbeing, researchers might actively look to further explore whether all five elements are ubiquitous across different school settings marked by wellbeing. Researchers might also look to critique the relative importance of different elements, focusing on prerequisite elements or steps.

Given that the present study stressed the importance of and drew the distinction between four specific types of connection, connection with internal harmony or body, connection within oneself or mind, connection with others or relationships and connection with meaning or purpose, future research might explore the multifaceted nature of connection in greater depth to better understand possible influences and synergy and explore what others systems are particularly formative. In terms of connection, researchers might seek to actively explore the relationship between the different types of connection described in this study. Research could also focus on exploring implications when one or more types of connection are present or missing as well as whether there is a causal relationship between the connection types. Researchers might also reevaluate past research which focused primarily on one element at the exclusion of other connection types and look for ways to expand the body of research accordingly. Additionally, researchers might focus on the power of framing and semantics. In this study, for example, the words wellness and wellbeing, as similar as they are, may have evoked different feelings and interpretations from individuals based on their backgrounds and assumptions. In short, words matter.

Given the positive results derived from the present study of the integrative 1-2-3 Wellness™ program, examining whether findings can be replicated in future studies to reveal

similar benefits for educators and students could prove fruitful for educational leaders and practitioners seeking to replace disturbing sickness trends with wellbeing outcomes. Additionally, examining the synergistic potential of other integrative rather than reductionist approaches to behavior, academics, trauma, mindfulness and social and emotional learning could help practitioners leverage their time and resources. Also, future research exploring the 1-2-3 Wellness™ program and other integrative efforts effectiveness in different contexts could help researchers, policy makers and practitioners develop a more nuanced understanding of how policy and pecuniary resources might help the program be deployed and scaled to address the health crisis our schools are facing. Applying the 1-2-3 Wellness program in military and workplace settings and studying results could help prevent instances of stress, PTSD and burnout.

Additionally, a longitudinal study that focuses specifically on how the 1-2-3 Wellness™ program effects different outcomes including academics, self-compassion, self-esteem, behavior and attendance could help practitioners understand the macro, long implications of the program. In fact, following this study, the assistant principal involved has decided to complete a quantitative dissertation study focused on the effect that 1-2-3 Wellness™ has on academic, behavioral and attendance outcomes. As was the case with the present study, the researcher will remind educators and students to answer truthfully and remind all participants that all answers would be kept entirely confidential. In terms of wellbeing propellants for educators and students, future research examining the implications of the wellbeing factors identified in his study - safety, structure, connection and meaning for *educators* and safety, connection and choice for *students*- could allow practitioners to better hone their efforts.

In terms of practice, school leaders and teachers seeking ways to propel wellbeing in their classrooms might explore and adopt the 1-2-3 Wellness™ program and other integrative efforts. School leaders, employing 1-2-3 Wellness™ and other integrative efforts, can truly invest in educator wellbeing first as a paramount, foundational and prerequisite component to supporting student wellbeing. Educational leaders can plan and deploy resources which invest in the *safety* and *connection* of students and educators while also investing time, energy and resources focused on *procedures* and *meaning* for adults and emphasizing *choice* for students. Educators can also work expeditiously to embed opportunities for students to have a choice in their wellbeing and academics, embedding opportunities to build connection with self and others building each day. With respect to choice in this study and in an attempt to proactively address issues of positionality, I offered all participants multiple forums/choices for discussing their ideas, asked follow-up questions during the interviews and structured open-ended questions to elicit additional information.

In terms of the five essential elements of school wellbeing discussed, educators might actively seek to evaluate their current school practice based on these five essential elements. For schools seeking to create long-term sustainable wellbeing efforts, they can utilize these five domains, along with the connection triad, as a framework or North star for creating a school driven by a culture and climate of wellbeing.

With such considerations in mind, policy makers, researchers and practitioners can continue to systems of connected wellbeing for students and educators alike. Now that we have examined key research findings as well as implications for policy makers, researchers and educators, we now broaden our lens to a wider, even more expansive view. Though this study focused on school efforts to promote wellbeing, at the heart of this research the reader is

being asked to reflect on a larger, yet in some ways, simpler question: How can we promote human flourishing? Informed by evidence, we can envision a new paradigm to promote human flourishing guided by the following opportunities.

Big Picture Opportunities: How can we promote human flourishing?

Below, three big picture opportunities to promote human flourishing are presented and expounded upon in greater depth thereafter.

1. **Shifting to human flourishing paradigm.** Namely, we can shift from a compartmentalized view of humanity which views achievement as its primary end to an integrative view which maintains human flourishing as its primary end or north star.
2. **Overcoming Collective Limbic Regulation together.** Namely, we can acknowledge that we are facing a wellbeing emergency related to largescale limbic dysregulation and can draw upon the tools to promote intentional healing.
3. **Cultivating largescale human flourishing.** Namely, the future can be bright as we design systems of connected wellbeing.

Shifting to human flourishing paradigm. This paper suggests that, as a societal collective, despite our best intentions, we have at times been looking in the wrong place, missing the forest for the trees. As a result, we have diagnosed the problem of a lack of wellbeing myopically, attuned to individual branches and leaves that are easy to "see", while maintain less astute awareness to the root system below. Thus, in many cases the conventional paradigm that has guided the school system and society broadly for centuries has placed student's academic achievement as the epitome of success and relegated other factors, including health, wellbeing and connection to secondary status (Ferrer, 2005). Put in

alternative terms, historically, we have decided what academic, largely cognitive achievements, to render as ultimate end goals including math goals, reading goals, science related goals and organized the system based on their achievement (Greenberg, Domitrovich, Weissberg, & Durlak, 2017a). In this scenario, achievement is regarded as the ultimate goal or "north star" and wellbeing is relegated to a lesser, secondary subset goal among many others.

Shifting to a *human flourishing paradigm* would require us to switch our "north star" to the promotion of human flourishing, thereby relegating academic achievement to an important, yet deferential role. In this scenario, aligned with formative research, we would honor the complexity of human experience: we are intricate beings with needs that are physical, social, emotional and spiritual (Maslow, 1943). If we design schools specifically, and society broadly, around human beings then flourishing becomes our ultimate goal and our measures of success would consequently point to the north star of human flourishing. Such an approach would maintain wellbeing as primary. (Brighouse, 2009). In such a scenario, academic achievement would become a smaller factor within the larger context of our stories of wellbeing. Driven by this paradigm shift in the school setting, we might question: Do we see school as an academic journey of which wellbeing/human flourishing is a part (current paradigm) or a wellbeing/human flourishing journey of which learning is a part (proposed paradigm)?

Cultivating Collective Limbic Regulation Together

Within the educational arena, we can design schools in a backwards design approach, based on what students and adult's bodies, minds and spirits need to thrive. In addition to stressing the importance of different types of connection, the present research offers five essential elements of school wellbeing as examples to consider. We know that,

neurobiologically, teachers and students alike are hardwired, literally and figuratively, to need time for rest and digest. Based on our neurobiology, for example, a wellbeing design understands, accounts for and builds up on the idea that we need to be regulated and nurture connections as a prerequisite to achieving human flourishing (Murray, 2007). Currently, our system is often created based upon the opposite assumptions -we have to earn more, achieve better grades make more money and so on.

Embedding opportunities for people to access different types of connection with self and others is key. Affording time for people to activate their parasympathetic nervous systems through deep breathing, positive interactions with others unrelated to "work" can serve to offer minds and bodies what they need to survive and eventually thrive. The research presented suggests that our very limbic systems are connected. With such a notion, we might ask: What if each micro-interaction of connection, including the way we treat ourselves and others, has the power to impact the world exponentially?

Cultivating Largescale Human Flourishing

The current study builds upon seminal work which suggests that we continue to expand our knowledge regarding certain complex dynamics that, when present, help people meet needs and eventually thrive (Maslow, 1943; Tschannen-Moran & Tschannen-Moran, 2012; Maclean, 1985; Neff, 2011). The present study defines *wellbeing* as the expression of interdependent systems of connection working in harmony. One upshot of this definition is that wellbeing flows when connections flow together. Wellbeing then, like a healthy heart, can be thought of as an organic expression of unblocked channels. Instead of trying to unblock the arteries of our collective heart, we can learn that the heart of our human flourishing is based on interconnection with ourselves, others and the environment of which

we are a part. Looking through such a lens, we might wonder: How might I connect more deeply with myself, with others and with my environment in order to cultivate harmony?

Conclusion

An integrative approach to holistic wellbeing does not replace academics, it contextualizes human experience within a broader framework which sees students and educators as multifaceted beings with bodies, minds, emotions, cognitions, values and pluripotential. Just as students are more than test scores, educators are more than disseminators of curriculum. Just as parents are more than biological gene disseminators, researchers and policy makers are more than the papers that they write or policies that they enact.

Today, society is facing a collective onslaught of mental and social challenges which include increased instances of depression, anxiety, bullying and suicide. An interconnected approach to wellbeing, as this paper presents, reimagines these problems not in isolation and addressable through band-aid solutions and initiatives for separate issues, but rather as the manifestation of interwoven root causes. If history is a guide, students will "pay forward" what they've experienced. This work suggests that we have a choice in affecting the future of human being's wellbeing. By empowering young people, through proactive wellbeing approaches, they will have a decreased need to treat sickness reactively. Instead, young people will be better positioned to cultivated health and wellbeing along the path, "paying forward" the wellbeing they've come to embody into the world. As educational researchers and school practitioners seek to better understand the dynamics of these causes, we position ourselves to not only improve people's lives in the short term, but also bring forth integrative

solutions which empower students to live happier, healthier lives from a place of interconnection.

Like an interconnected web of streams and rivers which ultimately flows into a larger ocean below, human connection is also complex. If we view society as the ocean of our collective health then perhaps it is time we look upstream to see what young people are being fed, not just physically but also emotionally and socially. Guided by continued vision, focus, and intentionality, we can help ensure that the evolving wellbeing in schools story flows into a larger ocean reimagined through a lens of connectedness and human flourishing throughout society. Through such a story, being well is united with being human.

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Appendix A
Wellbeing in Schools

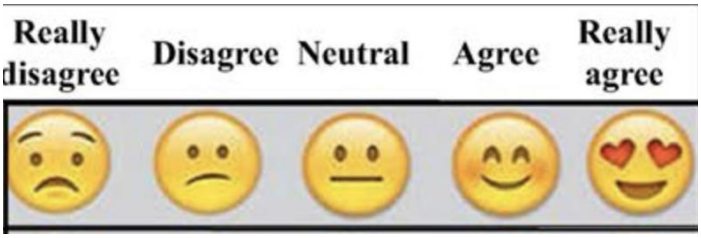
Teachers will be provided with research-based information and Wellbeing practices related to mindfulness, self-care and social and emotional wellbeing via a 21-video course and supportive workbook. Please find video topics below.
Appendix A: Pre-training Video Course Topics

1. Your Vision of Wellbeing
2. Mindfulness, Social and Emotional Learning, Self-Care & YOU
3. 1-2-3 Wellness™: Creating Mindful Habits
4. Your Wellbeing Library
5. Your Purpose as a Guide
6. Your Thoughts are Powerful
7. Your Best Self
8. Healthy Thoughts
9. Mindful Now
10. Processing Emotions in a Healthy Manner
11. Emotions and Your Brain
12. Self-Compassion
13. Appreciation
14. Reflect and Breath
15. Stress Mindsets: Creating Wellbeing
16. Simple Movements
17. Your Self-Care Plan
18. Teaching 123 Wellbeing to Your Kids/Students
19. Laying the Foundation for Student Success
20. AAA Healthy Habit: Anyone. Anywhere. Anytime.
21. Celebration and Conclusion

Appendix B
Wellbeing in Schools
Student Survey

Please answer the following questions using a 5-point answer scale:

1 Almost never
2 Not very often
3 Somewhat often
4 Very often
5 Almost always



1. I take care of my Wellbeing.
2. I stop to ask myself how I am feeling.
3. I know how to deal with difficult emotions (like stress, anger and sadness) in healthy ways.
4. I understand how other students are feeling.
5. I tell my teacher what I need.
6. I work well with others.
7. I practice self-care.
8. I have different self-care tools to choose from that help me make responsible decisions.
9. I take a Wellbeing break at least once a day. (a deep breath, stretch, etc.)
10. My teacher shows me ways to take care of myself.
11. If I feel sad or angry, I know what to do.
12. My classroom is happy and healthy.

Thank you very much!
If you want to talk about this survey please check the box below.
☐ YES, I would like to talk to you some more.
Thank you and great job!

Appendix C
Wellbeing in Schools
Teacher Survey

Please answer the following questions using a 5-point answer scale:
1 Almost never
2 Not very often
3 Somewhat often
4 Very often
5 Almost always

1) I pause to check in with how I'm feeling.

2) I take care of my self-care needs.

3) I manage stress in healthy ways.

4) I regulate my emotions.

5) I practice perspective taking.

6) I am aware of what is happening in my environment.

7) I create positive relationships.

8) I have different self-care tools to choose from that help me make responsible decisions.

9) I practice mindfulness.

10) I support my students with practical self-care tools.

11) I meet my students' social and emotional learning (SEL) needs.

12) Social and emotional learning, mindfulness and self-care are a part of my classroom/school.

13) Is there anything else you'd like to add related to self-care, social and emotional learning or mindfulness in your classroom/school?

14)

Thank you very much!

If you want to discuss your answers with the researcher, please check the box below.
☐ YES, I would like to talk to you some more. Thank you!

Appendix D
Parental permission form prior to survey administration 1

University of California, San Diego
Parent Consent for Child to Act as a Research Subject

"Promoting Wellbeing in Schools"

Who is conducting the study, why your child has been asked to participate, how your child was selected, and what is the approximate number of participants in the study?
Drew Schwartz, a doctoral student in Educational Leadership at the University of California, is conducting a research study to find out more about Wellbeing in schools. Your child has been asked to participate in this study because all 2nd grade teachers and all 2nd grade students are included and invited. will be approximately 150 participants in this study.

Why is this study being done?
The purpose of this study is to research the effectiveness of a school Wellbeing program (1-2-3 Wellness™) offered to staff and students and to develop a deeper understanding of Wellbeing, social and emotional learning (SEL) and mindfulness in schools. Additionally, the study aims to provide greater insight to schools wishing to promote educator and student Wellbeing.

What will your child be involved in with this study and which procedures represent standard of care and which are experimental?
If you agree to allow your child to be in this study, your child will:
Your child(ren) will answer survey questions on a computer during the school day. The survey involves 12 simple questions about Wellbeing at school.
Of the 140+ 2nd grade students at Bayless Elementary school, 3-7 students will be invited to take part in a short 10 minute interview about their experience. Only students who ask to be interviewed when the teachers asks will be interviewed (this is completely voluntary).
Your child(ren) does not have to answer any questions or participate in this survey. Participation in this study is voluntary. Your decision to have your child(ren) participate or answer questions is completely up to you and your child(ren). Your decision to have your child(ren) participate or not participate will not have any effect on any benefits or services you or your child(ren) are currently receiving or may receive in the future.
How much time will each study procedure take, what is your child's total time commitment, and how long will the study last?
In total, your child's total time commitment is 15-20 minutes.

What risks are associated with this study?
Participation in this study may involve some added risks or discomforts. These include the following:

1. Study procedures: A potential risk is that your child(ren) may feel discomfort or boredom while taking the 12 question survey or while being observed in the classroom. Participants can take a break or stop at any point if they wish to.

Breaches in confidentiality: A potential risk in securing confidentiality is the use of identifiers. One potential risk in securing confidentiality is the storage of the data. All consent forms and data will be protected in a locked file drawer on UCSD premises. The computer utilized will remain password protected throughout to ensure that all data is private.

Invasion of privacy: A potential risk related to the collection of classroom observations is that students or teachers may feel uncomfortable with the classroom observation. Participants can take a break or stop at any point upon request.

Because this is a research study, there may also be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

What are the alternatives to participating in this study?
The alternative to participation in this study is not to participate. The teacher will offer your child a comparable learning activity instead.

What benefits can be reasonably expected?
The study is designed to support and propel Wellbeing in schools like Bayless Elementary. This will include introducing your child to over three dozen Wellbeing practices such as deep breathing techniques and positive affirmations.
Results from this research will support researchers and practitioners in identifying systems and practices which best support student, teacher and administrator Wellbeing. This newfound knowledge can be translated into tools and programs (including the one being studied) that can be utilized by other grades within the Bayless School district as well as other school districts throughout the country.
Can you choose to not to have your child participate or withdraw from the study without penalty or loss of benefits?
Participation in research is entirely voluntary. You may refuse to allow your child to participate or withdraw your child or refuse to allow your child to answer specific questions in an interview or on a questionnaire at any time without penalty or loss of benefits to which you or your child are entitled. If you decide that you no longer wish your child to continue in this study, you can let us know by informing the school or reaching out to the researcher:
Drew Schwartz, UCSD doctoral candidate in Educational Leadership
4530 Weber Road in St. Louis, Missouri, 63123
D3schwar@ucsd.edu
You will be told if any important new information is found during the course of this study that may affect your child wanting to continue.

Can your child be withdrawn from the study without your consent?
The researcher may remove your child from the study without your consent if the researcher feels it is in your child's best interest or the best interest of the study. Your child may also be

withdrawn from the study if you or your child do not follow the instructions given you or your child by the study personnel.

Will you be compensated for participating in this study?
There is no compensation for you and your child's participation in this study.

Are there any costs associated with participating in this study?
There will be no cost to you or your child for participating in this study.
Who can you call if you have questions?
Drew Schwartz, under supervision of Dr. Alan Daly, has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach them at:
Drew Schwartz
Drew Schwartz, UCSD doctoral candidate in Educational Leadership
4530 Weber Road in St. Louis, Missouri, 63123
D3schwar@ucsd.edu (858) 822-6427

Alan J. Daly, Ph.D. Professor, Director, Educational Leadership Joint Doctoral Program, Education Studies, University of Californian, San Diego (858) 822-6472, ajdaly@ucsd.edu

You may call the Human Research Protections Program Office at 858-246-HRPP (858-246-4777) to inquire about your rights as a research subject or to report research-related problems.

Name _____. Date _____

In order for your child to participate, please sign this sheet and have them return the sheet to their teacher within one week.

Appendix E

Wellbeing in Schools
Student Consent to Participate

Assent to Act as a Research Subject
(Ages 7-12 years)

"Study on Wellbeing in schools"

Drew Schwartz, a doctoral student at the University of California, is doing a research study to find out more about how to help students feel well at school. You are being asked if you would like to participate in this study.

The main ideas to know about this study is that:
You are going to learn ways to feel more calm, uplifted and happy.
You don't have to worry about anything. Your teacher will help you know what to do each step of the way.

Plus, you get to decide if you will take two short surveys (later this week and in a month or so). If you sign this form, it means you are OK taking the surveys.

If you decide you want to be included in this research study:

- You will complete a 12 question survey about Wellbeing
- You may be asked to take part in a short interview about what helps you feel healthy and happy at school (less than ten minutes)

Sometimes kids don't feel good while being in this study. You might feel these things:

- The online survey may take a long time to complete (it is 12 short questions) and you might not be comfortable with that. You can stop at any moment during the survey.
- The information that Drew collects will be stored at the University of California - San Diego on a hard drive locked with a password. Drew is the only one who can access the information and she will remove your name from the information as soon as she collected all the information.

If you feel any of these things, or other things, be sure to tell your mom or dad.

You don't have to be in this research study if you don't want to. Nobody will be mad at you if you say no. Even if you say yes now and change your mind after you start doing this study, you can stop and no one will be mad.

Be sure to ask your teacher or Drew Schwartz to tell you more about anything you don't understand.

If you would like to participate in this study, please sign your name below.

_____ _____

Write your name on this line Date

Signature Of Person Obtaining Assent

In my judgment, the participant is voluntarily and knowingly giving assent and possesses the legal capacity to give assent to participate in the study.

_____ _____

Signature of person obtaining assent Date

Appendix F
Informed Consent and Consent for Audio Recoding
AUDIO RECORDING RELEASE CONSENT FORM

Holistic Wellbeing in Schools:

Towards an Integrative Approach to Promoting Human Flourishing

Drew Schwartz, a doctoral candidate with University of California, San Diego and California State University San Marcos is conducting a research study as a primary researcher to find out more about Wellbeing in schools. You have been asked to participate in this study because you are a member of the Bayless School district. There will be approximately 16 participants, 9 adults and 7 students, being interviewed as part of this study.

The purpose of this case study will be to research the effectiveness of a Wellbeing program (1-2-3 Wellness™) offered to school staff and students and to develop a deeper understanding of Wellbeing, social and emotional learning and mindfulness in schools. Additionally, the study aims to provide greater insight to your school and other schools and districts interested in promoting educator and student Wellbeing, social and emotional learning and mindfulness.

If you agree to this study, you will be involved in a 12 question survey (pre and post survey), 20 minute class observation(s) and a semi-structured conversational interview individually. This interview will be video or audio-taped with your permission.
While every effort is made to reduce risk, there exists a possibility of a loss of confidentiality in this study and feelings of discomfort. In addition, there may be some unknown risks that are currently unforeseeable. You will be informed of any significant risks should they arise in the course of the study.

Procedures and safeguards have been put in place to minimize risks to participants. Interviews will be restricted to no more than one hour. You may end the interview at any time for any reason. Your interview data will be kept confidential, available only to the researcher for analysis purposes. The audio tapes will be destroyed following final analysis no later than one year after the conclusion of the study. Pseudonyms for participants including the interviewees, positions and district will be used to minimize the risk of identification. You will be given the opportunity to review the verbatim transcribed interview. You may choose to eliminate any comments or references. The recording may be stopped at any time when requested by the participant. The entire audiotape or portions of it will be erased upon request by the participant.

While the study involves providing you and your students with Wellbeing resources, there may or may not be any direct benefit to you from participating this study. The researcher, however, may learn more about Wellbeing in schools to benefit from this knowledge. Additionally, improved practices and discussion could result from your participation.

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions in an interview. An alternative to participation in this study would be to not participate and you may share this with the PI at any time.

The researcher may remove you from the study without your consent if the researcher feels it is in your best interest or the best interest of the study. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel.

There is no compensation for being a part of this study. You will be given resources including a video course and Wellbeing workbook free of charge. There are no costs associated with the study with the exception of your work time used to participate in the interview process.

This study has been approved by the University of California San Diego and California State University San Marcos Institutional Review Board (IRB). You will be given a copy of this form to keep for your records. Drew Schwartz has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Drew Schwartz at 314-933-0089 or the researcher's advisor/professor, Dr. Alan Daly, ajdaly@ucsd.edu, (858) 822-6422. You may call the Human Research Protections Program Office at 858-246-HRPP (858-246-4777) to inquire about your rights as a research subject or to report research-related problems.

Your Signature and Consent
You have received a copy of this consent document.

You agree to participate.

_____ _____
Subject's signature Date

As part of this project, an audio recording will be made of you during your participation in this research project. Please indicate below the uses of these audio recordings to which you are willing to consent. This is completely voluntary and up to you. In any use of the audio recording, your name will not be identified. You may request to stop the recording at any time or to erase any portion of your recording.

1. The audio or video recording can be studied by the research team for use in the research project. Initials _____

2. The audio or video recording can be used for scientific publications. Initials _____

3. The audio or video recording can be reviewed at meetings of scientists interested in the study of Wellbeing in schools.

Initials _____

You have the right to request that the recording be stopped or erased in full or in part at any time.

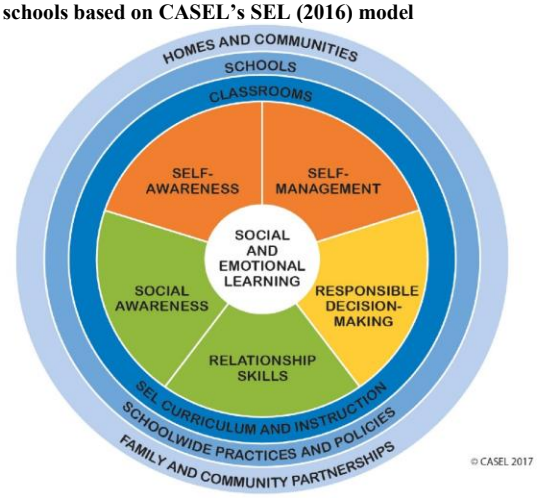
You have read the above description and give your consent for the use of audio recording as indicated above.

Signature _____Date_____ Witness_____ Date _____

Appendix G

Observation: Wellbeing in Schools

Observation scheme on Wellbeing in schools based on CASEL's SEL (2016) model



Observations And Notes
Self-Awareness
Self-Management
Social-Awareness
Relationship Skills
Responsible Decision Making
Use of mindfulness or neurobiological primers (deep breath, etc.)

Mindful Use of 1-2-3 Wellness™

Self-Care Strategies Used

Appendix H

Educator Interview Questions

1. What are your thoughts on the importance of social and emotional Wellbeing in schools? Where does (or doesn't) it fit in to academics?
2. What helps you come alive and feel well at school?
3. In what ways does 1-2-3 Wellness™ support or constrain teacher and student Wellbeing?
4. What are some of your challenges as an educator? How does (or doesn't) 1-2-3 Wellness™ help you address those challenges?
5. What beneifts, if any, did you personally notice for yourself as a talented educator while using 1-2-3 Wellness™?
6. What benefits or drawbacks, if any, did you notice for your students while they were learning and using 1-2-3 Wellness™?
7. In general, what classroom factors support or constrain your feelings of calm, happiness, mindful learning and Wellbeing?
8. In general, what classroom factors support or constrain students' feelings of calm, happiness, mindful learning and general Wellbeing?
9. Minfulness means to be aware of the present moment without judgement. How did 1-2-3 Wellness™ support this?
10. The five core competencies of SEL are: Self awareness, social awareness, self management, relationship skils and responsible decision making: How did 1-2-3 Wellness™ help or hinder you with teaching these?
11. Are you more aware of your own needs now? Please explain.
12. Are you more aware of your students and their needs now? Please explain.
13. What other questions, conserns, feedback or sugesstions might you want to add before we wrap up?

Appendix I

Student Interview Questions

1. What helps you feel good or do well in school?
2. What helps you come alive and feel great at school?
3. You have been practicing 1-2-3 Wellness™ with your class. Can you please tell me about what 1-2-3 Wellness™ is?
4. Does 1-2-3 Wellness™ help or support you? Please explain.
5. Does 1-2-3 Wellness™ keep you from doing certain things you like? Please explain.
6. Have you learned anything about yourself- like how you are feeling or what Wellbeing practices can help you?
7. Do you have any questions or comments at this point?