

CULTIVATING WELLBEING IN SCHOOLS THROUGH EMBODIED-MINDFULNESS:  
AN EXPLANATORY MIXED-METHOD

by

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## **Abstract**

### **Cultivating Wellbeing in Schools Through Embodied-Mindfulness:**

#### **An Explanatory Mixed-Method**

**by**

**Anne-Marie M. Charest**

Mindfulness-based meditation practices are receiving increased attention within the scientific community for their capacity to foster wellbeing by reducing stress, mitigating psychological and emotional suffering, and promoting prosocial behavior. This Explanatory Mixed-Method study examined both role and impact of secular Embodied-Mindfulness practice based on nature-centric or indigenous approaches in improving strength-based attributes of primary school children. Study was conducted in 3 California primary schools, with English-speaking 4th to 6th grade children, ages 9 to 12. Intervention group students ( $n = 115$ ) had an 8-week program of daily mindfulness education and practice during school hours. Control group students ( $n = 113$ ) completed an 8-week silent reading activity. Pre and post administration of Life Satisfaction Scale, Happiness Scale, and BERS-2 was used to document and analyze the program's efficacy in impacting students' and teachers' perceptions of change in wellbeing. Concluding student and teacher interviews, and student drawings in response to each session constituted the qualitative data. Contrary to expectation, no significant effects were found in measures of wellbeing. However, quantitative exploration revealed a significant correlation in wellbeing,  $F(1, 169) = 4.332, p = 0.039$  when data were covaried for pre-intervention on Life Satisfaction and Happiness scales. A significant 4-way interaction between time, gender, school, and intervention group was demonstrated within the BERS-2 Teacher School Functioning (SF) subscale  $F(1, 180) = 5.1222, p = 0.007$ . Thematic content analysis of all interviews and students' drawings

identified receptivity to and increased awareness of benefits of specific mindfulness practices. Qualitative findings revealed agreement between students' and teachers' responses, and reported noticeable impact in students' intrapersonal and school functioning strengths, and conflict resolution. Use of nature-centric or indigenous approaches to teaching mindfulness offered students transpersonal experiences. This study supports the importance of incorporating nonverbal, art-based measures to evaluate the efficacy of mindfulness education and practice in schools.

## **Dedication**

To my mother and all the women of my lineage who have continuously shared their wisdom and compassionate hearts. To my father who uniquely shared his love of nature. To my husband who continuously believed in me. To my children and all children of the world who face the realities of modern day living. To my friends who stood by me. To the teachers and educators that saw something more in me than my eyes could see. To the many elders and shamans, particularly Angaangaq Angakkorsuaq, who helped me shape my inner and outer worlds. In dedication to life itself.

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## Chapter 1: Introduction

*“The most beautiful smile is a smiling heart.”* Angaangaq Angakkorsuaq, Eskimo Elder

Wellbeing is at the heart of human happiness. It is the foundation on which we seek to become whole and complete. As the Dalai Lama (1998) expressed it,

I believe that the very purpose of our life is to seek happiness. Whether one believes in religion or not, whether one believes in this religion or that religion, we all are seeking something better in life. I think, the very motion of our life is toward happiness. (p. 15)

The source of genuine happiness is rooted in wellbeing through the delicate and intricate weaving of the body, mind, and spirit to form what constitutes balance and health. In recent years, positive psychology has been at the forefront of understanding happiness and wellbeing through the development of an evidence-base founded on promoting and supporting the flourishing of societies’ children into their full potential (Holder, 2012). According to a recent study by Gore et al. (2011) from the World Health Organization, mental health concerns account for almost half of all disabilities among the 1.8 billion children ages 10 to 24. This represented 27% of the world population in 2008 and numbers are expected to rise to 2 billion by 2032. This places the necessity to address mental health and wellbeing at the forefront of societal concerns. As reasonable evidence strongly points to the positive impact of mindfulness-based practices on learning, cognition, emotional, physical, and social skills in adults (Weare, 2013), the necessity to explore its relevancy in children is of the utmost importance not only to mediate mental health concerns but to nurture children’s health and wellbeing by developing habits of mind and behavior that build resiliency (Greenberg & Harris, 2011) and promote happiness and inner peace.

Science and contemplative practices have pointed to the transient nature of happiness, particularly with regards to its relationship to extrinsic pursuits. According to Waterman,

Schwartz, and Conti (2008), happiness has long been proposed as the goal of human functioning and can be categorized as hedonic or eudemonistic. “Hedonic enjoyment refers to the positive affect that accompany getting or having the material objects and action opportunities one wishes to possess or to experience” (Waterman, Schwartz, & Conti, 2008, p. 42). Such understanding of happiness is viewed as extrinsic in that it relies on external contributors (Mathews, 2013). In contrast, eudaimonic happiness can be referred to as intrinsic in that it is cultivated by “living in a manner consistent with one’s daimon, true self, where the daimon represents one’s best potential” (Waterman et al., 2008, p. 42). In essence, eudaimonia is a subjective state that refers to the feelings present when one is moving into one’s unique individual potentials and purposeful life. This often translates into living heartfully. Such an understanding offers an important distinction in that happiness is not necessarily dependent on external circumstances and can shed light on the nature of emotions presented in Social and Emotional Learning (SEL) programs in school.

Although the introduction of Social and Emotional Learning (SEL) programs in school have contributed to an overall success in managing emotional distress, improving social and classroom behavior, and assist with attitude toward self, others, and school in children (UCI, 2010), these programs have failed in cultivating intrinsic or eudaimonic understanding of happiness, fostering attention, or considering the kinesthetic intelligence of children. According to Saltzman (2011),

One of the primary ironies of modern education is that we ask students to “pay attention” dozens of times a day yet we never teach them how. The practice of mindfulness teaches students how to pay attention, and this way of paying attention enhances both academic and social-emotional learning. (p. 1)

The introduction of Embodied-Mindfulness based practices, as a complimentary method to enhance existing SEL's, can prove to be beneficial in introducing valuable life skill which may be otherwise undeveloped in traditional educational systems.

### **Researcher's Connection With the Topic**

In 2007, in an effort to support my mother's humanitarian initiatives, I travelled to Yangon, Myanmar where I had the opportunity to spend time at Sunrise Home. There, I was deeply struck by the joy, peacefulness, and resilience of the children I met considering their traumatic life experiences. I also had the chance to travel throughout the country to visit schools and orphanages, where once again, the smiles and authentic expression of happiness touched my heart. Perplexed by what I saw, I began inquiring on the nature of wellbeing. What contributed to the children's expansive yet peaceful states of being despite their horrific life circumstances? How did their education or lifestyle cultivate their sense of inner peace? What common element permeated these schools and school culture? The answer: meditation. In Myanmar all children practice meditation twice a day in school. This awakened me to the power of contemplative practices for children.

In parallel to this awakening, I was also blessed to be trained by an Eskimo Elder from the Far North, Greenland who taught me the importance of weaving the body, the mind, and the spirit. According to the ancient oral traditions of the Kallaalit Eskimo community, the body, the mind, and the spirit are as brittle as a strand of sweetgrass when tended independently from each other. But, by weaving the body, the mind, and the spirit together, they become flexible and unbreakable like a braid of sweetgrass. It is with this basic teaching in mind that I began understanding the necessity of introducing kinesthetics to existing sitting centric mindfulness-based school programs. In addition, my 20 years of experience as an athlete, a dance and fitness

instructor, and a somatic psychologist provided me with the experiential understanding that movement was vital for health and wellbeing. This gave rise to my vision of how Embodied-Mindfulness-based practices could benefit children's wellbeing.

### **The Research Problem**

The necessity to evaluate the impact of mindfulness-based practices on wellbeing is of growing importance. Current Western public educational systems along with [their](#) student population are facing increasing demands that may result in mental health and behavioral problems. According to the United States Census Bureau (2011), the total population of children reached 73.7 million in 2012 and is expected to climb to 80.3 million in 2032. Among America's youth, it is suggested that about 7.5 million children have unmet mental health needs of which only 6% to 8% receive adequate mental health services in schools (Kataoka, Zhang, & Wells, 2002). These findings are substantiated by a recent report by the Center for Disease Control which indicates that as of 2011 in the United States alone, approximately 11% of children 4-17 years of age (6.4 million) have been diagnosed with ADHD (Center for Disease Control, 2014). In addition to mental health concerns, educational pressures may have also contributed to increased stresses in school environments.

With increased demands for public educational systems to conform to stringent Common Core State Standards (CCSS) and the No Child Left Behind Act of 2001, academic competencies have become the central focus and concern of public schools (California Department of Education, 2011). As a result, educational priorities have shifted to accommodate rigorous classroom assessments and standards, leaving little room to cultivate or teach life skills associated with fostering wellbeing. This shift has increased teacher and student pressures to perform to standards, which in return contribute to heightened overall stress. These stressors,

compounded with the reality of often difficult family dynamics, peer conflicts, and the pressure to perform in all realms of human development, can result in antisocial and nonadaptive emotional behaviors.

According to the American Psychological Association (2009) roughly 35% of American children experience stress-related problems. Experiences of anxiety or stress in primary school children play an important role in contributing to behavioral, emotional, and social problems (Valizadeh, Farnam, & Farshi, 2013). Such problems are often displayed through various internalized and externalized behaviors such as anxiety, hyperactivity, aggression, bullying, depression, somatization, attention problems, withdrawal, substance use, self-inflicted violence, and learning problems which impact core values such as interpersonal, intrapersonal, and affective strengths that greatly influence the quality of life, happiness, and the wellbeing of children. Historically, intervention-based psychotherapeutic models in schools have been based on diagnostic criteria and treatment focused on alleviation of symptoms. This approach has resulted in addressing problem behaviors within a restricted population rather than considering approaches such as mindfulness programs, which are designed to benefit all the children in school environments (Huppert & Johnson, 2010).

Mindfulness-based practices and interventions are increasing in popularity in psychotherapeutic and school environments, as literature and research increasingly supports their efficacy (Weare, 2013). For the purpose of this research, a focus on research conducted in elementary school environments that utilized mindfulness-based practices derived from Mindfulness-Based Stress Reduction (MBSR) was taken into consideration for review. Evidence has suggested that mindfulness-based practices within elementary school settings may not only contribute to academic improvement (Bakosh, 2013), to the reduction of anxiety (Napoli et al.,

2005; Semple et al., 2010; Van de Wiejer-Bergsma et al., 2012), to improvements in behavioral outcomes (Black & Fernando, 2013; Flook et al., 2010), but has also shown to have contributed to improvements in emotional reactivity (Saltzman & Goldin, 2008), in the reduction of depression (Joyce et al., 2010), resulting in attention improvement (Napoli et al., 2005), reduction of ADHD symptoms (Klatt et al., 2013), enhancing the ability to self-regulate (Beigel et al., 2009), to improve the ability to trust friends (Mendelson et al., 2010), as well as contribute to student overall wellbeing (Kuyken et al., 2013; Schonert-Reichl & Hymel, 2010).

To date, no mindfulness-based practices studies have used strength-based measures to evaluate the efficacy of Embodied-Mindfulness practices. Based on this premise, this Explanatory Mixed-Method study sought to evaluate the efficacy of a mindfulness-based curriculum in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, affective strengths, and overall happiness of the child as determinants of the state of wellbeing. It is hypothesized that Embodied-Mindfulness-based practices improve children's wellbeing as demonstrated through interpersonal, intrapersonal, school functioning, affective strengths, and overall happiness.

### **Statement of Purpose**

The purpose of this Explanatory Mixed-Method study was to evaluate the efficacy of a mindfulness-based curriculum that featured embodied practices in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, and affective strengths of primary school children ages 9-12, as well as to elicit a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within the context of primary school settings. The study gathered quantitative and qualitative data, and examined the findings to determine the efficacy of Embodied-Mindfulness training within

primary schools. In addition, the study sought to provide a model for the use of the standardized clinical multidimensional measurement tool, Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), to measure both emotional and positive functioning in similar school settings, both essential markers for wellbeing (Joseph & Wood, 2010). This may lead to a correlation with other measurement tools and contribute to a better understanding of how children, who have been assessed by school psychologists utilizing standard assessment tools, may potentially benefit from mindfulness practices.

### **Research Questions**

The central quantitative question for this study was: How does the experience of a secular Embodied-Mindfulness practice affect the wellbeing of students as observed through quantitative and qualitative assessments of behavioral and emotional influences in primary school children ages 9-12? It was hypothesized that an Embodied-Mindfulness practice would increase wellness in children as measured by the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004) and the Student's Life Satisfaction Scale (SLSS; Huebner, Suldo, & Valois, 2003), as well as contribute to happiness as measured by the Children's Happiness Scale (CHS; Morgan, 2012).

There was a secondary qualitative question. What are the subjective, embodied experiences of children (gender differences were observed) as a result of regular engagement in Embodied-Mindfulness-based practice (framed as benefits, self-concept, subjective happiness, emotional balance, peers and family relationship, perceived practice value)?

### **Definition of Terms**

In an attempt to better understand the correlates between embodied mindfulness-based practices and their impact on children's wellbeing, it was important to define the terms

wellbeing, mindfulness, mindful meditation, embodiment, and creative expression as they pertain to this research study. Definitions for these terms follow.

**Wellbeing.** Historically, two approaches to wellbeing have emerged over recent decades resulting in questioning the notion and definition of wellbeing (Dodge, Daly, Huyton, & Sanders, 2012). The first approach derived from hedonic traditions where constructs such as positive affect, happiness, and life satisfaction are emphasized, while eudaimonic traditions concerned themselves with understanding the implication of positive psychological functioning and human development. According to Dodge, Daly, Huyton, and Sanders (2012), “most research now believes that wellbeing is a multi-dimensional construct” (p. 223) that encompasses psychological, social, and physical dimensions. Early attempts to define wellbeing by Bradburn (1969) referred to wellbeing in terms of a psychological construct: “An individual will be high in psychological wellbeing in the degree to which he has an excess of positive over negative affect and will be low in wellbeing in the degree to which negative affect predominates over positive” (p. 9). To add to this psychological understanding of wellbeing proposed by Bradburn (1969), subsequent authors have defined wellbeing as encompassing such dimensions as life satisfaction (Seligman, 2002), happiness (Pollard & Lee, 2003), and one’s quality of life (Rees, Goswami, & Bradshaw, 2010; Stratham & Chase, 2010; Zikmund, 2003). This has led to a greater understanding of the multidimensional aspects of wellbeing. Recently, Joseph and Wood (2010) have challenged the clinical psychology community to reflect on the epistemological foundation of wellbeing and noted the implications of moving the field of psychology toward the adoption of emotional or positive functioning as markers for wellbeing. According to Seligman (2011), the notion of functioning does not lie in happiness but rather in the “true, complex, nature of human flourishing” (Dodge et al., 2012, p. 222). Seligman (2011) even goes so far to state that

“the topic of positive psychology is wellbeing, that the gold standard for measuring wellbeing is flourishing, and that the goal of positive psychology is to increase flourishing” (p. 13). To add to the construct of emotional and positive functioning associated to wellbeing, Wallace (2006), defines wellbeing as being rooted in a wholesome way of life where mental balance is cultivated conatively, attentionally, cognitively, and affectively. For Wallace (2006), wellbeing is a state of mind. This was expanded by Dodge et al. (2012) to include social and physical dimensions that may be balanced by the level of resources verses challenges. Here, wellbeing is viewed as the state in which “individuals have the psychological, social, and physical resources they need to meet a particular psychological, social, and /or physical challenge” (Dodge et al., 2012, p. 230). Taking into consideration the wide spectrum of understanding of what constitutes wellbeing, wellbeing is “generally understood as [the] quality of people’s lives” (Statham & Chase, 2010, p. 2). This subjective understanding may vary tremendously in childhood populations as developmental markers and different foci of wellbeing are to be considered.

Children’s wellbeing may be understood as multidimensional, including physical, emotional, mental, and social markers (Statham & Chase, 2010). Although the quality of life may be understood through objective measures such as educational resources, health status, and income, this study concerned itself with subjective indicators such as perceived interpersonal strengths, family involvement, intrapersonal strengths, school functioning, and affective strengths. For the purpose of this study, childhood wellbeing was defined as the quality of life as measured through the subjective lens of the child and characterized by the achievement of the developmental and emotional milestones, healthy social development, and effective coping skills, such that mentally healthy children have a positive quality of life and can function well at home, in school, and in their communities.

*Knowing others is wisdom;  
Knowing the self is enlightenment.*  
(Lao Tsu, *Tao Te Ching*, Sutra 33)

**Mindfulness.** Mindfulness may be viewed as an inherent state of mind that offers a gateway to knowing oneself. Rooted in Buddhist traditions, mindfulness has received in the last three decades significant attention within the scientific and academic communities for its capacity to shift one's relationship to suffering (Charter, 2013; Chiesa, 2012; Kabat Zinn, 2011). Modern definitions of mindfulness differ from the more traditional views of mindfulness (Chiesa, 2012). It was noted that an in-depth exploration of traditional views and understanding of mindfulness were beyond the scope of this current study. That being said, in its simplest form, the Buddhist term for mindfulness is referred to in the Sanskrit word *Sati*, suggesting the "lucid awareness to what is occurring within the phenomenological field" (Chiesa, 2012, p. 256). According to Chiesa (2012), the term *Sati* can also be translated to *remembering* or memory, referring to the state of being that is beyond thoughts and emotions, also often understood as the place of equanimity that offers the opportunity to experience the world through the senses. In classical Buddhism, the development of *Sati* is not seen as an end in itself but rather valued for its capacity to reduce human suffering by correcting mental states (Chiesa, 2012). Another important distinction of mindfulness within Buddhist tradition is that it is associated with ethical development that encompasses cultivating patience, loving kindness, and compassion. The traditional definition of mindfulness also requires the understanding that mindfulness is seated in the ethical prejudgment of what constitutes wholeness rather than wholeness itself. This classical perspective differs from modern or Western perspective of mindfulness, which preoccupies itself with defining mindfulness as solely a state of mind.

Through a psychological lens, Charter (2013) suggests that mindfulness can be “difficult to define because it involves an interweaving of processes and attitudes, and shifts in perspective, and it is a process, a practice, a state, and an outcome” (p. 345). Understanding such difficulties, psychologists agree that mindfulness encompasses both attentional and acceptance-based components (Bishop et al., 2004; Coffey, Hartman, & Fredrickson, 2010). Mindfulness was initially described by Kabat-Zinn (1994) as being instrumental in secularizing mindfulness-based practices, as involving “paying attention in a particular way: on purpose, in the present moment, and non-judgementally” (p. 4). The attentional dimension of mindfulness pertains to the state of mind and awareness that arises from intentionally regulating observation of one’s thoughts, emotions, and sensations in any given moment (Coffey et al., 2010). Acceptance or the state of being open-hearted is also an essential construct to mindfulness and incorporates the capacity to embrace the various attitudes or opinions that arise in whatever circumstance, without judging or reacting to them (Kabat-Zinn, 2011). In acceptance, one no longer resists or clings to thoughts, feelings, ideals, or goals, resulting in attitudes of curiosity, friendliness, and compassion (Coffey et al., 2010). According to Bishop et al. (2004), “Mindfulness in contemporary psychology has been adopted as an approach for increasing awareness and responding skillfully to mental processes that contribute to emotional distress and maladaptive behavior” (p. 230).

In essence, for the purpose of this this study, mindfulness was defined as the capacity to observe open-heartedly one’s thoughts, emotions, and sensations in any given moment without judgment. This study aligns itself with the understanding that, “Mindfulness cannot be understood as a concept or as a cognitive exercise, but must instead be experienced” (Charter, 2013, p. 345) and that the most common path to cultivating such embodied experiences is through mindfulness-based meditation practices (Kabat-Zinn, 2011).

**Mindfulness meditation.** Mindfulness meditation can refer to the various techniques that facilitate mindfulness. “The capacity to evoke mindfulness ostensibly is developed using various meditation techniques that originate from Buddhist spiritual practices” (Bishop et al., 2004, p. 7). Although Western interpretation of traditional practices has resulted in the development of a variety of mindfulness-based techniques, they all are fundamentally similar in their procedures and goals (Chiesa, 2013). From a psychological perspective, the goal is that “Mindfulness training leads to a shift in consciousness that mediates a number of benefits to clients’ psychological, emotional, and physical wellbeing across a broad range of contexts” (Charter, 2013, p. 344). The process constitutes a bringing of awareness to current experiences, may it be by “attending to the changing fields of thoughts, feelings, and sensations from moment to moment—by regulating the focus of attention” (Bishop et al., 2004, p. 232).

It is also requisite to note the important distinction between mindfulness practices and concentration practices. Concentration practices are essentially concerned with the development of concentration through attentionality to a given object, such as a sensation, image, or sound. Meditation practices on the other hand are “concerned with the development of an open monitoring of the whole sensory and cognitive/affective fields and includes a meta-awareness or observation of the ongoing contents of thought” (Chiesa, 2013; Lutz et al., 2009). Recognizing such important delineation, mindfulness meditation was defined for the purpose of this study with children as those techniques that will cultivate open-hearted monitoring of cognitive, affective, and sensory fields which may result in the development of concentration and shifts in consciousness.

**Embodiment.** The study of “self” and consciousness has tantalized philosophers and mystics for centuries. Although Eastern-based sensory practices have opened the door to

consciousness for thousands of years, our modern Western views of consciousness only made their debut in the 1600s with philosophers such as Locke and Descartes, who viewed consciousness as a state of mind that is incorporeal, separate from the body. Descartes' dualistic views were later challenged by phenomenologists such as Husserl, Nietzsche, Heidegger, and Merleau-Ponty who acknowledged the embodied nature of man as essential in shaping the experience of the world one lives in (Abram, 1996). Abram (1996) further proposes that, "The living body is thus the very possibility of contact, not just with others but with oneself—the very possibility of reflection, of thought, of knowledge" (p. 45). It is through the body itself that our true essence or self is experienced, may it be at all levels of human development.

For the purpose of this research, the term embodied was defined as the incarnate form of self, manifested through unified body parts, and inseparable from awareness. As suggested by Will (2013), the term embodied cannot be separated from mindfulness as, "the experience of the body can only be known through the awareness of sensations" (Kindle Location 277). Will (2013) also postulated that "mindfulness is not so much a condition that we need to manufacture or create as it is the natural state of a body that has learned how to become more comfortably aligned, relaxed, and resilient" (Kindle Locations 170-171). In the understanding that both embodiment and mindfulness are necessary for the return to self, the term Embodied-Mindfulness was utilized to depict the mind/body connection without giving preference to either form: body (embodiment) or consciousness (mindfulness).

**Creative expression.** Creative expressions, such as the visual arts, storytelling, music, dance / movement, drama, or any other creative processes have been at the root in all civilizations and fundamental to one's wellbeing and overall health (Stuckey & Nobel, 2010). According to Stuckey and Nobel (2010), "Art helps people express experiences that are [often]

too difficult to put into words” (p. 256). Although the research regarding creative expression is relatively new, preliminary research findings offer clear indications that music engagement, visual arts, movement-based creative expression, and expressive writing has significant positive effects on health and wellbeing (Stuckey & Nobel, 2010).

Creative expression can be characterized by the active participation in a process of bringing something new into existence. According to Crick (2003), the creative process is considered an expression of self. Through the artistic manipulation of objects and symbols, the expression of self in and through a medium is the foundation of creative expression in children. In this landscape the unexplored imaginal is called to emerge where material and expression may become one. According to Salser (2014) creative expression is, “the language that lives in the heart and the spirit. It’s the language that emerges when you find the safety to really listen to your heart” (para 4). For the purpose of this study, creative expression refers to the free form creative process, may it be imaginative expression, music, art, and/or creative movement that engages children’s minds, bodies, and senses toward self-expression.

### **Transpersonal Relevance**

The societal mandate to developmentally support primary school children reaches far beyond the scope of academic performance or of addressing behavioral and emotions constraints, rather it lies in the ground of being, where as suggested by Anderson (2011), its primary mandate is to cultivate the values and experiences that inform individuals of their highest human potential. For transpersonalists, this humanistic perspective of education transcends the confines of traditional educational and psychotherapeutic values, where performance and pathology often dictate children’s educational landscapes. Transpersonal psychology attempts to honor a holistic and integrative setting where the cultivation of the most transformative human values guides us

closer to the essential nature of embodiment, interconnectedness, altruism, empathy, compassion, wisdom, and consciousness (Hartelius, Caplan, & Rardin, 2007).

Within the context of the primary school setting, transpersonal approaches that foster mindfulness may address emotional and behavioral concerns such as bullying, unhealthy friendship dynamics, low self-esteem, and attention deficits in class environments, as well as help foster more positive and holistic approaches to existence that include attentiveness, cooperation, respect, altruism, happiness, peace, empathy, and compassion. Mindfulness, developed through meditative or contemplative practices, has demonstrated itself to be fundamental in fostering the qualities often related to higher states of consciousness and existence. Within school children such transpersonal expressions may result in prosocial behavior, altruistic attitudes, and compassion for others. As defined by the Dalai Lama (2001), “Meditation is the process whereby we gain control over the mind and guide it in a more virtuous direction” (p. 46). This guided direction allows for an intrinsic capacity to be in the present moment, alert and present to one’s experience. Understanding that life stressors are often at the root cause of pathologies as well as recognizing that stressors continue to escalate within our schooling systems with academic demands at the forefront, the necessity to cultivate and educate our children in practices that promote wellbeing is imperative.

It is only within the last decade that a new wave of research has emerged within our scientific communities, where both the masculine and the feminine, the mind and the heart, the objective and the subjective, the explicit and implicit, the analytical and the intuitive, are recognized as equally valuable to the exploration of human’s expansive nature. As Anderson (2011) suggested, “the paradigm of science is shifting” (p. 4) and a new understanding that empirical reductionist models alone may not satisfy the thirst for deeper knowing is emerging.

This is particularly true within the world of psychology, and more specifically within transpersonal research, where intrinsic spiritual dimensions may not be observable through an objective, external lens. Historically,

[S]o often our research methods fall flat before the fullness and extraordinary experience of being human [and] it may be time to re-enchant our methods of inquiry and related epistemologies with the rigors and vigor of imagination and more fully dimensionalized concepts and theories. (Anderson, 2011, p. 4)

New, creative methodologies using integral and transpersonal models of inquiry have surfaced to honor the continuum of lived experiences, where the sacred dimensions of proprioception, activation of the senses, play, imagination, and artistic expression are utilized as means of eliciting a deeper understanding of the subjective landscape (Anderson & Braud, 2011). Such qualitative methods offer a unique path into exploring typological functions of knowing that may be complimentary to generalized quantitative findings. A call for increased sophistication of evidence had led to a Mixed-Method research approach where both quantitative and qualitative data are inherent to data collecting (Creswell & Plano Clark, 2011).

Through the use of an Explanatory Mixed-Method approach, the subjective views of children's understanding of wellbeing were identified. The transpersonal approach to this research method not only offered an opportunity to combine quantitative and qualitative research techniques, methods, approaches, concepts, and language into a single study (Johnson & Onwuegbuzie, 2004), but also allowed for complementary, holistic, and integral skills (Anderson & Braud, 2011) to elicit ways of knowing throughout the research investigation.

### **Research Design and Method**

This explanatory Mixed-Method study evaluated the efficacy of a mindfulness-based curriculum in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, affective strengths of primary school children ages 9-12, as

well as elicited a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within [three](#) primary schools in Goleta, California. In this Explanatory Mixed-Method study, 4th to 6th grade children, ages 9 to 12, were introduced to a 15-20 minute mindfulness class twice a week, along with a 5 minute mindfulness practice 3 days of the week via audio recordings on the days that mindfulness sessions are not taught—totaling 55 minutes of contact per week. The mindfulness program, innerU, is composed of 16 mindfulness sessions taught over a period of 8 weeks, which utilized nature inspired imagination, sitting and kinesthetic exercises, and creative expression journaling as the foundation of its educational platform. In addition, the program was developed to introduce mindfulness skills progressively in order to gently build attention and inner exploratory capacity throughout the program. The study assessed behavioral, emotional, and social markers by evaluating interpersonal strengths, family involvement, intrapersonal strengths, school functioning, and affective strengths. These were operationalized using the Behavioral and Emotional (BERS-2; Epstein, 2004) assessment tool, the Children’s Happiness Scale (CHS; Morgan, 2012), and the Student’s Life Satisfaction Scale (SLSS; Huebner et al., 2003). Parental informed consents were obtained prior to the beginning of the study.

Elementary students from the 4th to 6th grades were selected to participate in the program on the basis of three considerations:

1. Specific primary school program needs, which identify behavioral and emotional concerns in this population.
2. A sufficient number of students from each school site, which allowed for executing the intervention and gathering data from a control group in the same site.
3. Student’s ability to engage in subjective assessment measures through sufficient cognitive and reading capabilities.

Qualitative dimensions of the study utilized student journaling (writing and/or drawing) as well as selected follow-up interviews with exemplars. Interviews allowed the researcher to gain deeper understanding of the students' subjective experience of engaging in embodied mindfulness-practice and for the students to anchor their understanding of wellbeing and deepen a connection to their subjective lived experience.

### **Organization of the Following Chapters**

Chapter 2 presents the developmental considerations in late childhood, a brief overview and understanding of creative expression and its benefits, a broad understanding of neuroscience as it pertains to children and a whole brain model, a review of the theoretical and historical development of mindfulness, and a review of the literature regarding the empirical background of mindfulness-based practices as well as an understanding of its efficacy within primary school settings. This was addressed by briefly reviewing the benefits of mindfulness in adults as well as exploring the various psychological themes that demonstrate wellbeing. The greater part of this chapter provides a detailed review of the literature pertaining to mindfulness-based meditation research and its efficacy within the context of primary school environments.

Chapter 3 presents the Explanatory Mixed-Method approach to this study, outlining the procedures, ethical considerations, delimitations, and foreseen limitations. Chapter 3 explains in detail the Explanatory Mixed-Method approach including the quantitative and qualitative components of the study. The following chapter also provides an overview of the procedures and the measurement tools employed to operationalize and validate the research. These tools include: the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004); Children's Happiness Scale (CHS; Morgan, 2012); and the Student's Life Satisfaction Scale (SLSS; Huebner et al., 1991). Chapter 3 concludes with a brief discussion of the researcher's efforts in implementing

ethical procedures throughout all phases of the study and exercised methods of validity verification (particularly pertaining to the subjective, qualitative measures).

Chapter 4 provides an overview of the qualitative and quantitative results of the study. In addition to presenting sample demographics, quantitative results are presented by test measure including the BERS-2 Teacher Scale, the BERS-2 Student Scale, the [Student's](#) Life Satisfaction Scale, and the Children's Happiness Scale. Finally, qualitative results were also presented by presenting student creative expression journals which have been organized by week and finally student and teacher interviews that have been organized by interview question.

Chapter 5 presents a quantitative data analysis summary followed by a detailed a qualitative data analysis. The qualitative analysis offered insight into the student journals, which have been organized by weekly responses, the student interviews and teacher interviews, organized by interview question. This chapter also offers an integrative summary and discussion as well as limitations and recommendations.

## Chapter 2: Literature Review

*“When you go deep inside yourself and ask, ‘Who am I?’ you are like the whale. And after a long time down there, finally you will surface, taking a deep, deep breath. You give that breath of life for all you learned so it can live.”* Angaangaq Angakkorsuaq, Eskimo Elder

For the purpose of gaining a better understanding of the role of secular Embodied-Mindfulness practices in primary schools settings and its potential efficacy to foster wellbeing in children, the following literature review addresses the developmental, neurological, and kinesthetic considerations within primary school children and provides a theoretical and empirical framework relevant to mindfulness-based practices. Due to the fact that the majority of evidence-based research has been conducted within an adult population, this chapter necessarily provides a brief overview of recent research conducted with adults as a means to better understanding the potential benefits of mindfulness with children. In addition, an overview of the existing empirical research within elementary school settings was provided as a means to provide an in-depth analysis of these studies’ methodologies, results, and limitations. Reviewed researches were delimited to published, peer-reviewed randomized controlled trials (RCTs) that assess psychological, somatic, behavioral, and social outcomes of mindfulness-based meditation practices.

### **Developmental Considerations of Late Childhood**

As suggested by Craine (2011), “We all have assumptions about the nature of development” (p. 1). As an educator or parent, it is commonly assumed that children’s development is shaped by what we teach them; may it be through modeling, corrective measures, or motivation. It is often assumed that behavioral and existential outcomes have been taught and are the product of one’s social environment. Yet such environmental learning theories may be brought into balance by other theoretical models that consider how children intrinsically grow

and learn on their own. The following addresses the intrinsic and natural developmental tendencies of children in late childhood as well as how environmental considerations can support such tendencies within the construct of introducing Embodied-Mindfulness into a school-based curriculum.

Armstrong (2007) speaks of late childhood, which takes place approximately between the ages of 9 to 12, as an important transitional stage of human development. According to Armstrong, as children cross this new developmental portal, they leave behind the golden age of childhood where youthful spirituality, imagination, and creativity come to a close, making way for greater social responsibility, academic pressures, and burdens imposed by peers. Children entering this chapter of life begin to feel, “a palpable tension [which] can be felt building up inside” (Armstrong, 2007, p. 110). This is a noticeable departure from the carefree and often joyful, magical expression of middle childhood (approximately experienced between the ages of 5 to 8).

**Creative expression.** Mindfulness-based practices, especially when augmented with creative expression, can potentially help children in late childhood to deal with newly experienced internal tensions as well as help process, address, support, and possibly counter emergent burdens experienced at this stage of development. In a meta-analysis conducted by Bungay and Vella-Burrows (2013), creative expression not only supports the overall creativity of children, it is recognized as being valuable in promoting mental health and wellbeing. In addition to building self-esteem and confidence, a number of studies reported increase in prosocial engagement, positive behavioral changes, and increase academic outcome. According to Oftedal (as cited in Bungay & Vella-Burrow, 2013), creative expression offers children the capacity to express their stories through imaginal exploration without hindrance and in flow.

In research with adults, creative expression has been observed as offering states of consciousness similar to mindfulness and meditative practices. Such states of consciousness include the withdrawal of the external senses phase, a concentration phase, an unbroken concentration phase, and an integration phase (Horan, 2009). For centuries Buddhists have utilized creative art expression such as mandala creations as a means to further their meditative practices. A recent research by van der Venet and Serice (2012) replicated an experimental study by Curry and Kasser (2005), which tested whether coloring a mandala would reduce stress. Findings supported the initial study by demonstrating the benefits of anxiety reduction. Although these findings were conducted with adults, such creative outlets may also be deemed valuable for the developmental considerations of children as they encourage focus, relaxation, and flow.

**Biological dimensions.** It is also noted that this period of child development is marked by significant biological and hormonal changes. According to McClintock and Herdt (1996), “there is a maturation of adrenal glands during middle childhood, termed *adrenarche*.” It is between the ages of 6 and 11 that the adrenal glands begin producing hormones responsible for sexual attraction and equally “critical for understanding interpersonal and intrapsychic development in middle childhood” (pp. 178-179). With such new hormonal realities comes the requirement for navigating new interpersonal landscapes that may be awkward at first. The use of embodied-mindfulness practices could potentially support the understanding of internal biological dynamics taking place at this stage of development while helping to facilitate blossoming interpersonal landscapes.

According to Armstrong (2007), “the biochemical changes of late childhood also appear to herald a shift in the sense of identity” (p. 113). In middle childhood, a new sense of being emerges and departs from a more transpersonal and *numinous* dimension as expressed in early

childhood, to develop into a distinct separate understanding of *self*. Such a transition comes with mixed blessings, “As the child’s sense of *I* becomes stronger, so too does the feeling of separation from the world” (Armstrong, 2007, p. 114). These biological and identity developments on one hand support new introspective capabilities, including reflecting and thinking, yet also mark the beginning of a new feeling of existential loneliness which reaches its full significance in preadolescence years. Although Armstrong (2007) suggests that schools can alleviate such loneliness, the introduction of transpersonal practices such as mindfulness could potentially serve to help remember one’s youthful spiritual origins and interconnection with the world we live in. By extension, the researcher believes that cultivating Embodied-Mindfulness in middle childhood could not only serve to tend to intrapersonal and interpersonal relationships, school functioning, and affective strengths of children but also serve to help direct attention to present experiences, cultivate a practice that can help deal with the neurotic tendencies of the mind (Deatherage, 1996), promote a deeper inner knowing (Palmer, 1998), and thin the veil of consciousness in order for children to remember their inherent interconnectedness (Carvalho, 2014). Here, without hindering the important development of the ego, children could potentially be encouraged to cultivate their inherent nature and connection to the world they live in, resulting in minimizing existential loneliness.

Although adolescence is often recognized for its socio and emotional challenges, environmental factors also contribute to potential turbulences in middle childhood. Exposure to media filled with violence and aggression (television and video games), internet and social compliances demands, as well as the pressure of self-image leaves little room for childhood exuberance (Armstrong, 2007). It is therefore presumed that the practice of embodied mindfulness could serve to help mitigate the anxiety and stresses that accompany such realities.

The confounding stressors of emergent *adrenarche* or also known as the early sexual maturation stage, increased learning pressures, identity transformation, and new social landscapes may leave youth mildly chronically dysregulated.

**Neuroscience and autonomic response.** It is also important to recognize the essential nature of the brain. According to Wolpert (2011), the function of the brain is to create adaptable and complex movements to ultimately change the world around us. All actions, even verbal communications, are all mediated through the contractions of muscles. Thus one could argue that movement is an essential and inherent expression of existence. Taking into consideration this inherent nature, it is important to understand that, “motor control is fundamentally concerned with the relationship between sensory signals and motor commands” (Wolper & Ghahramani, 2000, p. 1212), both considered in the practice of embodied mindfulness. In addition, “sensorimotor integration, sensory input and motor output signals are combined to provide an internal estimate of the state of both the world and one’s own body” (Wolpert, Goodbody, & Husain, 1998, p. 529), supporting not only a greater capacity for awareness but also contributing to the existential understanding that we are not separate from the world we live in. Our interconnectedness contributes by way of neurological and somatic expressions that may be increased or diminished by the balance of life stressors.

The compounded stressors associated with developmental and everyday realities of middle childhood may result in the dysregulation of the autonomic nervous system (ANS). Without elaborating on the neurological and physiological effects of stress responses, it is important to understand that anxiety or fear activates the sympathetic nervous system which sends signals to the brain and body in order to engage in what is now understood as fight, flight, or freeze responses (Levine & Frederick, 1997; Ogden, Pain, & Minton, 2006; Porges, 2009a).

As a result of this biological response, not only is the autonomic nervous system placed on high alert and ready to move via acting and reacting, signals are sent to cut off communication with the prefrontal cortex or thinking brain capacity, to make way for more primitive and efficient threat-addressing responses (Porges, 2009b; Seigel & Bryson, 2011). This results in a highly aroused nervous system accompanied by a lack of effective decision-making skills, both of which are not conducive to creation of an optimum learning environment and overall wellbeing. The consequence of such dysregulation not only impedes learning itself, but equally affects peer relationships through diminished somatic or empathic attunement. To prevent such negative or destructive autonomic responses, researchers have turned to Eastern traditions to better understand the powerful influences of contemplative practices on the ANS (Desbordes et al., 2012; Kabat-Zinn, 2005). Various studies have demonstrated that the introduction of mindful meditation and body awareness practices are valuable means to foster ANS regulation within the mind-body (Desbordes et al., 2012; Hofmann, Grossman, & Hinton, 2011; Kabat-Zinn, 2005; Lang et al., 2012; Lutz et al., 2008).

With a greater understanding of inner biological and psychological landscapes, science has begun to grasp that compassion in and of itself can be understood as a state of being which flows from the inside out. An example of such an understanding is through our capacity to better comprehend the influences of the *mirror neuron system* (MNS) and compassion. The MNS, typically found in the primary motor cortex of the human brain, also plays a significant role in affecting the autonomic nervous system and influencing empathic responses (Iacoboni, 2008; Kiesling, 2012; Oberman, & Ramachandran, 2008). According to Oberman and Ramachandran (2008), the MNS, which is referred to as the basis of civilization, plays a role in the development of empathy. These mirror neurons, found in the frontal lobes, rostral inferior parietal areas,

amygdala, and the insula (Iacoboni et al., 2005), fire off not only in individuals experiencing a particular situation, but also in people witnessing the experiences of another, resulting in neural signals sent to the ANS (Rizzolatti & Craighero, 2005). Such signaling provides regulation or disregulation responses depending on the circumstances. Iacoboni et al. (2005) offer this perspective:

I think one of the primary goals of imitation [mirroring] may actually be the facilitation of an embodied “intimacy” between the self and others during social relations. The tendency of imitation and mirror neurons to recapture such intimacy may represent a more primary, original form of intersubjectivity from which self and others are carved out. (p. 69)

In essence, the MNS provides neural mechanisms for understanding the intentions of other people (Iacoboni et al., 2005). In addition, Lutz, Greischar, Perlman, and Davidson (2009) also concluded that compassion enhances the emotional and somatosensory brain representations of others’ emotions. It is for this reason that the effort to achieve coherence of the body and mind on the part of children is viewed herein as an inherent and essential expression of intrapersonal and intrapersonal wellbeing. It is thus extrapolated that children training in both mindfulness and heartfulness practices which result in embodied expressions exemplified by coherence, would be critical for a regulated autonomic nervous system, and for developing the capacity to care and understand others. It is within this understanding that embodied mindfulness could prove a valid tool in supporting the neural and somatic wellbeing of children.

### **Theoretical Perspective of Mindfulness**

Mindfulness is grounded in a rich and complex Buddhist tradition where presence, attention, and insight give rise to a clearer comprehension of the world. Despite an extensive body of knowledge on the subject, the current study solely addresses a Western view of mindfulness. The following addresses some of the foundational components of mindfulness,

conceptualized with adult practitioners in mind. Applications for mindfulness meditation with younger populations are addressed under a separate heading.

One of the important considerations of mindfulness is its universality. According to Kabat-Zinn (2011), the 2600-year-old Buddhist principles along with its mindfulness meditation practices, have been found to transcend national and cultural values. Kabat-Zinn (2011) continues by stating that despite the significant epistemological differences of Buddhism in contrast to those of the scientific world, the cultivation of mindfulness in its largest sense can be heard, embraced, and cultivated in commonsensical and universal ways in secular settings; thus rendering it universal. The universality of the program allows for cultural considerations, which are growing in importance in American schools today.

Mindfulness may also be characterized by three essential components: *intention*, *attention*, and *attitude* (Shapiro, Carlson, Astin, & Freedman, 2006). Within modern psychology, the term *intention* has lost in some way its original significance. An observable shift from the traditional Buddhist understanding that mindfulness meditation was a means to attain enlightenment and the development of compassion for all beings, to a means to achieve self-regulation and self-exploration can be observed. Such later understanding may lack in depth and altruistic complexity. Modern psychology also added a reductionist dimension by viewing mindfulness practices as a means to mediate pathologies. *Attention* also plays a critical and fundamental role in mindfulness. “In the context of mindfulness practice, paying attention involves observing the operations of one’s moment-to-moment, internal and external experience” (Shapiro et al., 2006, p. 4). In this space, individuals are invited to attend to the experience in itself while suspending interpretation. Shapiro, Carlson, Astin, and Freedman (2006) continue by suggesting that, “Attention has been suggested in the field of psychology as critical to the healing

process” (p. 4). Finally, mindfulness refers to the quality of attention one brings to the practice of meditation. In essence, it is the *attitude* brought to the attention. Attention can differ in quality from cold and critical, to openhearted, friendly, and compassionate. This greatly influences the way an inner and outer world is experienced. Therefore, as Shapiro et al. (2006) elude, it is essential to include the heart qualities with mindfulness, thus incorporating loving-kindness or compassion meditations.

Compassion meditation, or *Metta* per the Pali term, is generally defined as the traditional Buddhist practice of cultivating compassion, joy, equanimity, and a sense of love and connectedness with self and others (Kristeller & Johnson, 2005). At its foundation, acceptance and satisfaction with oneself that subsequently leads to the acceptance of others, is fostered. More specifically, the practice traditionally begins with embodying loving kindness toward oneself, then proceeds into a transpersonal dimension where one experiences all-encompassing love and caring toward others, may it be family members, friends, strangers, enemies, humanity, and the universe (Dalai Lama, 2001). Compassion meditation “provides participants with insight into the sense of empowerment that arises when one uses a calm, centered, focused mind to evoke feelings of love, kindness, and goodwill” (Leppma, 2012. p. 197). According to Kabat-Zin (2005), compassion meditation can help foster positive emotions and enable the letting-go of resentment and other negative emotions. I suggest that such positive emotions and letting go would greatly benefit the interpersonal social dynamics of primary school children. Through mindfulness, compassion meditation requires one to “develop an affective state of unconditional kindness to all people” (Hofmann et al., 2011, para 7) also known as loving kindness, while cultivating states of compassion, essential for prosocial qualities and healthy interpersonal relationships in children.

## **Mindfulness Meditation Empirical Research and Wellbeing in Adults**

Before reviewing the research on mindfulness meditation within school settings, a brief overview of the influence of mindfulness on wellbeing in adults is provided. This serves not only to anchor mindfulness research with children within a broader context of understanding; it also serves as a means to identify the potential benefits of mindfulness for children in school settings despite a lack of empirical evidence within this emerging field.

Within a Western framework of understanding, mindfulness research has experienced three significant waves of growth over the last 30 years. The first research wave was seeded by Kabat-Zinn (2011) in the 1970s, with the instruction of Mindfulness-Based Stress Reduction (MBSR), while a second wave of research has led to Designed for Adults, which was initially designed for adults within a medical model. Subsequently another wave of research has led to a new generation of mindfulness-based interventions such as Dialectical Behavior Therapy (DBT; Linehan, 1993), Mindfulness-Based Cognitive Therapy (MBCT; Segal et al., 2002), Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999); and Mindfulness-Based Relapse Prevention (Witkiewitz et al., 2005), which were developed to cater to the unique features of a variety of clinical conditions (Charters, 2013; Chiesta, 2012; Keng, Smoski, & Robins, 2011). Finally, the third wave of mindfulness research began emerging within nonclinical environments such as school environments in the last 8 years.

Before reviewing the research on mindfulness meditation within school settings, a brief overview of the influence of mindfulness on wellbeing in adults is provided. This serves not only to anchor mindfulness research with children within a broader context of understanding; it also serves as a means to identify the potential benefits of mindfulness for children in school settings despite a lack of empirical evidence within this emerging field. As summarized in several meta-

analyses, numerous studies have provided strong evidence regarding the benefits of mindfulness interventions in adults across a multitude of outcomes (Irving, Dobkin, & Park, 2009; Keng et al., 2011). These benefits may be categorized into four groupings associated with wellbeing: psychological, somatic, behavioral, and social health.

As Keng, Smoski, and Robins (2011) proposed, “mindfulness is the miracle by which we master and restore ourselves” (p. 1041), and it has historically been theoretically and empirically associated with psychological wellbeing. According to Keng et al., (2011), mental health research findings suggested that mindfulness meditation improves cognitive functions such as focusing and attention (Schmertz, Anderson, & Robins, 2009; Tang et al., 2007), and fosters pleasant affect (Brown & Ryan, 2003; Ma & Teasdale, 2004). It has also demonstrated significant negative correlations between mindfulness and distress (Bullis, Bøe, Asnaani, & Hofmann, 2014), depression (Cash & Whittingham, 2010), rumination (Hawley et al., 2014; Raes & Williams, 2010), cognitive reactivity (Raes, Dewulf, Van Heeringen, & Williams, 2009), anger (Rodriguez Vega et al., 2014), and with disturbances in emotion regulation (Jazaieri, McGonigal, Jinpa, Doty, Gross, & Goldin, 2014). Other important dimensions of psychological wellbeing associated with the practice of mindfulness include higher levels of life satisfaction (Brown & Ryan, 2003), positive emotions and quality of life (Nyklíček, Dijkstra, Lenders, Fontein, & Koolen, 2014), vitality (Brown & Ryan, 2003), self-esteem (Rasmussen & Pidgeon, 2011), empathy (Dekeyser, Raes, Leijssen, Leysen, & Dewulf, 2009), and optimism (Brown & Ryan, 2003).

Mindfulness-based research has also pointed to somatic benefits, including the management of chronic pain (Garland et al., 2014; McCracken & Vowles, 2014; Ussher et al., 2014), improvement in neuroendocrine and immune functioning (Davidson et al., 2003; Tang et

al., 2007), regulation of the autonomic nervous system and decrease in diastolic blood pressure in women (Chen, Yang, Wang, & Zhang, 2013), reduction of irritable bowel syndrome symptoms (Zernicke et al., 2013), and other stress based symptoms.

Behavioral outcomes have also been associated with the practice of mindfulness in adults. Health-related behaviors include reductions in binge eating (Marchiori & Papiés, 2014; Masuda & Hill, 2013) and substance abuse and other addictive behavior (Felver, 2014). Social considerations and implications of mindfulness-based practices include reduction in social anxiety (Rasmussen & Pidgeon, 2011), and the promotion of prosocial behavior. Although the above findings may not apply to children, it is important to note that such results may indicate potential benefits of mindfulness for children when adapted to children's developmental needs and the setting in which it is employed.

### **Clinical Research Review—Mindfulness for Children**

Research on the effects of mindfulness-based practices with children and youth has paled in contrast to the extensive research with adults. Early studies on mindfulness reflected a reasonable base of support for the feasibility and acceptability of mindfulness approaches for children (Burke, 2009). It was also suggested by Burke (2009) that many of the earlier trials lacked in methodological consideration, sample size, and adaptation of the mindfulness programs based on age-related developmental needs of the children. Despite such limitations, the growing body of evidence has suggested the efficacy of mindfulness to support wellbeing. Research outcome with youth has suggested the efficacy of mindfulness to help: reduce ADHD behavior (Kanagy-Borofka, 2013; Klatt et al., 2013; Mendelson et al., 2010; van der Oord, Bogel, & Peijnenburg, 2012), improve academic outcomes (Bakosh, 2013), reduce anxiety (Napoli et al., 2005; Semple et al., 2010; Van de Wiejer-Bergsma et al., 2012), improve behavioral outcome

(Black & Fernando, 2013; Flook et al., 2010), improve emotional reactivity (Saltzman & Goldin, 2008), reduce signs of depression (Joyce et al., 2010), improve attention and focus (Napoli et al., 2005), enhance the ability to self-regulate (Beigel et al., 2009), and improve the ability to trust friends (Mendelson et al., 2010), thus contributing to the overall wellbeing of children. Although historically mindfulness has mainly been used in clinical settings to address mental health problems, positive psychology is turning to mindfulness as a potential preventative measure and life skill within school settings (Bakosh, 2013; Coholic, Eys, & Lougheed, 2012; Flook et al., 2010; Klatt, Harpster, Browne, White, & Case-Smith, 2013; Kuyken et al., 2013; Semple, Lee, Rosa, & Miller, 2010; van der Oord et al., 2012).

### **Empirical Literature Review—Mindfulness in Primary School Settings**

Although significant research in the last 30 years has led to a comprehensive understanding of the positive influences of secular and agnostic mindfulness-based practices in adults and in children within clinical environments (Keng et al., 2011), it is only recently that science has begun to explore the implications of mindfulness meditation beyond clinical environments and into generalized educational school settings. Several relevant mindfulness-based studies in primary school environments have been identified as demonstrating promising results in helping children cope with anxiety (Napoli, Krench, & Holley, 2005), ADHD symptoms (Klatt, Harpster, Browne, White, & Case-Smith, 2013; van der Oord et al., 2012), reduce stress and anxiety (Kuyken et al., 2013), improve academic performances (Bakosh, 2013), enhance social-emotional resiliency (Semple et al., 2010), improve executive functions (Flook et al., 2010) and minimize emotional reactivity (Coholic et al., 2012). All studies trained students in mindfulness practices adapted from Mindfulness-Based Stress Reduction (MBSR), however most research programs varied in core curriculum delivery and/or research method. For

inclusion in this review, the mindfulness interventions had to be relevant to children ages 9 to 12, had to be conducted in a primary school educational setting or related educational environment, had to loosely follow Mindfulness-Based Stress Reduction protocols, and had to be conducted within the confines of a controlled research with control and intervention conditions. The following studies met such criteria and are summarized in Tables 1a and 1b. Researches have been presented in chronological order.

One of the first published studies to evaluate mindfulness training within nonclinical primary-school environment was conducted by Napoli, Krench, and Holley (2005). The research used a randomized controlled trial (RTC) design to evaluate the efficacy of an integrated mindfulness and relaxation program (Attention Academy Program) on a group of 228 elementary students from two schools (120 male and 109 female), ages 5 to 9. The Attention Academy Program was formulated based using MCSR protocol including awareness exercises, various activities, and the development of a mindful way of being. The intervention was compared to a control group that engaged in a quiet reading activity. The program was conducted for a period of 24 weeks comprised of a total of 12, 45 minute sessions, equating to 9 hours of contact. The program was delivered by two expert trainers in mindfulness and MBSR and conducted in place of the physical education classes. Students had to complete all 12 sessions to be included in the final data analysis. Of the 228 students 34 students missed one or more sessions and were excluded from the final data set resulting in 194 students.

Three measures were considered for the study and administered pre and post training: The ADD-H Comprehensive Teacher Rating Scale (ACTeRS) which measures classroom behavior associated with attention, hyperactivity, social skills and oppositional behavior, the Test of Everyday Attention for Children (TEA-Ch), which measures sustained and selective attention

using five subtests, and the Test Anxiety Scale (TAS), which measures student self-evaluation, worry, physiological reactions, and concerns about time limits. Measures were compared using a paired *t*-test and showed statistically significant results: TEA-Ch Selective Attention subscale ( $p < .001$ ), ACTeRS Attention Subscale ( $p = .001$ ), ACTeRS Social Skills Subscale ( $p = .001$ ), and Test Anxiety Scale ( $p = .007$ ). These findings suggested an improvement in selective attention and social skills as well as a reduction in teacher-reported ADHD symptoms. Limitations to the study were reported as having to change the existing curriculum by replacing the physical education class with the Attention Academy Program for 24 weeks. Understanding the importance of movement and physical activity for learning and cognitive development in children (Raine et al., 2013), it is noted by this researcher that choosing to conduct the mindfulness program in place of the physical education class may prove to be ethically inappropriate as such decision could be potentially detrimental to the overall health and learning capacity of the children. In addition, children are denied socialization opportunities that may take place in group activity opportunities often experienced in sports engaged during physical activity. It is also important to note that the researchers did not report the number of students that participated in the weekly Attention Academy Program per class. In addition, it was reported by the authors that socioeconomic status was not collected nor were the instruments used optimized for children this age. The large number of students made it equally difficult to analyze the data. In this study, the recognized limitations above were addressed by a careful adaptation of the principles and delivery of MBSR to the developmental needs of student participants (by emphasizing embodiment, movement, imagination, and creative expression); offering mindfulness training during class time (and not in lieu of physical education); accounting for

students' participation in the program via school attendance; establishing social-economic status via parental survey; and utilizing the BERS-2 instrument that has been optimized for children.

Flook et al. (2010) continued to expand elementary school setting research by evaluating the efficacy of mindfulness practices to help develop executive functioning. They suggested that finding ways to develop executive functioning early in life results in a positive impact on children's social-emotional and academic growth. Sixty-four students (35 boys and 29 girls), ages 7-9, were randomly assigned matching for classroom, gender, and age. The program was delivered for 30 minutes twice a week, a total of 9 contact hours, at an urban on-campus elementary school at the University of California, Los Angeles. Students represented a diverse ethnic mix with 45% Caucasian, 23% Latino, 14% Asian, 9% African American, and 9% other. The students were randomized into blocks where two intervention classes ( $n = 32$ ) participated in the Mindfulness Awareness Program (MAP), formulated based on the MBSR protocol, while the control group ( $n = 32$ ) read in silence. The MAPs training was developed by one of the study's authors, Susan Kaiser Greenland from the Inner Kids Foundation.

The Behavior Rating Inventory of Executive Function (BRIEF) was completed by both parent and teacher, for each student, prior and following the program. The BRIEF includes eight clinical scales (Inhibit, Shift, Emotional Control, Initiate, Working Memory, Plan/Organize, Organization of Materials, and Monitor) to form two indices, Behavioral Regulation Index (BRI) and Metacognition Index (MI), as well as an overall Global Executive Composite (GEC). Results demonstrated that all scales used in the study failed to reach significance, with all  $p$ -values greater than .05. Individual  $p$ -values were not published for each specific index or subscale. Although the study did not reach an overall statistical significance, observable differences were noted in children who were less regulated. Less regulated students showed moderate

improvement in EF compared with controls in both teacher and parent ratings. The teacher BRIEF results showed an overall effect of EF with  $p = .005$  as well as significant effect for each indices with GEC  $p = .001$ , MI  $p = .011$  and BRI  $p = .023$ . The parent BRIEF correspondingly showed an overall effect with  $p = .020$  with noticeable effect for each indices with GEC  $p = .006$ , MI  $p = .016$ , and BRI  $p = .004$ . It is also important to note that the MAPS program primarily included sedentary activities, seated games, periods of silent meditation, and group sharing, and did not include yoga movement typical of a MBSR program. This may help to demonstrate the viability of such programs without a movement component to it, challenging evidence that suggests the importance of movement for learning (Raine et al., 2013). This being said, it was not noted when the program was conducted. If the children experienced movement prior to the MBSR participation, for example first thing in the morning, after recess, or right after lunch, the seated, silent meditation would have acted as a balancing agent to regulate the existing physical activity.

Reported and perceived limitations to the study were that the program required expert training, smaller class sizes (16 students verses the typical 25 students in public school settings), and changes to the existing curriculum to accommodate for the mindfulness practice. The current study suggests mitigating the above mentioned limitations by ensuring a movement based curriculum that incorporates a proven mindfulness program within standardized classroom sizes. In addition, attention was given in the current study to consulting with the school's principal and participating teachers to ensure that the training and practice was complementary to the existing curriculum rather than perceived as requiring special accommodation.

A recent study in a school setting conducted by Klatt, Harpster, Browne, White, and Case-Smith (2013), suggested that mindfulness-based practices positively influence Attention

Deficit Hyperactivity Disorder (ADHD). The researchers conducted a noncontrolled feasibility study where third grade students ( $N = 41$ ; 16 male and 25 female) were asked to participate in a school-based, Mindfulness-based intervention program. The Move-Into-Learning program formulated was based on a variety of mindfulness-based interventions as well as yoga, also included music, creative writing, visual arts, and an adaptive inquiry component to cultivate positive skills, support systems, and coping mechanism. A pretest and posttest single group design with two classrooms was used to investigate teacher-rated behavioral changes in children as well as investigate stress management as operationalized by the teacher's Rating Scale – Revised [Short Form] (CTRS-R:S). The CTRS, widely used for psychological evaluation and does not directly measure stress responses, the subscales evaluate behaviors pertaining or often associated with stress such as oppositional behavior, inattention, hyperactivity, and ADHD index. The program ran weekly for 45 minutes per session for a period of 8 weeks. Results demonstrated that a pre and post intervention showed significant behavioral improvement as evaluated by hyperactivity ( $t[I, 39] = 3.1; p = 0.002$ ), and highly significant differences in the attention-deficit / hyperactivity disorder index ( $t[I, 39] = 5.42; p < 0.001$ ) and cognitive/inattentiveness ( $t[I, 39] = 5.56; p < 0.001$ ) subscales. Teacher interview data supported these findings suggesting Move-Into-Learning as a feasible and acceptable mindfulness-based intervention that can be implemented in a third-grade classroom. A 2 month follow-up with classroom 1 also demonstrated that pre and posttest measures were maintained for ADHD index ( $t[I, 19] = 4.9; p < 0.001$ ) while cognitive/inattentive behaviors significantly continued to improve ( $t[I, 19] = 2.9; p < 0.01$ ). Although the research demonstrated statistical relevancy, research limitations result from the small sample size, lack of a control group, the absence of randomization, and the lack of blinded assessment. Further research is warranted to address the

weaknesses of this study. In addressing the limitations of this study, the current research proposes to introduce control measures that offer comparable data from an intervention to a control group.

Schonert-Reichl and Lawlor (2010) conducted a quasi-experimental control group study to evaluate the effectiveness of a mindfulness education program (ME) on children's wellbeing functioning in four domains: optimism, self-concept, positive affect, and social-emotional functioning in school. This RTC study recruited teachers via a district-wide information session in Western Canada. Students were recruited from classrooms in which the teachers expressed a willingness to participate. In addition, school board permission and parent permission were obtained and students were advised that their participation is voluntary. Participants were selected from 12 elementary classrooms (4th to 7th grade) in which six were randomized to receive the Mindfulness Education (ME) program and six to waitlist control. A total of 246 students participated in the study with 130 (70 boys, 69 girls) engaged in the ME group, while 107 (57 boys, 50 girls) were allocated to the control group. Demographically, students were from medium income families (\$52,800 CAD).

Several scales were used to operationalize the study. An optimism subscale from the 5-point Likert-type Resiliency Inventory questionnaire was used and consisted of 9-items that inquired about a person's positive perspective on the world and the future. Self-concept was measured using two 8-item subscales from the 5-point Self-Description Questionnaire, while positive and negative emotions were measured using the 24-item *Positive and Negative Affect Schedule*. Twenty-four emotion words (12 positive, 12 negative) were rated according to how much the respondent had felt that emotion over the last week. Words were rated on a scale from 1 (*Not much*) to 4 (*Most of the time*). A Teacher's Rating Scale of Social Competence (TRS) was

used to assess school-related social and emotional competence. The 31-item scale consisted of four subscales that measured teacher report of: (a) Aggressive Behaviors (e.g., “Fights”), (b) Oppositional Behavior/Dysregulation (e.g., “Easily irritated when he/she has trouble with some task, such as reading math, etc.”), (c) Attention and Concentration (e.g., “Pays attention”), and (d) Social and Emotional Competence (e.g., “Shows empathy and compassion for other’s feelings”). Questionnaires were administered prior and following the ME program. To guard against biases due to variability in reading proficiencies, a research assistant read each item on the questionnaire aloud, and students marked their responses accordingly.

The ME program was developed on the theoretical model of mindfulness and social and emotional learning programs, and consisted of the following four teacher-delivered components: quieting the mind, mindful attention (to sensation, thoughts, and feelings), managing negative emotions and thinking, and acknowledgment of self and others. It consisted of 10, 40-50 minute lessons delivered each week along with 3 minutes of mindfulness attention exercises that were delivered 3 times a day for the duration of the program. A total of 7.5 hours of mindfulness meditation and 7.5 hours of education, totaling 15 hours of contact.

Data were analyzed using ANOVA to ensure no differences between the MA program and the control group. No differences were found for any of the outcome measures. Results indicated that when comparing participant and teacher surveys from before and after the program, students in the ME classrooms ( $n = 139$ ) reported increased optimism ( $p = < 0.5$ ) and increased teacher-rated aggressive behavior ( $p = < .001$ ), oppositional behavior/dysregulation ( $p = < .001$ ), attention and concentration ( $p = < .001$ ), and social-emotional competence ( $p = < .001$ ), but not significant differences in self-concept or affect. Overall, the ME program designed to foster students’ social and emotional learning, provided moderate positive effects in self-

report matrixes yet teacher rated evidence suggested slight positive improvement in behavior (.59,  $p = < .001$ ,  $n^2 = .074$ ).

Several limitations to the study can be identified. A significant limitation to the study is the bias that may emerge from teachers rating considering that they also delivered the intervention. Confirmatory bias may also have played a role. A noted limitation was the absence of an extended follow-up to assess sustaining effects. Another perceived limitation of the study is that teachers were required to modify their curriculum to accommodate for the 45 minute training. In light of these limitations, the current study proposed a curriculum that was time sensitive, taking into consideration the existing time constraints and educational responsibilities of teachers in delivering state wide educational requirements. In addition, the current design sought to minimize teachers' biases through assigning teachers a limited role in program delivery. Finally, the current study introduced a 2 months follow up to measure the sustained effects of the intervention.

Mendelson et al. (2010) employed a mindfulness-based intervention to improve the ability to self-regulate in 9 and 10 years old children from disadvantaged backgrounds. Move-Into-Learning Program, a curriculum including yoga-based physical activity, breathing techniques, and guided mindfulness practice, was designed to develop body awareness, breath work, and cognitive responsiveness. Mendelson et al. (2010) recruited 97 4th and 5th grade students to participate in a study where only 25 students from each school would be randomly selected among those who provided parental consent. The study included 97 students (59 girls and 38 boys) of which 51 students took part in the intervention condition while 46 students were placed in the control condition. The program consisted of 45 minute sessions, four times a week for a period of 12 weeks within the school setting, resulting in 36 intervention hours. The course

was taught by an expert yoga teacher and conducted outside academic hours. Several measures were used to operationalize the study: The Response to Stress Questionnaire (RSQ) to assess for stress; The Short Mood and Feelings Questionnaire-Child Version (SMFQ-C) to assess for depressive symptoms; and The People in My Life (PIML) to assess students' relationship with peers, parents, school, and neighborhood. Results indicated that the intervention group reported significant improvements on the overall scale of Involuntary Engagement compared to the controls ( $p < 0.001$ ). Significant differences were found on three of the five subscales of this factor, including Rumination ( $p < 0.01$ ), Intrusive Thoughts ( $p < 0.05$ ), and Emotional Arousal ( $p < 0.01$ ), and a trend in the predicted direction for Impulsive Action ( $p = 0.07$ ) and Physiologic Arousal ( $p = 0.07$ ). In addition to some significant reductions of involuntary response to stress among intervention youth, it was also noted that there was a trend for the control group members to report more trust in friends than the intervention group ( $p = 0.06$ ).

Limitations of the study included small sample size considering the quantitative nature of the study and failure to report Type I error rate. Other perceived limitations suggested that the recruitment method may have biased the sample toward more highly motivated students who were willing to engage in the program. Finally self-reported scales may have been influenced by social desirability outcomes. Such limitations were addressed in the current study by introducing an Explanatory Mixed-Method approach, where both quantitative and qualitative data were used to support the data analysis. In addition, sufficient students were recruited to ensure a rugged qualitative study and ensure confidence interval. Qualitative data were used to augment the quantitative dimension of the study. In addition, the research was incorporated into the existing school curriculum as suggested by Kanagy-Borofka (2013), while teacher and parent scales helped mitigate the biases that can result from students' self-reported scales.

Van de Weijer-Bergsma, Langenberg, Brandsma, Oort, and Bögels (2012) evaluated the effectiveness of a school-based mindfulness training (MindfulKids Program) to prevent stress, behavioral difficulties, and stress related mental problems. Children ( $N = 199$ , 89 boys and 110 girls) from 2nd through 4th grade, ages 8 to 12 years from three elementary schools were selected for the study. The schools were selected for their ethnic diversity with 10%, 30%, and 90% students from immigrant families respectively. Eight classes were selected based on teacher's interest in participating in the study. Classes were randomized to an immediate-intervention group ( $n = 95$ ) or a waitlist-control group ( $n = 104$ ) who received the intervention after a waitlist period. The 6 week program by an expert trainer consisted of six 30 minute sessions twice a week totaling 6 contact hours per group. In addition, teachers were invited to conduct daily practices with students on nontraining days using a short 5-minute script. Teachers, parents, and students were asked to complete several measures. Student measures included the Emotion Awareness Questionnaire revised (EAQ-30), the Non-Productive Thoughts Questionnaire for Children (NPDK), the Sense of Coherence Questionnaire for Children (SOC-K), and an adapted Subjective Happiness Scale (SHS). Parents completed the Screen for Child Anxiety Related Emotional Disorders (SCARED), the Social Competence and Behavior Evaluations (SCBE-30), and the Sleep Disturbance Scale for Children (SDSC). Teachers completed three subscales of the School as a Caring Community Profile II. Test measures were completed by both treatment and wait-list control participants at baseline, pre, post, and follow-up. Results demonstrated that children who participated in the MindfulKids Program demonstrated a noticeable increase in the capacity to verbally share emotions, to differentiate emotions and bodily awareness, as well as be aware of inner coherence. The study also revealed that students who participated in mindfulness meditation experienced a decrease in rumination

and analyzing of emotions. Parents reported a decrease in anger, aggressive behavior, and anxiety symptoms. It is noted that all effect sizes were small as participants were already operating overall within normal psychological functioning range. Limitations of the study included a failure to identify the number of students per class who attended the program daily, the unavailability of school/teacher data, the method required a change in the existing school curriculum, and the difficulty of continuing the program once it ended. Such shortcomings were taken into consideration in the design of this research by disclosing the number of students per class for each intervention group, collecting teacher data to determine perceived changes in the class environment, minimizing the change to the overall mindfulness curriculum structure, and ensuring that the curriculum can be continued without expert training once the program is implemented.

In a recent multiphase Mixed-Method study conducted by Kanagy-Borofka (2013), 5th grade elementary children ( $N = 51$ ; 25 intervention including 14 girls and 12 boys and 26 control, including 16 girls and 9 boys) participated in a mindfulness curriculum to evaluate executive functioning, hyperactivity/impulsivity, peer relations, and the qualitative lived experiences and observations of the teacher. Demographics demonstrated an overall low socioeconomic population (85%) with 75% Hispanic, 11% Asian, 5.5% Caucasian, 5% Filipino, and 3.5% other participants. The study looked at evaluating teacher-led mindfulness practices. The treatment class received mindfulness training in the classroom, consisting of 10, 20-minute sessions over a 5-week period. The quasi-experimental design was operationalized via the Conners 3<sup>TM</sup> teacher rating scale which was paired down from its original 111 questions to 42 questions that pertained to evaluating attention-to-task behaviors and social relations. Pre and posttest measures were administered to establish baseline and determine efficacy. The program

founded on Jon Kabat-Zinn's MBSR (1979) consisted of yoga postures, pranayama breathing exercises, and other sensory and meditative mindfulness activities such as visual imagery, body scanning, ethical children's stories, and mindful eating and walking. In addition, ethical qualities of mindfulness, such as compassion, integrity, gratitude, and equanimity, were addressed through stories and discussion to help the students holistically integrate mindfulness practices into body, mind, and spirit. Two phases were included in the research design. The first phase, which included 10, 20-minute sessions, given twice a week for 5 weeks (a total of 3.3 contact hours), was designed to assess the effects of treatment, mindfulness training, as led by an experienced facilitator and simultaneously integrated into the curriculum by the teacher. The control group received no special treatment, although participated in 50 minutes of physical activity. Phase 2 immediately followed Phase 1 to assess the continuing effects of treatment, when the teacher independently integrated the learned mindfulness practices into the curriculum. The second phase of the study, consisting of 4 weeks of intervention consisting of 5 to 10 minutes of daily mindfulness practices (total contact hours = 1.6), evaluated the efficacy of the program led by the teacher which was also followed by the Conner's 3<sup>TM</sup> and semistructured interviews conducted by the teacher. In addition, semistructured interviews allowed for gaining a better understanding of the subjective experience of the teacher. Self-perception questions were utilized to evaluate strengths and weaknesses, personal and professional progress, and overall impression of the mindfulness in the classroom.

ANOVA was used to determine significance of effects in evaluating attention-to-task, executive functioning, inattention, hyperactivity/impulsivity, and peer relationship. A paired *t* test, with a *p*-value preset at .05, was used to compare the mean of the treatment group following Phase 1 with the mean of the treatment group following Phase 2. Results indicated a significant

progressive decline of all above measures in Phase 1 and 2. The following  $p$ -values were demonstrated for the following comparative mean effects of mindfulness on the following measures: evaluating attention-to-task ( $p$ -value of .0105), executive functioning ( $p$ -value of .0057), inattention ( $p$ -value of .0387), hyperactivity/impulsivity ( $p$ -value of .1256), and peer relationship ( $p$ -value of .0048). Results indicated according to a paired  $t$ -test, with a set  $p$ -value significance of .05, a significant continued improvement in attention-to-task and executive functioning from Phase 1 to Phase 2, a mild, insignificant regression in the areas of inattention and hyperactivity/impulsivity, and a significant regression the area of peer relations. It is also noted a more drastic change took place during Phase 1 than Phase 2. It is suggested that such a remarkable difference between expert delivery and teacher delivery may have resulted from the discrepancy in contact hours between the two Phases and/or due to the level of expertise of the trainers and teacher. Thus, the lack of consistent comparison between expert and teacher training may be viewed as a limitation of the study. Such a limitation was addressed in the current research by ensuring sufficient teachers, with various skill levels, delivered the Embodied-Mindfulness program. In addition, the small sample size and lack of randomization can also lead to validity and generalizability concerns. Such a concern was also mitigated in the current research by ensuring adequate number of classes and students to be part of the research. Other limitations identified concern the qualitative dimensions of the study, which drew data from only two teachers, reducing the generalizability of data. The current study utilized the collection of three to four interviews in order to broaden the data source. Finally, the research may appear biased as the facilitator was also the researcher. This, too, was mitigated by having other teachers teaching the same curriculum simultaneously, thus being able to compare the efficacy of teaching mindfulness across several teachers.

Another recent research pointed to the efficacy of mindfulness to positively impact student's academic success. Bakosh (2013), in her quasirandomized controlled trial (RCT) design, measured the effects of a mindfulness program on student grades, on teaching operations, and on teacher mindfulness and stress. Unlike other teacher taught programs and mindfulness research, the Inner Explorer™ program was delivered via an MP3 player and docking station which offered both students and teachers the opportunity to consistently participate in mindfulness practices each school day without impacting teaching operations. Students engaged in 10-minutes per day audio-guided mindfulness program from a 90-track series for a period of 4 months, a total of 15 contact hours. The program also included a 2-minutes journaling period after each meditation. This is a significant departure from traditionally taught mindfulness programs and intended to demonstrate universality in program delivery. Teachers were encouraged to pick a normal transition time to run the program, may it be after lunch or recess or in between two intense subjects. A total of 337 ethnically diverse students (2%-84% Hispanic, 1%-86% White, 1%-49% Black, and 0%-15% Other) from two U.S. schools (18 classrooms) participated in this study. Classes were randomized per grade level within each school since groupings were preexisting. To evaluate academic outcome, six subject areas were evaluated including reading, math, science, written language, verbal communication, and social studies. In addition, teachers filled out two surveys to evaluate teacher mindfulness (MAAS) and perceived stress (PSS).

Results demonstrated a significant effect of mindfulness intervention on students' grade point average (GPA) changes in School A ( $N = 131$ ), between the treatment ( $n = 64$ ,  $M = 2.7995$ ,  $SD = 3.13$ ), and control ( $n = 67$ ,  $M = .0448$ ,  $SD = 2.61$ ) groups;  $t(129) = 5.48$ ,  $p < .001$  (2-tailed), 99%  $CI [1.76, 3.75]$ ,  $d = .96$ . In school B ( $N = 206$ ), there was a near significant mindfulness

intervention effect on GPA changes between the treatment ( $n = 103$ ,  $M = .0357$ ,  $SD = .065$ ) and control ( $n = 103$ ,  $M = .0091$ ,  $SD = .126$ ) groups;  $t(204) = 1.91$ ,  $p = .058$  (2-tailed), 95%  $CI [- .001, .054]$ ,  $d = .27$ . This intervention, which presented little to no change to the existing curriculum, suggests that daily audio-guided mindfulness practices can positively impact student academic achievement. It is also noted that academic achievement did not go up in all six measures. Significant improvements were noted in mathematics, science, and social studies but stayed relatively the same for reading, writing, and spelling. Overall, the results were important in that they presented results despite geographic location, grading practices, and student demographic variables, particularly language, ethnicity, special needs designation, poverty, and age. A limitation of the study is that it included only a treatment and wait-list control groups without an active control group. This current study included an active control to counter such research limitations. Another limitation is that there may have been self-selection bias as a result of teacher influence on assessments and data that did not use standardized testing. Finally, due to the lack of a posttest follow-up, it is unclear if the long-term effects of mindfulness training on students' academic performance are applicable. Although this current study was also limited in its scope and did not include follow-ups as a means to determine program efficacy, this factor was acknowledged in the current study's delimitation and foreseen limitations and, given the researcher's awareness of the importance of assessing long term efficacy, follow-ups will be sought in future studies.

### **Wellbeing Studies Within School Settings**

Two studies worth noting, despite their irrelevance to elementary school interventions, have been conducted in secondary school settings and focused their research solely on evaluating mindfulness interventions with regard to wellbeing. The first study was conducted by Kuyken et

al. (2013) and aimed at studying the efficacy of a schools-based universal mindfulness intervention (MiSP) on mental health and wellbeing. A total of 522 youth aged 12-16 in 12 secondary schools either participated in the Mindfulness in Schools Program (intervention) or took part in the usual school curriculum (control). This feasibility study utilized a nonrandomized controlled parallel group study where pre, post, and a 3-month follow-up were administered. The intervention curriculum was offered in school as part of the normal curriculum replacing either religious or social and health education. The control groups delivered their normal social or emotional curriculum. Schools were selected based on teachers already being familiar with the program or teachers interested. Participation was voluntary.

To operationalize the research, Kuyken et al. (2013) used the Warwick-Edinburg Mental Wellbeing Scale (WEMWBS) designed to capture broad concepts of wellbeing including affective-emotional, cognitive-evaluative, and psychological functioning. This 5-point Likert scale demonstrated acceptable validity, internal consistency, and test-retest reliability. To measure mental health, two scales were used: Perceived Stress Scale (PSS) and the Center for Epidemiologic Studies Depression Scale (CES-D), both of which used a 5-point Likert format. Six schools received the intervention and each school was matched based on school demographics. Seven teachers, who were familiar with the program, taught the curriculum for 9 weekly sessions. Results indicated that relative to the controls, children who participated in the intervention reported fewer depressive symptoms posttreatment ( $p = 0.004$ ) and at follow-up ( $p = 0.005$ ) and lower stress ( $p = 0.05$ ) and greater wellbeing ( $p = 0.05$ ) at follow-up; and after adjusting for baseline imbalances. The degree to which students in the intervention group practiced the mindfulness skills was associated with better wellbeing ( $p < 0.001$ ) and less stress

( $p = 0.03$ ) at 3-month follow-up. The findings provided promising evidence of the program's efficacy and adoptability as a program by students and teachers.

According to the research, results were proven to be small effects in a larger-scale randomized study, yet a slight shift in population mean could reveal significant impact for at risk youth or ones with existing mental health concerns. Much like other school based studies, one of the limitations is that the study was not randomized, resulting in an inability to properly assess baseline measures. The research also utilized self-report measures and did not provide classroom-based measures nor did it offer an understanding of the contact hours with the students. Taking the above mentioned limitations into consideration for the current study, randomization was conducted by randomizing the class as a whole rather than individuals within a class. In addition, the inclusion of test measures that accounted for parent and teacher considerations ensured the evaluation of the program within the class environment and in the home.

The second study worth noting was conducted by Huppert and Johnson (2010) and aimed to evaluate the effects of mindfulness training in adolescent boys ( $N = 173$ ) by administering a modified MBSR course in a school context. This quasi-experiment utilized the mindfulness training where students (6 classes) were introduced to concepts of awareness, acceptance, and bodily awareness within four 40-minute classes, one per week for a total of 2.66 contact hours. The intervention group was also provided a CD with an 8 minute audio file of mindfulness exercises to be practiced outside class. The audio files reflected the progressive aspect of the training. The control group (5 classes) attended their normal religious studies lesson during the 4-week intervention period. To operationalize the study and to measure mindfulness outcomes, the Cognitive and Affective Mindfulness Scale-Revised (CAMS-R) was used which consists of a

12-item, 4-point Likert scale. To measure resiliency, the Ego-Resiliency Scale (ERS) was used where one's capacity to respond to changing situations, especially frustrating and stressful, are evaluated with a 4-point, 14-item Likert scale. To measure wellbeing, the Warwick-Edinburgh Mental Wellbeing scale (WEMWBS) was used for its capacity to evaluate the affective-emotional aspects via a 14-item 5-point Likert scale. To measure personality, the Big-Five personality *dimension* was used via its 7-point, 10-item Likert scale. All test measures demonstrated good test-retest reliability, internal consistency, and validity. At follow-up, qualitative measures were collected via a series of questions that were directed to validating the intervention: the number of times they had practiced mindfulness outside of class, how much they felt they had learned during the course, how much they enjoyed the course, how helpful they found it, whether the training course was the right length, and whether they thought they would continue to practice mindfulness.

The strength of the study is that it used a relatively larger sample size which was taken into consideration in the present study, whereas gender limitations, lack of random allocation to invention and control group, and the use of only student subjective measures are recognized as limitations of the study. The current study mitigated such limitations by ensuring that quasirandomization was introduced as well as offering data from both genders. Finally, subjective measures were gathered by various sources of data, such as teacher, parent, and facilitator, in order to triangulate results and establish both internal and external validity.

### **Summary of Empirical Studies Review**

In summary (see Tables 1a and 1b), only a few studies to date have investigated mindfulness-based programs within primary school settings. The aggregate outcomes of the studies reviewed in this chapter pointed to the efficacy of mindfulness curriculums to reduce

stress and increase attentionality (Napoli et al., 2005); improve executing function (Flook et al., 2010; Kanagy-Borofka, 2013); foster the development of optimism and positive emotions (Schonert-Reichl & Lawlor, 2010); cultivate behavioral improvements and diminish ADHD (Kanagy-Borofka, 2013; Klatt et al., 2013; Van de Wiejer-Bergsma et al., 2012); improve academic performance (Bakosh, 2013), and help minimize rumination and emotional arousal as well as foster pro-social behaviors (Mendelson et al., 2010). All programs utilized a variation of MBSR-based training, of which only three programs (Klatt et al., 2013; Mendelson et al., 2010; Napoli et al., 2005) incorporated a movement component to their curriculum. The exclusion of mindful movement is a notable departure from the original MBSR training which utilized yoga as part of its intervention. It is also important to note that studies with movement-based curriculum were held outside the classroom environment, whereas sedentary based programs were conducted in the classroom. A hybrid version of the program may be warranted to allow for gentle conscious movement within the classroom environment. This may be an important factor, affecting research outcomes. All studies, with the exception of Schonert-Reichl and Lawlor (2010), that chose to train teachers in mindfulness to deliver the mindfulness program, relied on expert trainers to deliver their interventions. Although expert trainers offer valuable knowledge that is grounded in a deep mindfulness understanding, training teachers may be valuable in providing a broader reach and an integrative approach within class environments. On average, contact time ranged from 6 to 10 hours and took place within an 8 to 12 week period. Mendelson et al. (2010) departed from this generalized standard by offering mindfulness training four times per week for 12 weeks, totaling 36 contact hours. Despite the significant delta in contact hours, findings did not reflect a significant correlation between the increase in contact hours and research results. It is also important to note that the above mentioned research studies utilized a

variety of test measures that focused on stress reduction, social and emotional learning, executive functioning, behavioral management, and resiliency, yet little attention has been placed on evaluating the impact on wellbeing as measured by strength based developments. The used of a strength-based measure such BERS-2, which has been widely accepted as a reliable and valid test measure within existing California educational environments, could serve to expand the current body of knowledge by evaluating the impact of mindfulness-based practices on: (a) Interpersonal strengths which measures how a child may control emotions, (b) Family Involvement which measures participation and relations with family, (c) Intrapersonal strengths which assesses the child's perception of competence and accomplishments, and (d) School Functioning which addresses competence in classroom tasks. In addition, another gap in the literature seems to point at the lack of qualitative research in this field. All mentioned research relied on quantitative measures of gathering data and have omitted the subjective lived experience. Based on these premises, this study evaluated through quantitative and qualitative measures the efficacy of how a mindfulness-based curriculum that highlights attention to embodiment, movement, imagination, and creative expression can improve the interpersonal, intrapersonal, school functioning, affective strength, and overall happiness of the child as determinants of the state of wellbeing. An Explanatory Mixed-Method study was conducted in order to expand on the existing breadth of research within primary school settings, where the subjective lived experience of children was gathered through journaling and art. This offered an opportunity to extract emerging thematic qualities, not predetermined by the confines of a quantitative scale. Such an approach offered the capacity to observe, describe, and analyze data from complementary and distinctively rich research tools. In addition, an Explanatory Mixed-Method approach promotes a greater understanding of the findings, while addressing the various

transformational needs of the participants, school administration, governing agencies, and the community at large.

Table 1a

*Synthesis of Elementary School Research Findings*

Study	Mendelson et al. (2010)	Schonert-Reichl & Lawlor (2010)	Flook et al. (2010)	Napoli et al. (2005)
Environment	Public Primary School (USA)	Public Primary School (Canada)	Public Primary School (USA)	Public Primary School (USA)
Participants	97 students (38M, 59F) 4 classrooms (2T n = 51, 2C n = 46) 16 students/class, 4 urban school	246 students (128M, 118 F); 12 classrooms (6T n = 139, 6C n = 107); 20.5 students/class, 12 urban schools	64 students (35M, 29F) 4 classrooms (2T, 2C) 16 students/class 1 urban school	228 students (120M, 108 F) 8 classrooms (4T, 4C), 28 students/class 2 urban schools
Age / Grade	4th and 5th grades	4th through 7th grades	7 to 9 years old	5 to 9 years old
Dependent Variables	Behavior	Wellbeing: optimism, self-concept, positive affect, and SE functioning in school	Executive Function	Selective Attention and Social skills
Design	RCT by school, student	RTC by classroom (Waitlist Control)	RCT (quasi) by classroom	RCT (quasi) by school/classroom
Intervention	Mindfulness intervention (based on MBSR), w/waitlist control	Mindup (based on MBSR) w/waitlist control + (SE assignments)	MAP (based on MBSR and Inner Kids) w/active control (quiet reading)	Attention Academy Program AAP, (based on MBSR) w/active control (quiet reading)
Intervention Hours	36 hours, 12 weeks; 48 classes/45 min. 4 days per week	10 hours, 10 weeks; 10 classes/50 min, + 9 min./day (3 min 3x a day_	9 hours, 8 weeks 16 classes/30 min	9 hours, 24 weeks 12 sessions/45 min
Trainer Control	Expert yoga trainer Yes	Teachers Yes by classroom	Expert trainer Yes	Expert trainer Yes
Randomized	No	Yes by class	Yes	No
Measures	RSQ-response to stress-5 subscales SMFQ-C- depressive symptoms PIML-relationships	RI-resilience, optimism. Self-Descriptions Questionnaire PANAS; TRSC-social competence	BRIEF- EF Overall BRI-behavior MI-metacognition GEC-global exec function	ACTeRS-attention, social TEA-CH-attention TAS-test anxiety
Results	RSQ-reduced rumination ( $p < .001$ ), intrusive thoughts ( $p < .05$ ), and emotional arousal ( $p < .001$ ). Positive trend in other two scale-impulsive action and physiologic arousal, both ( $p = .07$ ). No significant effect for SMFQ-C or PIML.	RI-optimism ( $p < .05$ ). Self-descriptions within group effect, 4th to 5th positive self-concept, 6th to 7th, negative self concept PANAS- trend positive ( $p < .1$ ). TRSC-improved emotional & social & emotional behavior, attention, education in aggressive & opposition behavior. All with ( $p < .001$ ).	No main effects, low EF moderated gain-Teacher ratings- EF overall ( $p = .005$ ), BRI ( $p = .02$ ), MI- ( $p = .011$ ), GEC ( $p = .001$ ) Parent ratings - EF Overall ( $p = .020$ ), BRI ( $p = .004$ ), MI- ( $p = .016$ ), GEC ( $p = .006$ )	ACTeRS ( $p = .001$ ) TEA-CH ( $p < .001$ ) TAS ( $p = .007$ )
Program / Movement	yoga, breathing techniques, and guided mindfulness practices.	Sedentary Program - Affirmations, attention, emotion management, etc.	Sedentary Program	Yoga
Highlights	RCT by student, program highly appreciated by the students, intensive program with high dose and near-daily practice, movement based, outside of academic hours	In class intervention with teachers, practice done daily using 3 min sessions. Large sample size	Effective in self-regulating, randomized setting, diverse ethnic background	First study to evaluate improved attention and less anxiety in regular classroom settings, large sample size
Limitations	Conducted outside academic hours, failure to report Type I error rate, possible bias of recruiting method, not in class environment,	Bias of teacher rating scale, curriculum change necessary to implement program, no extended follow-up	Small class size (16), did not include yoga movement typical of a MBSR program, scales used in the study failed to reach significance, curriculum change necessary to implement program	Removed 13% of students for missing 1 class, Replaced PE, did not report attendance, so used in the study failed to reach additional demographics reported, curriculum change necessary to implement program

Table 1b

*Synthesis of Elementary School Research Findings (continued)*

Study	Bakosh (2013)	Kanagy-Borofka (2013)	Klatt et al. (2013)	Van de Wiejer-Bergsma et al. (2012)
Environment	Public Primary School (USA)	Public Primary School (USA)	Public Primary School (USA)	Public Primary School (Europe)
Participants	337 students (gender not specified) 18 classrooms 25 students/class 4 suburban schools	51 students (21M, 30F), 2 classrooms	41 students (16M, 25F), 2 classrooms	199 students (95M, 104F) 8 classrooms (4T, 4C) 25 students/class 3 suburban schools
Age / Grade	Elementary school (Ages not specified)	5th grade	3rd grade	9 to 12 years old
Dependent Variables	Accademic performance	Executive functioning, hyperactivity /impulsivity, peer relations	Stress reduction and behavioral improvement of at risk children	ADHD, Oppositional Behavior, wellbeing
Design	RCT (quasi) by classroom / waitlist	Mixed Method	NRCT single group design	RCT (quasi) by classroom
Intervention	Inner Explorer ((based on MBSR) w/waitlist control	Mindfulness intervention (based on MBSR) with control group	Move-Into-Learning	MindfulKids (based on MBSR and MBCT) w/waitlist control
Intervention Hours	10 minutes a day of pre-recorded audio over 4 months (90 audio tracks)	20 minute sessions over 5 week peiod	6 hours, 8 weeks, classes/45min	6 hours, 6 weeks 12 classes/30 min, +5 min/day
Trainer	No expert trainer	Both non and expert trainer	Expert trainer	Expert trainer
Control	Yes	Yes	No	Yes
Randomized	Yes by class	No	No	No
Measures	Accademic Performance	Conners' Behavioral Rating Scale, semi-structured teacher interviews	Conners' Behavioral Rating Scale, semi-structured teacher interviews	NPDK-rumination EAQ-awareness SOC-K-coherence SHS-happiness SCARED-71-anxiety
Program / Movement	No movement	Yoga	Yoga , music, art (movement)	Sedentary Program based on Mindful Schools
Results	School A ( $N = 131$ ), between the treatment ( $n = 64$ , $M = 2.7995$ , $SD = 3.13$ ), and control ( $n = 67$ , $M = .0448$ , $SD = 2.61$ ) groups; $t(129) = 5.48$ , $p < .001$ (2-tailed), 99% $CI [1.76, 3.75]$ , $d = .96$ . In school B, ( $N = 206$ ), near significant on GPA changes, treatment ( $n = 103$ , $M = .0357$ , $SD = .065$ ) and control ( $n = 103$ , $M = .0091$ , $SD = .126$ ) group; $t(204) = 1.91$ , $p = .058$ (2-tailed), 95% $CI [-.001, .054]$ , $d = .27$ .	Attention-to-task (p-value of .0105), executive functioning (p-value of .0057), inattention (p-value of .0387), hyperactivity / impulsivity (p-value of .1256), and peer relationship (p-value of .0048)	Reduced Hyperactivity ( $t[1,39] = 3.1$ ; $p = 0.002$ ); Reduced ADHD ( $t[1,39] = 5.42$ ; $p < 0.001$ ), Reduced cognitive inattentiveness ( $t[1,39] = 5.56$ ; $p < 0.001$ )	NPDK-decrease ( $p = .007$ ) EAQ-differentiating, sharing, not hiding emotions ( $p < .05$ ) SOC-K ( $p < .001$ ) SCARED-71- ( $p < .001$ ) SCBE-30 ( $p = .002$ )
Highlights	Consistent intervention with audio recordings, large population, improvement in math, science, and social studies, presented the viability of audio led mindfulness program, minimal disruption to accademic curriculum	Significant improvement in attention-to-task and executive functioning, utilized reliable test measure, included movement, art-based activity	Utilizing reliable test measure. Incorporating mindfulness, yoga, awareness prompts, music, art-based activity.	Large sample, diverse mix of students, included daily practice, greater effects at follow up, larger sample size
Limitations	No movement or arts component, no active control group, no long term follow-up	Small scale, non-randomized, no control, multi phase design did not account for curriculum similarity, qualitative measures drew on only two teachers	Small scale, non-randomized, no control groups, curriculum change necessary to implement program	Issues conducting daily training, many scales may cause Type II errors, curriculum change necessary to implement program

## Conclusion

This chapter provided an overview of philosophical, theoretical, and empirical dimensions of the researcher's current understanding of mindfulness-based practices and interventions, particularly pertaining to children in late childhood (9-12 years old). The chapter addressed developmental considerations of late childhood and its implications on creative expression and biological considerations, as well as provided an overview of the neurological and autonomic response in children. In addition, a theoretical perspective of mindfulness established the foundation for a broad overview of the mindfulness research in adults as well as in children within clinical settings. Finally, an in-depth overview of mindfulness research in primary school settings provided a rich understanding of how mindfulness practices within school environments may contribute to an increase in attentionality (Napoli et al., 2005); improve executive function (Flook et al., 2010; Kanagy-Borofka, 2013); foster the development of optimism and positive emotions (Schonert-Reichl & Lawlor, 2010); cultivate behavioral improvements and diminish ADHD (Kanagy-Borofka, 2013; Klatt et al., 2013; Van de Wiejer-Bergsma et al., 2012); improve academic performance (Bakosh, 2013), and help minimize rumination and emotional arousal as well as foster prosocial behaviors (Mendelson et al., 2010). Despite such evidence, it is also concluded that further research on wellbeing is warranted, as only one research study addressed wellbeing in primary school setting to date, and no research study evaluated how mindfulness could impact interpersonal and intrapersonal dimensions, recognized as being an important dimension of wellbeing. In addition, further qualitative research utilizing rigorous methods would serve to better understand the lived experience of mindfulness practices in children.

Chapter 3 presents the Explanatory Mixed-Method approach to this study, outlining the procedures, ethical considerations, delimitations, and foreseen limitations. Chapter 3 explains in detail the Explanatory Mixed-Method approach including the quantitative and qualitative components of the study. The following chapter also provides an overview of the procedures and the measurement tools employed to operationalize and validate the research. These tools include: the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), Children's Happiness Scale (Morgan, 2012), and the Student's Life Satisfaction Scale (Huebner, 1991). Chapter 3 concludes with a brief discussion of the researcher's efforts in implementing ethical procedures throughout all phases of the study and exercised methods of validity verification (particularly pertaining to the subjective, qualitative measures).

### Chapter 3: Research Methods

*The animals, plants, and  
Rocks know how to act  
Going with nature  
They say  
Thinking little of tradition  
They do living  
Each speaking in  
Their own way  
Communicating together  
Living as a nation  
Taking differences  
In stride*

~Frank LaPena (La Penza, 2004, p. 26)

This Explanatory Mixed-Method study was designed to evaluate the efficacy of daily mindfulness practices on children’s wellbeing within primary school settings utilizing a quasirandomized control model. To evaluate the efficacy of daily mindfulness practices on children’s wellbeing within primary school settings, the following Explanatory Mixed-Method research design utilizing a quasirandomized control model was developed. This study’s design was developed based on the existing research evidence that supports the positive influence of mindfulness on children’s behavior (Black & Fernando, 2013; Flook et al., 2010), attention (Napoli et al., 2005), mental health (Van de Wiejer-Bergsma et al., 2012), executing function (Flook et al., 2010; Kanagy-Borofka, 2013), optimism and positive emotions (Schonert-Reichl & Lawlor, 2010), ADHD (Kanagy-Borofka, 2013; Klatt et al., 2013; Van de Wiejer-Bergsma et al., 2012), academic performance (Bakosh, 2013), and prosocial behaviors (Mendelson et al., 2010). To date however, no research has examined the impact of a mindfulness-based curriculum that features embodied practices in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, and affective strengths of primary school children ages 9-12 as operationalized via the BERS-2 assessment instrument. The study of such outcomes

was not only important for understanding and fostering the children's continued emergent growth, it also served to bring innovation and balance to the current body of research which is often founded on pathological/dysfunctional measures rather than on matrices that highlight and promote wellbeing. It is also important to note that despite the emerging studies on mindfulness practices and their influences on children, many of the existing studies do not demonstrate robust methodological considerations where both qualitative and quantitative data are considered.

### **Research Design**

Using an Explanatory Mixed-Method approach, 228 elementary students from 4th to 6th grade from the Goleta Union School District were included to participate in the study. An Explanatory Mixed-Method (Creswell, 2014) approach was selected on the basis that both quantitative and qualitative measures would broaden the capacity to understand the influences of mindfulness-based practices on wellbeing, emotionality, and behavior of children attending public primary schools. In addition, an explanatory model utilized qualitative measures to explain and support quantitative findings (Creswell & Plano Clark, 2011). This convergent parallel design allowed the study to effectively and simultaneously engage multiple sources of data and ways of knowing (Anderson & Braud, 2011; Creswell, 2014), such as kinesthetic, visceral, and creative expression via writing and art journaling, while offering an ongoing transformative experience to participants. In addition, the use of a Mixed-Method approach allowed for the incorporation of a qualitative component into an otherwise quantitative study (Braud, 2011), to help participants not only increase self-awareness and deepen their understanding of mindfulness through reflective activities, but also allow the collection of qualitative data to contribute to the understanding of the subjective lived experiences of children ages 9 to 12 as a result of their daily innerU Embodied-Mindfulness practices during school.

## **innerU Curriculum**

innerU was developed to inspire, empower, and cultivate awareness and inner wisdom for the wellbeing of all our relations. It was also developed on educational, social and emotional, physical, psychological, and ecological considerations. Current educational systems require children to pay attention several times a day, yet little to no efforts are made to teach our children how to do so (Saltzman, 2011). innerU attempts to bridge this gap by introducing a curriculum that gently guides students into developing attentionality, cognitive capacity, embodied awareness, and prosocial behavior utilizing indigenous practices and ecopsychology as a means to cultivate inner wisdom by bridging the mind to the heart. The curriculum was designed to expose children to mindfulness and heartfulness concepts through embodied experiences on a weekly basis (see Appendix A). The curriculum was designed to titrate between mindfulness and heartfulness practices so as to provide a greater heart/mind connection. Heartfulness within this curriculum refers to constructs relating to heart where notions of empathy, compassion, gratitude, generosity, and positive thinking are cultivated. Other psychological foundations taken into consideration in the development of innerU were:

- Learning is an integral experience incorporating body and mind functioning;
- Movement is the entryway to retention and deeper understanding;
- Learning and development are optimized in stress-free environments;
- Play is the foundation of wellbeing and happiness;
- A connection to the natural world is necessary for a deeper understanding of self;
- Wisdom can only be cultivated through the exploration of one's inner landscape.

The curriculum also took into account developmental consideration of primary school children who at this stage of development are capable of organizing their thinking, utilizing symbolic activity, and have begun to develop social thinking and moral judgment (Crain, 2011). In addition, the program attempted to cultivate the eight facets of intelligence (Gardner & Hatch, 1989): linguistic intelligence (via writing and journaling), logical intelligence (via reasoning on

the nature of the mind and experimenting with mindfulness skills), spatial intelligence (via imaginative guided imagery and drawing), kinesthetic intelligence (via mindfulness movement practices), musical (via the introduction of musical sounds and secular mantras), interpersonal intelligence (via empathizing and cultivating loving-kindness and compassion), and naturalist intelligence (nurturing living things such as the animal and the plant world). A multiple intelligence approach not only favored the inclusivity of various forms of learning, it was also educationally inclusive for children with intellectual and developmental challenges (Takahashi, 2013). By honoring the eight realms of intelligence as foundational elements of the innerU program, a holistic model of learning was brought to life, inviting each child to feel at home with their unique gifts. Such inclusion also helped minimize traditional classroom pedagogy, which is often “punctuated by a series of paralyzing experiences” (Armstrong, 2007, p. 117). This left room for greater expansive experiences.

Children learn from different kinds of models, including lived and symbolic models (Crain, 2011). Through in-person, audio, and stunning video explorations, children were invited to gain a deeper understanding of each presented concept by observing the interrelationship of these inherent qualities within the natural world. To introduce new Embodied-Mindfulness skills, animals that exemplify new behavioral concepts were presented throughout the program. This offered students the opportunity to engage in dynamic ways of learning that elicit imaginal thinking and exploratory dimensions necessary to the development of a whole brain approach (Seigel & Bryson, 2011). Here children were called to understand somatically and imaginatively the various dimensions of mindfulness and heartfulness through the lens of playful discovery of the natural world. Through the lens of ecopsychology, the program also aimed at developing a relationship with nature. Animals and plants perceived to present characteristics of Embodied-

Mindfulness were introduced to the children to help them gain a greater understanding of self while developing essential emotional bonds with nature. This acted in creating and cultivating a nondual or transpersonal view (Davis, 2013) in addition to anchoring mindfulness into a nature centric model.

As stated earlier, the program also relied on kinesthetic and visceral ways of knowing, as well as opportunities for participants' creative expression through journaling to help solicit and deepen each participant's self-understanding of Embodied-Mindfulness. Following each lesson, children were invited to briefly journal about their experience with prompting that aimed to minimize stereotypical responses and students' inclination to meet perceived adult expectations. A series of questions and guided activities were used to engage inner exploration. Another important dimension of the program addressed the capacity of the program to support and encourage the transfer of Embodied-Mindfulness practices into the lives of students. With this consideration in mind, following each class, children were invited to practice their newly acquired Embodied-Mindfulness skills. Each class also invited students to share their experience and practice of bringing Embodied-Mindfulness into their daily lives in- and outside of school. This encouraged integration of the mindfulness practice beyond the experience in the study, as well as solidifying newly acquired skills.

### **Rationale for Intervention**

The innerU Embodied-Mindfulness curriculum was inspired and developed based on John Kabat-Zinn's (2003) well-researched and established MBSR (mindfulness-based stress reduction) program as well as ecopsychology philosophies and child development considerations. In addition, two other secular mindfulness programs were used as viable models for the development of innerU due to their adaptation to children and youth populations. The first

of these models, Mindfulness-Based Social Emotional Learning (MBSEL)–Inner Explorer Program (Bakosh, 2013) was recognized for its standardization considerations, which departs from the traditional MBSR program in that it did not necessitate teachers to be extensively trained in mindfulness methodologies as the core practice is delivered via audio recordings. It is also noted that instructor led programs may vary greatly as a result of protocol modification, teacher comfort level in instructing mindfulness, language, tone, and activities incorporated into the program. As a result, such variances may elicit a significant lack in standardization, affecting validity concerns.

A program utilizing a standard platform can minimize such risk and provides a consistent standardized process. Inner Explorer has attempted to do so by offering a mindfulness program that is delivered through 90 prerecorded mindfulness meditations specifically adapted for primary school children. In addition, the Inner Explorer curriculum format has demonstrated significant success in primary school settings as exemplified by Bakosh's (2013) quasirandomized control trial (RTC) within 29 elementary classrooms across three states. Results indicated noticeable increase in grade point average (GPA) in participants who engaged in the 10-minutes a day mindfulness practice via audio recordings. The program was also noted for its ease of implementation within already preexisting time sensitive classroom environments where teachers simply were required to play once a day, one of the 90, 10-minute mindfulness tracks from an MP-3 player. In addition, little to no additional teacher training was required to successfully incorporate the training within the classroom setting. Based on the above observation and findings, the innerU program incorporated in its program, 8 weekly prerecorded meditations that were easily accessed via a mix-media iBooks format and practiced on the days that in-class teachings were not conducted.

Mindful Schools' curriculum was adapted as a model based on its extensive track record and reach throughout 48 states and 43 countries and its impressive research involving the largest randomized-controlled study to date on mindfulness and children, involving 937 children and 47 teachers in three Oakland, CA public elementary schools (Mindful Schools, 2011). With only 4 hours of mindfulness training (15 minutes, twice a week for 8 weeks), results showed statistically significant improvements in Paying Attention ( $p = .004$ ) and Social Compliance ( $p = .026$ ). Showing Care for Others was close to being significant ( $p = 0.165$ ). Although the program seems to conflict with the Inner Explorer curriculum delivery ideology in that it is founded on training the teachers in mindfulness, Mindful Schools' educational program has demonstrated that development of a curriculum founded on teacher competencies in embodying mindfulness can also be effective. Core curriculum values suggest that transmission from teacher to students is essential in communicating mindfulness through emotional contagion, mirroring neurons, and nonverbal body language. Through sensitivity, solidity, mindful speech, authenticity, and disclosure, teachers cultivate the qualities and attributes necessary to implicitly transmit the notions of mindfulness through what is known as attunement. This model is also supported by Bandura's social learning theory that argues that children learn a great deal through observation and imitation (Crain, 2011). As an environmentalist, Bandura (as cited in Crain, 2011) also noted that noticeable learning took place via *vicarious reinforcement*, meaning through the observation of outcome when others try a new behavior.

In addition, Mindful Schools incorporates practices such as loving kindness or Metta practices which have been shown to greatly influence empathy and compassion (Mascaro, Rilling, Tenzin Negi, & Raison, 2013) as well as prosocial behavior (Leiberg, Klimecki, & Singer, 2011). With such considerations in mind, innerU was developed to incorporate in class

curriculum segments, yet also allowed for engagement strategies that were critical for cultivating the children's active investigation and learning success (Yair, 2000).

Based on the above findings and for the purpose of this research, the program was delivered by an expert teacher 15 to 20 minutes twice a week, along with along with a 5-minute mindfulness practice 3 days of the week via audio recordings on the days that mindfulness classes were not taught—totaling 45 to 55 minutes of contact per week. In addition, both the above stated programs utilized journaling as a key component in their program to support the child's reflective capacity as well as help anchor their lived experience. It was also suggested that the use of creative expression journaling be used to elicit and deepen the children's understanding of Embodied-Mindfulness.

### **Intervention Facilitation**

**Primary researcher.** This researcher has acted as the primary researcher in this study. The original proposal to receive the assistance of MFT interns (see rationale under the subheading Research assistance and teachers' training) was modified with Chair approval, based on the change in circumstances. Despite the researcher's attempt to solicit and train MFTIs, no volunteers stepped forward to either teach or assist in the current research study. In light of these research method changes, the researcher taught mindfulness in all intervention classes, and no longer was required to conduct weekly meetings with MFTI. For that reason, too, triangulation of data via MFTI interviews was not obtained. A larger number of teachers' interviews were conducted in turn. In addition to conceiving the design and securing all necessary permissions and consent forms, the primary researcher undertook the following roles in executing the study:

1. Introduced the innerU model to school principals and classroom teachers
2. Conducted a teacher information meeting for teachers that accepted to take part in the study in order to explain the research and their role in the research.

3. Coordinated innerU intervention schedule for each class
4. Acted as liaison between principals and teachers
5. Ensured that all ethical dimensions of the research were maintained
6. Created online questionnaire and ensured that it was easily accessible from school computer labs
7. Coordinated with teachers and computer lab personnel time in the computer lab to complete pre and post intervention surveys
8. Taught the innerU curriculum to all classes/grades within the study
9. Gathered creative expression data once a week from each child during the 8-weeks of the program
10. Conducted, audio-recorded, and transcribed 10 interviews (2 students from each class) to obtain a better understanding of the subjective lived experience of students with regards to the innerU program, and interviewed 5 classroom teachers
11. Collected and analyzed the data.

### **Sampling and Participant Selection**

The study was conducted with a total of 228 English speaking female and male participants, ages 9 to 12, from three primary schools from the Goleta Union School District in Goleta, California. All participants were voluntarily recruited and selected from 4th to 6th grade classes within the selected schools. Participation in the study was predetermined, by school principal endorsement of the program and voluntary teacher participation, following a pre-study recruitment period where a flyer (see Appendix B) providing an overview of the study, was distributed to principals, and subsequently to teachers, in Goleta primary schools. On a student level, screening to determine inclusion or exclusion from the program was determined pending students obtaining parent approval through informed consent, which was provided in both English and Spanish to cater to the school's large Hispanic population (see Appendices C & D).

Children ages 9 to 12 were selected for the study based on developmental considerations. According to Crain (2011), children enter the concrete operational stage using logic and reasoning at around 8 years of age. Children of this age are also able to articulate and describe their experiences and talk about their feelings, which is an essential aspect for this study considering its qualitative dimensions. In addition, at this stage of development, children also begin to have less focus on themselves and cultivate concern for others, which facilitates potential transpersonal dimensions that may arise from mindfulness practices. This human developmental stage is also a time when children begin to understand their own place in the world, opening doors to notions of personal value.

**Research assistance and teacher-trainers.** Initially it was proposed that two to three Marriage and Family Therapist Interns (MFTI) be trained by the primary researcher (expert trainer) to act as innerU curriculum facilitators, in order to support delivering of the innerU curriculum to multiple classes and schools simultaneously. They were to introduce each week's session in person in their designated classrooms, and ensure that the classroom teachers were prepared to follow-up with the prerecorded, daily meditations. Although MFTI training was conducted, no MFTI volunteers accepted to teach in the study. This inclusion was initially suggested to help minimize researcher or expert trainer bias and help validate the program as a universal Embodied-Mindfulness teaching tool. MFTIs working for the Goleta Union School District were voluntarily recruited prior to the school year via email and invited to join the study for the explicit purpose of acting as teacher-trainers. Screening to determine inclusion or exclusion from the study required that each intern is employed by the Goleta Union School District, has a genuine interest in learning to teach mindfulness, has worked with children within the school district for minimum of at least a year, and has a work schedule that permits him/her

to be fully engaged as a teacher-trainer in the study. Due to no MFTIs recruited in this initial research phase, this segment of the study has been postponed for further evaluation in subsequent studies.

**Classroom teachers.** Following the school principal's agreement to include the innerU curriculum within their respective school, 4th to 6th grade teachers were solicited via an introductory email containing a flyer (see Appendix B) that addressed the nature of the study. A maximum of 10 teachers and their respective classrooms were identified for inclusion in the study. Inclusion was based on the teacher's genuine interest in learning about Embodied-Mindfulness, their wiliness to include Embodied-Mindfulness within their overall curriculum, and accept to evaluate students prior and following the intervention. Classroom teachers' scope of responsibilities, preparation, and contribution to the study included: (a) participate in a 1 to 2-hour mindfulness training which was delivered prior to the beginning of the mindfulness program starting date (dates to be determined); (b) help collect informed consent forms; (c) evaluate each student in their class via an online 55-item questionnaire prior and after the mindfulness training; and participate in one 45-minute interview with the researcher. Teachers were informed that classes would be randomly assigned to an intervention and waitlist group. Teachers were also informed that the waitlist group would receive the intervention in the second half of the year following the initial research (data were not gathered during these second term sessions).

**Parents.** Parents were given an option to complete an online survey, contributing by observing changes in their children's behavior and interactions at home. This survey was not required from parents, and their children still participated pending parental consent.

## **Informed Consent**

As part of the disclosure process, Informed Consent Agreements were distributed to all participants in the study: the school principals, the classroom teachers, and the students' legal guardians. The informed consent served to provide full disclosure of the nature of the research, inform participants of any risk involved, identify participant's involvement, address confidentiality, and articulate the participant's voluntary choice to participate. The following three informed consent categories were identified (statistician and transcriber informed consent are discussed separately under quantitative and qualitative data analysis).

**School principals and head psychologist.** Following an initial introduction and soliciting participation in the innerU program via an introductory Flyer (Appendix B), the head psychologist and principals who have demonstrated interest in the program were provided an Informed Consent Agreement (see Appendix C) which served to provide an overview and explanation of the study as well as an agreement in supporting the innerU curriculum within the respective schools. In addition, the form informed the head psychologist and primary school principals that students could potentially exhibit an emotional response due to participation in the study that might merit attention from the school psychologist, and that the MFTI and classroom teachers would make referrals, if they believed a student needed further attention to process emotional response to the exercises. Two copies were sent to each principal and head psychologist, providing one copy for the principal's record or head psychologist's records and one for the researcher's.

**Classroom teachers.** Following the recruitment period, an Informed Consent Agreement Form (see Appendix D) was distributed to teachers selected to take part in the study (two copies were sent to each teacher, providing one copy for the teacher's record and one for the

researcher's). These forms were presigned by the school principal and primary researcher and identified the nature of the study, the training requirements, confidentiality/privacy guidelines, approximate time and effort required of them as a participant classroom teacher, where the study would be conducted, emotional response that may be exhibited by the children, which would merit further attention by the school psychologist, and potential benefits to participants (teachers and students).

**Students' parents or legal guardians.** To implement the Mindfulness Program in the Goleta Union School District, parent approval was solicited and obtained through a Student/Parent Informed Consent Agreement Form (see Appendices E, F, & G) distributed prior to data collection. These forms were presigned by the school principal and primary researcher and were provided to each classroom teacher to distribute to prospective participants' families (two copies were sent to each family, providing one copy for the family record and one for the researcher's). The Student/Parent Informed Consent Form was worded in both English and Spanish (see Appendices E, F, & G) to accommodate the schools' large Hispanic population. It informed parents of the nature and purpose of the study, acknowledged participant's rights, acknowledged that students might wish to discuss their feelings about the study with the school psychologist (referrals to be made by the study facilitators), and identified benefits to participants (Creswell, 2009; Sarantoka, 2005). Children without parent or legal guardian's consent and approval were not included in the study. These children were offered to do silent reading in the control group class or outside the class. Only 4 students were not provided parental permission.

### **Data Gathering**

Data were collected in a classroom setting in three phases—baseline, continuous, and post study. Quantitative measurement tools such as the Behavioral and Emotional Rating Scale;

the Student's Life Satisfaction Scale (see Appendix H), and the Children's Happiness Scale (see Appendix I) were used at baseline and posttest, while qualitative measures were gathered via creative expressive journaling throughout the 8-week period, and interviewing of students, and class teacher at follow-up. Pretesting (prior to the start of the study) was administered by the school's computer specialists in two phases to ensure adequate attention was given to each questionnaire separately. All of the studies were administered online in a neutral environment such as a classroom or in the computer lab. To facilitate comprehension, questions were read out loud by the administrator and questions that the children had difficulty with were answered accordingly. Measures were taken to ensure the identity of each participant was protected. Numerical pseudonyms were allocated to each child by the researcher and correlation codes were kept sealed until posttest measures were re-administered. Only the researcher had access to the codes to ensure that test-measures were matched accordingly. Throughout the intervention period, creative journaling on a weekly basis offered children the opportunity to explore embodied and subjective dimensions related to their meditative experience. Children had the opportunity to express themselves through creative embodied expression and visual art journaling. Approximately 5 minutes were allocated to creative journaling at the end of the class. Students were asked to draw how they felt before and after the mindfulness class using school supplies by drawing shapes and lines without consciously thinking. Posttesting was administered online in the computer lab or classroom at the conclusion of the intervention in the same order that they were initially administered by the researcher in the prephase process. Teacher and student measures were gathered for the BERS-2 while only student ratings were obtained for the Children's Happiness Scale (CHS; Morgan, 2012), and the Student's Life Satisfaction Scale (SLSS; Huebner, 1991a).

**Quantitative data gathering procedures.** The quantitative segment of the study used a quasirandomized controlled group approach in which classes from three schools were randomly selected by group to be placed into an experimental and control group. The quasirandomized control trial (RCT) accounted for age differences by ensuring that an equal number of students were allocated to both the experimental and control groups. The experimental group took part in 15-20 minute Embodied-Mindfulness sessions twice a week, in accordance with the innerU curriculum (see Appendix A), along with a 5-minute mindfulness practice 3 days of the week via audio recordings delivered by the classroom teacher via their school iPad on the days that mindfulness sessions were not taught in person—totaling 45-55 minutes of practice per week, while the control group engaged in their regular school activities for the same period of time. The mindfulness program, innerU, was composed of 16 mindfulness sessions, which was taught over a period of 8 weeks, and which utilized nature inspired imagination, sitting and kinesthetic exercises, and creative expression journaling (see the following heading on how journal entries also constituted qualitative data) as the foundation of its educational platform. In addition, the program was developed to introduce mindfulness skills progressively in order to gently build attention and inner exploratory capacity throughout the program.

The program was delivered by the researcher in all five quasirandomized classes. The classroom teacher was responsible for implementing the daily meditation practice for the period of the study. The Embodied-Mindfulness sessions took place during school hours as the innerU sessions are designed to be integrated into teachers' delivery of their daily curriculum without disruption of classroom educational goals. Sessions focused on various Embodied-Mindfulness dimensions, may it be through the breath or via the awareness of the senses, thoughts, emotions, and one's connection to others. In addition, the program also included a movement component

that helped somatically integrate each learned experience. Quantitative assessment via the following instruments—the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the Children’s Happiness Scale (Morgan, 2012), and the Student’s Life Satisfaction Scale (Huebner, 1991a)—was conducted the 2 weeks prior and the 2 weeks following the intervention period (see Appendices H & I).

**Instruments.** Three self-report measures were selected to measure the efficacy of mindfulness-based meditation on children’s wellbeing as reflected in psychological, emotional, social, and behavioral criteria. Wellbeing was operationalized using the well-established Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the Children’s Happiness Scale (CHS; Morgan, 2012), and the Student’s Life Satisfaction Scale (SLSS; Huebner, 1991a). All tests were administered at baseline and post intervention.

**Rationale for selecting quantitative assessment measures.** The BERS-2 assessment tool was selected not only for its age appropriate (5 to 19 years old) and strength-based philosophical considerations; it was also selected for its proven track record in delivering acceptable (.90 test-retest reliability coefficient) psychometric properties (Epstein, Mooney, Ryser, & Pierce, 2004). In the last few decades, formal assessment instruments have predominantly been used to identify deficits, pathologies, or problems in individuals (Epstein et al., 2002). Such measures may tend to limit the scope of the behavioral and emotional landscape of a child. Strength-based assessments on the other hand are founded on principles that focus on the child’s strengths rather than weaknesses, which may result in enhancing motivation, improving performance, supporting skills rather than problems, and supporting educational development, mental health, and social endeavors. In addition, strength-based assessments allow for a holistic approach taking into consideration a broader range of information. The BERS-2

consists of 52 Likert-type items which provides an overview of four subscales which evaluate: (a) Interpersonal strengths which measures how a child may control emotions, (b) Family Involvement which measures participation and relations with family, (c) Intrapersonal strengths which assesses the child's perception of competence and accomplishments, and (d) School Functioning which addresses competence in classroom task. Each item is rated on a scale of 0 to 3 (0 = *not at all like the child*; 1 = *not much like the child*; 2 = *like the child*; 3 = *very much like the child*). Scores were calculated for each strength dimension and were then combined to provide an overall strength index. Higher scores reflected greater perceived strengths.

Specific measures of positive functioning (e.g., eudemonic wellbeing) were used in conjunction with existing clinical scales emphasizing the respondents' own standard of evaluation. Understanding a child's life satisfaction, as defined by a person's subjective, global evaluation of the positivity of her/his life as a whole (Diener, Suh, Lucas, & Smith, 1999), offered additional insight into the conceptualization of positive wellbeing in relationship to Embodied-Mindfulness practices. A recent study by Gadermann, Guhn, and Zumbo (2011) investigating life satisfaction scales for children found that 95% of children evaluated felt it was important to address life satisfaction. The Student's Life Satisfaction Scale (SLSS; see Appendix H) was proposed as it "provide[d] developmentally appropriate measures of positive subjective wellbeing of children and youth" (Huebner et al., 2003, p. 20) and has received considerable research attention. The SLSS is a 7-item measure that has been used with children 9 to 19 and requires respondents to rate their satisfaction with regards to items that are domain-free (e.g., *My life is better than most kids'* vs. *My family life is better than most kids'*). Construct validity of the SLSS has been supported and has been proven to provide sound measures of global life satisfaction measures (Huebner et al., 2003).

The Children's Happiness Scale, a 20-item questionnaire, was developed by soliciting 147 children and youth in 2012 to respond to 100 statements regarding happiness. Each question was rated in order to determine the relevancy of a question with regards to happiness. The 100 questions were then narrowed down to the 20-items that best addressed happiness within the lives of youth. When conducting internal validity, a Pearson product moment correlation demonstrated 0.70 accuracy. What demarks this measure from other measures is that it relied 100% on the subjective perception of what makes children happy to develop its scale. Weaknesses of this measure was that it was not validated within clinical settings and was founded on the benefit of focusing on states which explained the behavior of a given person at a given moment, but did not predict the behavior they demonstrated in subsequent days.

Although techniques to control threats to validity were implemented within each of these measures, certain threats were identified as potential treats to validity. These include the following: (a) Inadequate attention to item content which can lead to carelessness, (b) Parental or teacher bias in rating the child, (c) Low desire to complete the tool in a truthful manner, and (d) Inability to fully understand the content (Reynolds & Kamphaus, 2003). To control for such threats, the measures were read out loud to each child, thus helping to support intentionality and comprehension. Also, BERS-2 teacher and parent forms were administered in addition to the child form for greater reliability of data.

**Qualitative data gathering procedures.** Although there is an emerging consensus defining childhood wellbeing as multidimensional including the dimensions of physical, emotional, and social wellbeing, Statham and Chase (2010) stipulate that there has been a shift from over relying on objective measures of child wellbeing toward engaging children in defining their own parameters around what constitutes wellbeing. For this reason, a qualitative dimension

was introduced to the study, which offered the opportunity to gain a better understanding of children's subjective experiences of mindfulness practices and their benefits. Qualitative data were gathered by both creative expression journaling and phenomenological interviewing.

Creative expression journal entries were collected during the intervention to solicit a better understanding of the lived experience of Embodied-Mindfulness in children. To analyze the visual data, the research has utilized the *Imaginal Resonance* (Netzer, 2008, 2013) approach to analyzing nonverbal data through intuitive and experiential knowing. The researcher's Integral Research Skills (Anderson & Braud, 2011) examined the lived experience of students by emphasizing attention on kinesthetic and visceral creative expression.

The creative expression dimension of the program invited students once a week, following an experiential in-class innerU session, to draw in their journal, which was provided to each student participating in the study, for a period of 5 minutes. Such an inclusion distinguishes the innerU curriculum from other educational classroom activities, and minimizes the likelihood of stereotypical expression or regurgitation of what students perceived as the expected responses. These creative expressive instructions were provided by the teacher-researcher as well as made available to students in their journal.

Through brief expressed guidelines (see Appendix J), students were invited to choose two colors, one for how they felt before the mindfulness session, and another for how they feel after the mindfulness session (they may choose the same color if they feel no change), and asked to draw lines (e.g., straight, curved, scribbled) and shapes that express their somatic experience before and after the practice. This exercise not only served to help elicit the authentic visceral and lived experience of the children, it also invited a contemplative and reflective dimension of their embodied experience. Children were also asked to provide a caption, to match their

drawing, which would best describe the essence of their drawing and the quality of their inner state. This approach allowed for students to *learn from the inside out*, meaning that students were asked to draw or write from the perspective of their senses, which helped them anchor a deeper understanding of their experience in relationship to others (i.e., intrapersonal and interpersonal dynamics). Students' journaling was used to better understand the subjective embodied experience of children as a result of Embodied-Mindfulness practices. At the end of the 8-week period, journals from the intervention group were gathered for analysis with the promise that they would be redistributed to them at the end of the school year.

Following the intervention, qualitative data were gathered by interviewing 5 classroom exemplar teachers, who volunteered to be interviewed. Interviews spanned 45 to 60 minutes. Criteria of selection and inclusion consisted of the following: (a) Teachers who have collected the greatest number of informed consent forms, (b) Teachers who were engaged in the curriculum while the class was taught by the expert teacher, and (c) Teachers who identified a willingness to be interviewed on the Informed Consent Form. A semistructured interview (see Appendix K) was conducted to solicit information about the classroom teacher's perception of how the program influenced the children in the class as a whole, understand the teacher's personal embodied experience as a result of participating in the innerU Embodied-Mindfulness Program, and obtain their overall impressions of the curriculum.

In addition, 10 student interviews were conducted by the researcher to obtain a deeper understanding of the benefits of Embodied-Mindfulness in children. Student Informed Consent Forms were submitted prior to the interview process (see Appendices E, F, & G) to obtain parental permission to interview the children during school hours. Semistructured interviews

were conducted by the researcher the week following the last posttest. All interviews were recorded for accuracy and held in a neutral environment at school.

Criteria of selection and inclusion consisted of the following: (a) student's attendance rate of 95% or higher, (b) student who presented visible participation in class, (c) student who is articulate and communicates well, and (d) student representative from each class and grade level, if possible. Once again, a semistructured interview (see Appendix L) was conducted to solicit information about the student's perception of how the program influenced him or her and explored the lived experience as a result of participating in the innerU program. Although it was initially proposed that if observed as beneficial to deepen qualitative data, the researcher could elect to invite 4-8 students to participate in one focus group to specifically address interpersonal changes, it was deemed unnecessary to do so. Following the qualitative data gathering process, interviews were transcribed by a contracted transcriber or transcribing agency, who were informed of the ethical considerations of confidentiality, and who signed a Confidentiality Agreement form (see Appendix M).

## **Data Analysis**

**Quantitative data analysis.** To properly evaluate the hypothesis that an Embodied-Mindfulness practice increases wellness in children as measured by the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the Student's Life Satisfaction Scale (SLSS; Huebner et al., 2003), and the Children's Happiness Scale (CHS; Morgan, 2012), data sets were gathered, assigned a numerical value, cleaned to eliminate data errors, and compared for analysis accordingly. Data were exported from the Qualtrics.com secure online survey into an Excel spread sheet and subsequently imported into SPSS version 22.2 software which was used to analyze the data. It is also noted that a statistician was hired to ensure proper data analyses were

conducted. A Confidentiality Agreement was provided and signed by both the hired statistician and researcher (see Appendix N). Due to the complexity of variables, an ANOVA was used to evaluate the effectiveness between the independent (Embodied-Mindfulness practices) and dependent variables (wellbeing in children) presented in this study. Conducting this test also helped establish concurrent validity for the intervention. Effectively an ANOVA helped identify the efficacy of the intervention and how well it worked. An F-ratio identified how big of a difference there was between the conditions and whether the effect was due to chance. Data from all three schools were collected and compared against each other as well as evaluated collectively.

**Qualitative data analysis.** Within the context of this research, the qualitative data were used to both support and explain the quantitative dimensions of the research while also observing contradictions between quantitative and qualitative data sets. It also served to identify discrepancies between the students' external manifestation of the program's effects and their inner change. Two forms of qualitative data were gathered: (a) data gathered during the intervention, and (b) data gathered following the intervention. Data gathered concomitantly throughout the program (student journals) was reviewed by the researcher for thematic observation founded in weekly entries. The chronological data allowed the researcher to potentially identify turning points, trends, and consistencies in entries. Word descriptions that accompanied the children's drawings were entered in an Excel spreadsheet to reflect each week's entry, for each child. This data not only allowed for evaluating trends, it also served to evaluate any changes over time by comparing initial entries to final entries. These data matrices allowed the researcher to evaluate potential change and identify commonalities among classes, grade level, and the student population as a whole.

Drawings were evaluated through the interpretive lenses of researcher and children. The researcher selected journals per class to evaluate drawings by subjectively observing the shapes, line, and color choices throughout the 8 weeks. *Imaginal Resonance* (Netzer, 2008, 2013) utilizing embodied writing was used as a way for the researcher to attune to overall trends. The committee Chair, a professional art therapist, was consulted as visual data expert at this stage of the research.

The *Imaginal Resonance* procedures provide structure for the researcher and what is otherwise a fluid, somatic, and intuitive process of resonance with image-based data, which may range from consonance to dissonance. The process supports the researcher's inner, direct, and immediate knowing (Ross, 1987) of the imagery, without imposing logical reasoning, in ways that match the nonrational, feeling-based nature of the data. *Imaginal Resonance* was thus instrumental in this researcher's analysis of the visual journal entries of the students' nonverbal experiential state. Here, the human experience was explored by the researcher on both conscious and subconscious levels, where she attempted to meet the participants in the fullness of their human experience (Anderson & Braud, 2011). *Imaginal Resonance* constitutes the following steps based on a synthesis of two theories of intuitive experience (Petitmengin-Peugeot, 1999) and experiential knowing (Maslow, 1966/1998):

1. Immersion and interior listening
2. Waiting and open experience
3. Availability and innocence
4. Unconditional acceptance and intuition
5. Surrendering and a closing procedure.

These procedures are intended as a container for a fluid process of interiority, receptivity, trust in one's capacity to know without relying on prior knowledge, and unconditional acceptance of one's intuition with regard to the nonverbal communication of the data. It has a

clear beginning in immersion and interior listening, and closure that invites the researcher's humility and gratitude with regard to knowing. Immediate knowing is receptive and creative, it is soulful and mindful, not seeking to confirm existing bias or prove the researcher's hypothesis (Netzer, 2008).

Interviews allowed for deeper insight into the lived experience of children with Embodied-Mindfulness. The inductive analysis of interview transcripts was based on a triangulation model where children's and classroom teachers' interviews along with the researcher's observations were compiled to better understand the lived experience of children during the Embodied-Mindfulness program. Each interview transcription was read as a whole first, and subsequently underwent a thematic content analysis, initially coded by generating various labels pertaining to related embodied experiences. Coding was used to eliminate, combine, or subdivide coding categories and the researcher looked for repeating expressions and larger themes that connected codes, first within each contributor's transcription, then across groups (i.e., students, classroom teachers, researcher), and the body of data as a whole. The following questions (Berkowitz, 1997) were taken into consideration in the data analysis phase:

- What patterns and common themes emerged in responses about specific topics? How did these patterns (or lack thereof) help to illuminate the broader central question(s) or hypotheses?
- Where there deviations from these patterns? If so, where there any factors that might explain these deviations?
- What interesting stories emerged from the responses? How did they help illuminate the central question(s) or hypotheses?
- Did any of these patterns suggest that additional data may be needed? Did any of the central questions or hypotheses needed to be revised?
- Were the patterns that emerged similar to the findings of other studies on the same topic? If not, what explained these discrepancies? (Para 6)

In addition, the following question was also taken into consideration:

- How were participants' environments or past experiences related to their behavior and attitudes?

Although this Mixed-Method research initially proposed a multisource method where journal entry themes, interview themes, and MFTI and teacher observations themes would be gathered to identify common overarching patterns, it is important to note that no data were collected by MFTIs due to the absence of MFTI volunteers. In light of this exclusion, it was deemed appropriate to increase the number of student interviews to adequately identify potential themes. Ten student interviews were conducted rather than four as initially proposed. Modifications to the research design were also necessary as a result of teachers not providing sufficient in-classroom observations. Teachers chose independently to not provide class observations, a factor which was also excluded from the initially proposed sources of qualitative data. The inclusion of the researcher's own observations via *Imaginal Resonance* (Netzer, 2008, 2011) was deemed appropriate to help identify potential common trends in creative expression variances throughout the Embodied Mindfulness program. The omission of the researcher's in-class observation was also deemed appropriate to reduce researcher bias. The following chart represents the adjustments brought to the qualitative dimension of the study.

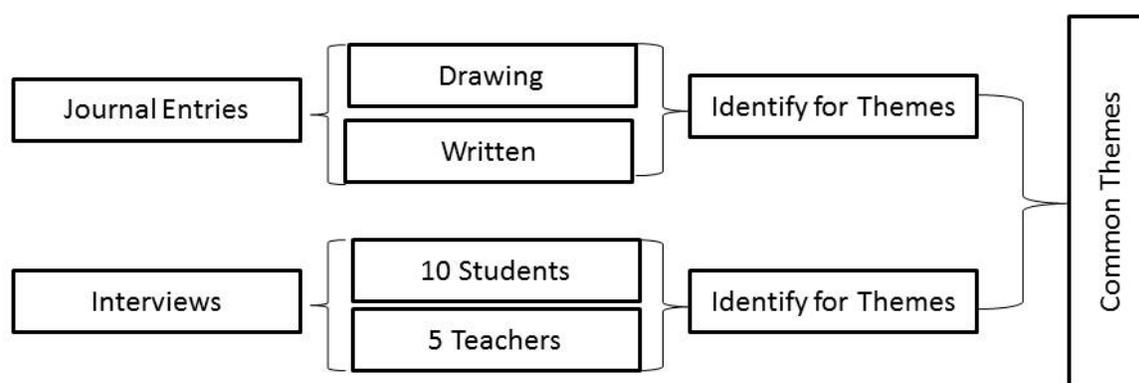


Figure 1. Revised flow chart of qualitative data analysis into common themes.

## **Ethical Considerations**

Several general ethical considerations were warranted for this study. “First and foremost, the researcher has an obligation to respect the rights, needs, values, and desires of the informant(s)” (Creswell, 2009, pp. 197-199). Because this research was conducted with children, such rights were extended to the children’s parents. Rights included confidentiality measures to guarantee that each participant’s personal information was kept anonymous, the provision of a full understanding of the purpose of the study and how it would be used, and the exercise of respect for a vulnerable population. Other participant rights included the right to withdraw from the study at any time and ensure that if any changes are brought to the study, they must be articulated to the participants. It was also ethically important to respect the research site by properly informing school principals of any development or change in the study. Finally, research findings and reports utilized appropriate language that ensured that no biases were made against a gender, sexual orientation, racial group, or disability.

Another important ethical consideration in conducting this research was that the researcher [understood](#) that Embodied-Mindfulness could contribute to the awareness of difficult and painful emotions within children that may be present as a result of challenging family or environmental circumstances. In the event that a child presented unusual, dysregulated behavior or expression that was a cause for concern as a result of the innerU program, the child would be removed from the study and provided appropriate counseling services. Four licensed psychotherapists were available at Isla Vista School, Hollister School, and El Camino for psychological interventions.

This study required the assistance and support of many, beginning with school principals, and extending to classroom teachers, parents, and the researcher. The researcher outlined an

Informed Consent Form for each one of these contributors to ensure clarity as to their scope of contribution and assistance. The researcher was available to respond to any questions or concerns that arose during the study or subsequently thereafter while aftereffects were potentially still present residually. The researcher was committed to provide a copy of this study's findings to those participants and contributors who indicated so in their ICF.

### **Summary**

In summary, this Explanatory Mixed-Method study evaluated the efficacy of a mindfulness-based curriculum in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, affective strengths of primary school children ages 9-12, as well as elicited a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within primary schools in Goleta, California. Children, ages 9 to 12 from 4th and 6th grades were introduced to a 15-20 minute mindfulness class twice a week, along with a 5-minute mindfulness practice 3 days of the week via audio recordings on the days that mindfulness sessions were not taught—totaling 45 to 55 minutes of contact per week. The mindfulness program, innerU, was composed of 16 mindfulness sessions which were taught over a period of 8 weeks, that utilized nature inspired imagination, sitting and kinesthetic exercises, and creative expression journaling as the foundation of its educational platform. In addition, the program was developed to introduce mindfulness skills progressively in order to gently build attention and inner exploratory capacity throughout the program. The study assessed behavioral, emotional, and social markers by evaluating interpersonal strengths, family involvement, intrapersonal strengths, school functioning, and affective strengths. These were operationalized using the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the Children's Happiness Scale (CHS;

Morgan, 2012), and the Student's Life Satisfaction Scale (SLSS; Huebner, 1991a). Parental informed consent was obtained prior to the beginning of the study. Qualitative data gathering included both student creative expression journaling and phenomenological interviewing with students and classroom teachers. Data were analyzed via ANOVA and *t*-testing as well as through a qualitative *Imaginal Resonance* and Integral Research model wherein trends in kinesthetic, visceral, and creative expression were identified in the collected journals, observations, and interviews. Ethical considerations were addressed through informed consent and through the mindfulness of this transpersonal researcher throughout the study. Such considerations included: observing participant confidentiality, providing full disclosure of the nature of the study, respecting the children's emotional needs, offering participants the right to withdraw, properly communicating development of the study to school principals, and the use of appropriate language to communicate.

## Chapter 4: Results

This Explanatory Mixed-Method study evaluated the efficacy of a mindfulness-based curriculum that featured embodied practices in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, and affective strengths of primary school children ages 9-12 years. It also aimed at eliciting a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within the context of primary school settings. The study gathered quantitative and qualitative data from three schools in the Goleta, CA area, where 10 classes participated in the program. The following represents the results obtained from both qualitative and quantitative data gathering initiatives.

### Sample Demographics

A total of 228 English speaking students, ages 9-12, from three elementary schools in Goleta, CA (10 classrooms) participated in the present study: innerU program/intervention group,  $n = 115$  (59 boys, 56 girls); control group,  $n = 113$  (56 boys, 57 girls). The *mean* age of participants was 9.98 years ( $SD = 0.93$ ) with a range of 9 to 12. Schools in which students were recruited represented a diverse range of socioeconomic status as presented by the school wide and district demographical surveys. This said, students eligible for the study resulted in a predominantly Hispanic, Caucasian, and Asian study group (see Table 2). Among these demographics, two of the three schools' student populations were from socioeconomically disadvantaged families (School 1: 64.9%, School 2: 41.4, and School 3: 79.8%). These demographics were characteristic of school populations in many areas of California, especially in Southern California. Although parental and family demographics were not directly gathered at the time of the survey, Table 2 summarizes the overall demographic characteristics of each school based on the school district 2014 SARC survey.

Table 2

*Demographics per School by Percentage of Total Enrolment*

Schools	Hispanic	White	Asian	Black	other	English learners	Socioeconomically Disadvantaged
School 1	60.8%	23.6%	9.4%	2.3%	3.9%	46.8%	64.9%
School 2	52.4%	37.5%	3.9%	0.6%	4.5%	25.9%	41.4%
School 3	85.4%	8.9%	2.8%	0.4%	2.4%	49.4%	79.8%

**Quantitative Data Results**

Student wellbeing was evaluated by administering three children's scales: the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the Student's Life Satisfaction Scale (SLSS; Huebner et al., 2003), as well as the Children's Happiness Scale (CHS; Morgan, 2012). It is noted that the BERS-2 was administered to students and teachers, as well as to parents who volunteered to fill out the online survey at pre and post intervention. Due to a low parent response rate ( $n = 24$ ) for both the pre and post surveys, BERS-2 parent surveys were omitted from the study. Only student and teacher outcomes were reported. The following represents the findings of the BERS-2 Teacher Rating Scale, the BERS-2 Student Rating Scale, the Children's Happiness Scale, and the Student's Life Satisfaction Scale. Prior to analysis, all scales were measured for normal distribution. The data presented was considered normally distributed within acceptable range and used for further data analysis. To facilitate data comprehension, the use of the term *Time* refers to the delta between pre and post intervention, while *Main Effect* refers to the effect of an independent variable on a dependent variable averaging across the levels of any other independent variables. *Interaction* refers to an action that occurs as two or more objects have an effect upon one another.

**BERS-2 teacher rating scale.** The BERS-2 Teacher Rating Scales were completed by the intervention and control group teachers at pre and post intervention, which represented a total of 206 students (97 boys and 109 female) as per Table 3.

Table 3

*BERS-2 Teacher Scales Participation*

	Variable	Value Label	<i>n</i>
Gender	1.00	male	109
	2.00	female	97
Schools	1.00	school 1	73
	2.00	school 2	83
	3.00	school 3	50
Intervention	.00	control	99
	1.00	intervention	107

The effect of the Teacher-filled BERS-2 rating over time was first analyzed and it was found that BERS-2 score did not significantly change over time. No significant interactions between time and age, time and intervention group, or time, school, and intervention group (all  $p > 0.05$ ) were found. Interestingly, a significant interaction between time and gender,  $F(1, 193) = 7.429, p = 0.007$  was noted, indicating that gender influenced the change in BERS-2 scores over time. A significant interaction between time and schools was also found,  $F(2, 193) = 5.193, p = 0.006$ . Additionally, a nonsignificant trend toward a 3-way interaction between time, gender, and intervention group,  $F(1, 193) = 3.014, p = 0.084$  was found. Most interestingly, a 4-way

interaction between time, gender, school, and intervention group was found, suggesting that the intervention exhibited a differential effect, based on the intersection of those groups.

Follow-up ANOVA have indicated that this effect was partially driven by a nonsignificant trend within School 3, where girls improved, but boys did not,  $F(1, 45) = 3.375, p = 0.073$ . This effect was most likely augmented by the fact that this trend was not present within other schools, along with the fact that girls improved more over time within School 2,  $F(1, 78) = 4.766, p = 0.032$ , but not in School 1 ( $p > 0.05$ ), and was present at trend level within School 3 ( $p = 0.093$ ). This trend may have been influenced and skewed due to teacher gender bias. It is noted that all participating teachers were female. Further discussion of the significance of these findings is addressed in Chapter 5.

The following figure and tables present a summary of the above mentioned results:

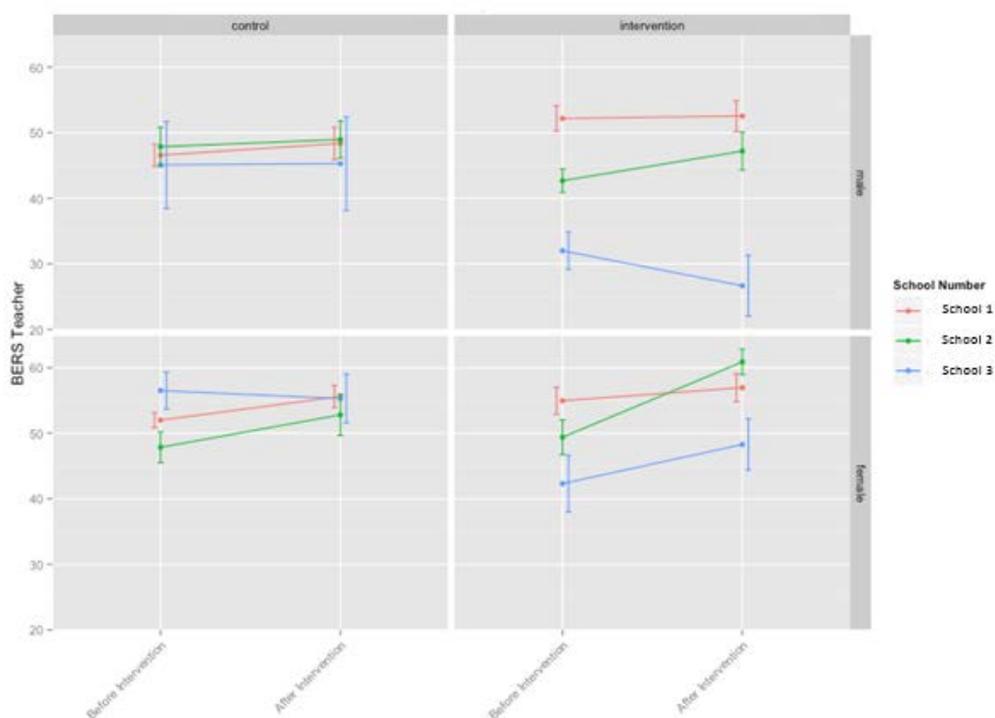


Figure 2. Highest improvement amongst females within intervention group in Schools 2 and 3.

Table 4

*BERS-2 Teacher Rating Scale Tests of Within-Subjects Contrasts: Measure: Time and BERS-2 Teacher Scale (pre/post) as Dependent Variable*

Source	Time	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Time	Linear	56.245	1	56.245	1.697	.194
Time * age real	Linear	31.698	1	31.698	.956	.329
Time * gender	Linear	246.307	1	246.307	7.429	.007
Time * schools	Linear	344.322	2	172.161	5.193	.006
Time * intervention	Linear	2.168	1	2.168	.065	.798
Time * gender * schools	Linear	38.332	2	19.166	.578	.562
Time * gender * intervention	Linear	99.922	1	99.922	3.014	.084
Time * schools * intervention	Linear	154.792	2	77.396	2.335	.100
Time * gender * schools * intervention	Linear	210.302	2	105.151	3.172	.044
Error (time)	Linear	6398.487	193	33.153		

Table 5

*BERS-2 Teacher Rating Scale Tests of Between-Subjects Effects: Measure: Time and BERS-2 Teacher Scale (pre/post) as Dependent Variable, Transformed Variable: Average*

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	6805.508	1	6805.508	24.733	.000
Age real	15.168	1	15.168	.055	.815
Gender	6574.795	1	6574.795	23.894	.000
Schools	3899.002	2	1949.501	7.085	.001
Intervention	613.941	1	613.941	2.231	.137
Gender * schools	1074.223	2	537.112	1.952	.145
Gender * intervention	432.008	1	432.008	1.570	.212
Schools * intervention	4721.216	2	2360.608	8.579	.000
Gender * schools * intervention	764.090	2	382.045	1.388	.252
Error	53106.336	193	275.162		

Table 6

*BERS-2 Teacher Scale Tests of Within-Subjects Contrasts: Dependent Variable: BERS.T.diff*

Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Corrected Model	563.864 <sup>a</sup>	2	281.932	4.005	.020
Intercept	934.773	1	934.773	13.278	.000
Schools	563.864	2	281.932	4.005	.020
Error	14291.515	203	70.402		
Total	16168.000	206			
Corrected Total	14855.379	205			

*Note.* <sup>a</sup> R Squared = .038 (Adjusted R Squared = .028).

Table 7

*BERS-2 Teacher Rating Scale Changes Over Time per School: Dependent Variable: BERS.T.diff*

School	Mean	Standard Error	95% Confidence Interval	
			Lower Bound	Upper Bound
School 1	2.342	.982	.406	4.279
School 2	4.217	.921	2.401	6.033
School 3	-.020	1.187	-2.360	2.320

**BERS-2 student rating scale.** The BERS-2 Student Rating Scales were completed by the intervention and control groups during the 2 weeks prior and following the intervention. As suggested per Table 8, a total of 195 students (100 boys and 95 female) completed the BERS-2 student survey.

Table 8

*BERS-2 Student Rating Scale Participation*

Variable		Value Label	<i>n</i>
Gender	1.00	male	100
	2.00	female	95
Schools	1.00	School 1	76
	2.00	School 2	76
	3.00	School 3	43
Intervention	.00	control	98
	1.00	intervention	97

The BERS-2 Student Rating Scale was first analyzed for effect and revealed that BERS-2 children's scores did not significantly change over time. As per Table 9, no significant interaction was found between time and age, time and intervention group, or time, school and intervention group (all  $p > 0.05$ ). Findings also point to a significant interaction between time and gender,  $F(1, 182) = 6.165, p = 0.014$ , indicating that gender influenced the change in BERS scores over time. Trends suggested that boys differed from the girls in their overall BERS-2 scores. Further exploration revealed that this difference was marked by no change between pre and post when averaging together pre and post intervention data. Per Table 9, the boys exhibited significantly lower BERS scores (mean = 115.52), compared to girls (mean = 121.228),  $F(1,182) = 6.165, p = 0.014$ .

Table 9

*BERS-2 Gender Variance: MEASURE\_1*

Gender	Mean	Standard Error	95% Confidence Interval	
			Lower Boundary	Upper Boundary
Male	115.520 <sup>a</sup>	1.631	112.301	118.739
Female	121.228 <sup>a</sup>	1.622	118.028	124.428

*Note.* <sup>a</sup> Covariates appearing in the model are evaluated at the following values: age real = 10.0205.

Table 10

*BERS-2 Student Rating Scale—Tests of Within-Subjects Contrasts: Measure: Time and BERS-2 Student Scale as Dependent Variable*

Source	Time	Type III Sum of Squares	df	Mean Square	F	Sig.
Time	Linear	15.096	1	15.096	.156	.693
Time * age real	Linear	18.878	1	18.878	.195	.659
Time * gender	Linear	217.018	1	217.018	2.246	.136
Time * schools	Linear	3.870	2	1.935	.020	.980
Time * intervention	Linear	229.845	1	229.845	2.379	.125
Time * gender * schools	Linear	257.809	2	128.905	1.334	.266
Time * gender * intervention	Linear	3.601	1	3.601	.037	.847
Time * schools * intervention	Linear	37.413	2	18.706	.194	.824
Time * gender * schools * intervention	Linear	138.295	2	69.147	.716	.490
Error (time)	Linear	17584.892	182	96.620		

Table 11

*BERS-2 Student Rating Scale - Tests of Between-Subjects Effects: Measure: Time and BERS-2 Student Scale as Dependent Variable, Transformed Variable: Average*

Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Intercept	54576.301	1	54576.301	116.885	.000
Age real	1449.224	1	1449.224	3.104	.080
Gender	2878.510	1	2878.510	6.165	.014
Schools	115.164	2	57.582	.123	.884
Intervention	546.694	1	546.694	1.171	.281
Gender * schools	1297.887	2	648.943	1.390	.252
Gender * intervention	60.964	1	60.964	.131	.718
Schools * intervention	929.439	2	464.719	.995	.372
Gender * schools * intervention	403.702	2	201.851	.432	.650
Error	84979.736	182	466.922		

**BERS-2 teacher and student subscales effect.** No effects were identified within the BERS-2 teacher subscales. In evaluating for effects within individual BERS-2 Student subscales, no effects were found for the Interpersonal Scale (IS), the Intrapersonal Scale (IaS), the School Functioning (SF), or the Affect Scale (AS). Interestingly, the BERS-2 student Family Involvement (FI) subscale presented significance between intervention  $F(1, 182) = 7.601, p = 0.006$  and time as demonstrated by Table 12.

Table 12

*BERS-2 Student Family Involvement (FI) Subscale—Test of Within-Subject Contrast:  
MEASURE\_1*

Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Time	2.187	1	2.187	.332	.565
Time * age real	1.789	1	1.789	.271	.603
Time * gender	1.830	1	1.830	.278	.599
Time * schools	17.422	2	8.711	1.321	.269
Time * intervention	50.114	1	50.114	7.601	.006
Time * gender * schools	7.132	2	3.566	.541	.583
Time * gender * intervention	.003	1	.003	.000	.982
Time * schools * intervention	10.362	2	5.181	.786	.457
Time * gender * schools * intervention	.738	2	.369	.056	.946
Error (time)	1199.877	182	6.593		

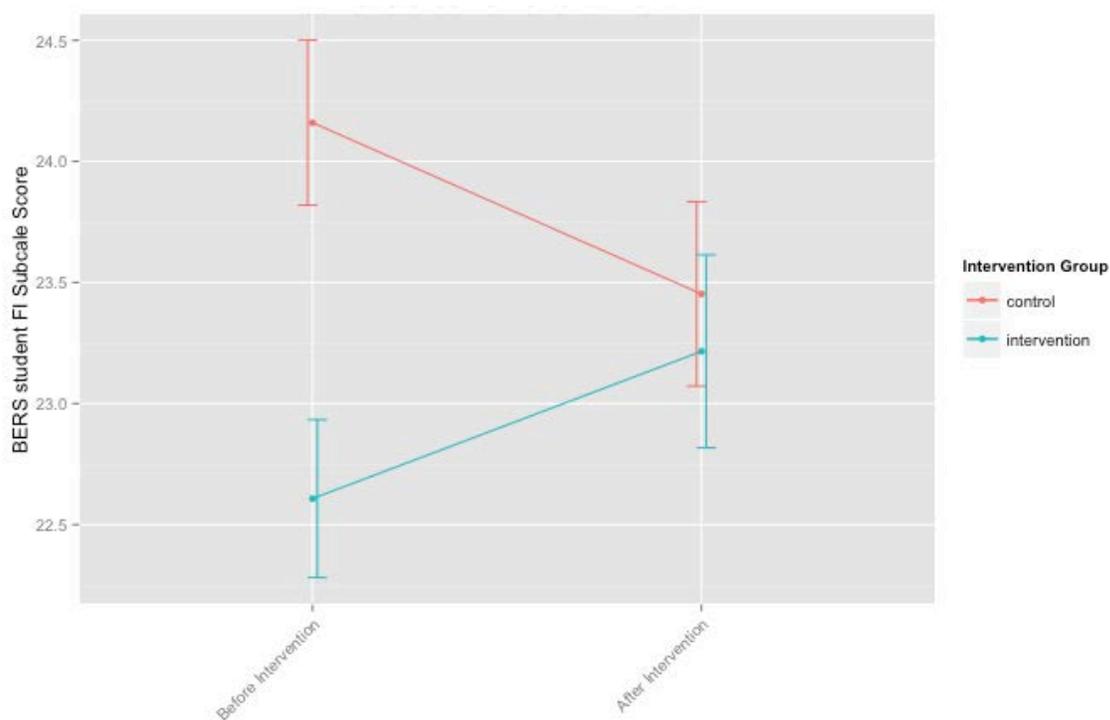
Although the intervention group improved significantly more than the control group, a counter argument could be made that the intervention group started lower within the scale suggesting a possible regression toward the mean effect (see Table 13 and Figure 3). It is also noted that one of the limitations found here was that the effect size was small (~1 point). Further discussion of the significance of these findings is addressed in Chapter 5.

Table 13

*BERS-2 Student Family Involvement (FI) Subscale—Intervention \* Time: MEASURE\_1*

Intervention	Class	Mean	Standard Error	95% Confidence Interval	
				Lower Boundary	Upper Boundary
Control	1	23.959 <sup>a</sup>	.367	23.235	24.684
	2	23.368 <sup>a</sup>	.429	22.522	24.214
Intervention	1	22.627 <sup>a</sup>	.375	21.887	23.367
	2	23.542 <sup>a</sup>	.438	22.678	24.406

*Note.* <sup>a</sup> Covariates appearing in the model are evaluated at the following values: age real = 10.0205.



*Figure 3.* Family Involvement (FI) measure over time \* intervention.

**Life satisfaction.** Overall, the researcher found that Life Satisfaction Scale (LSS) significantly changed over time, regardless of intervention group,  $F(1, 164) = 5.423, p = 0.021$  from a mean of 33.899 before the beginning of the experiment to a mean of 34.936 at the end of the experiment. Although all interactions were examined between time and gender, school, intervention group, none of them were significant. However, the 4-way interaction between time, gender, school and intervention, could be viewed as a nonsignificant trend  $F(2, 164) = 2.833, p = 0.062$ . Because so few other effects were significant, the interpretation of this 4-way interaction should be taken with caution and with the awareness that it may be a spurious effect.

When the sample was broken apart by school, we found that within School 1 and School 3 schools, the students did not significantly differ over time and there was no significant difference between intervention and control, nor was there any significant interaction with gender (all  $p > 0.05$ ). However, within School 2, a significant main effect of time was found,  $F(1, 68) = 9.970, p = 0.002$ . This indicated that students significantly improved in LSS from a mean of 35.24 before the experiment, to 36.705 after the experiment. Given that the other schools did not change over time, it is probable that this main effect was driving the main effect observed in the overall analysis. Importantly, a significant interaction between time and intervention,  $F(1, 68) = 7.599, p = 0.007$  was also found. This indicated that participants in the intervention group improved by about 2.8 points, compared to those in the control group who only improved by 0.2 points. We also found a nonsignificant trend toward an interaction between time, intervention, and gender,  $F(1, 68) = 3.016, p = 0.087$ . Upon further examination, we found that the intervention group improved significantly within School 2 males,  $F(1, 38) = 9.146, p = 0.004$ , but not School 2 females,  $F(1, 30) = 0.682, p = 0.415$ . More can be seen in the figure and tables, below.

Table 14

*Life Satisfaction Scale Participation*

	Variable	Value Label	<i>n</i>
Gender	1.00	male	89
	2.00	female	87
Schools	1.00	School 1	64
	2.00	School 2	72
	3.00	School 3	40
Intervention	.00	control	89
	1.00	intervention	87

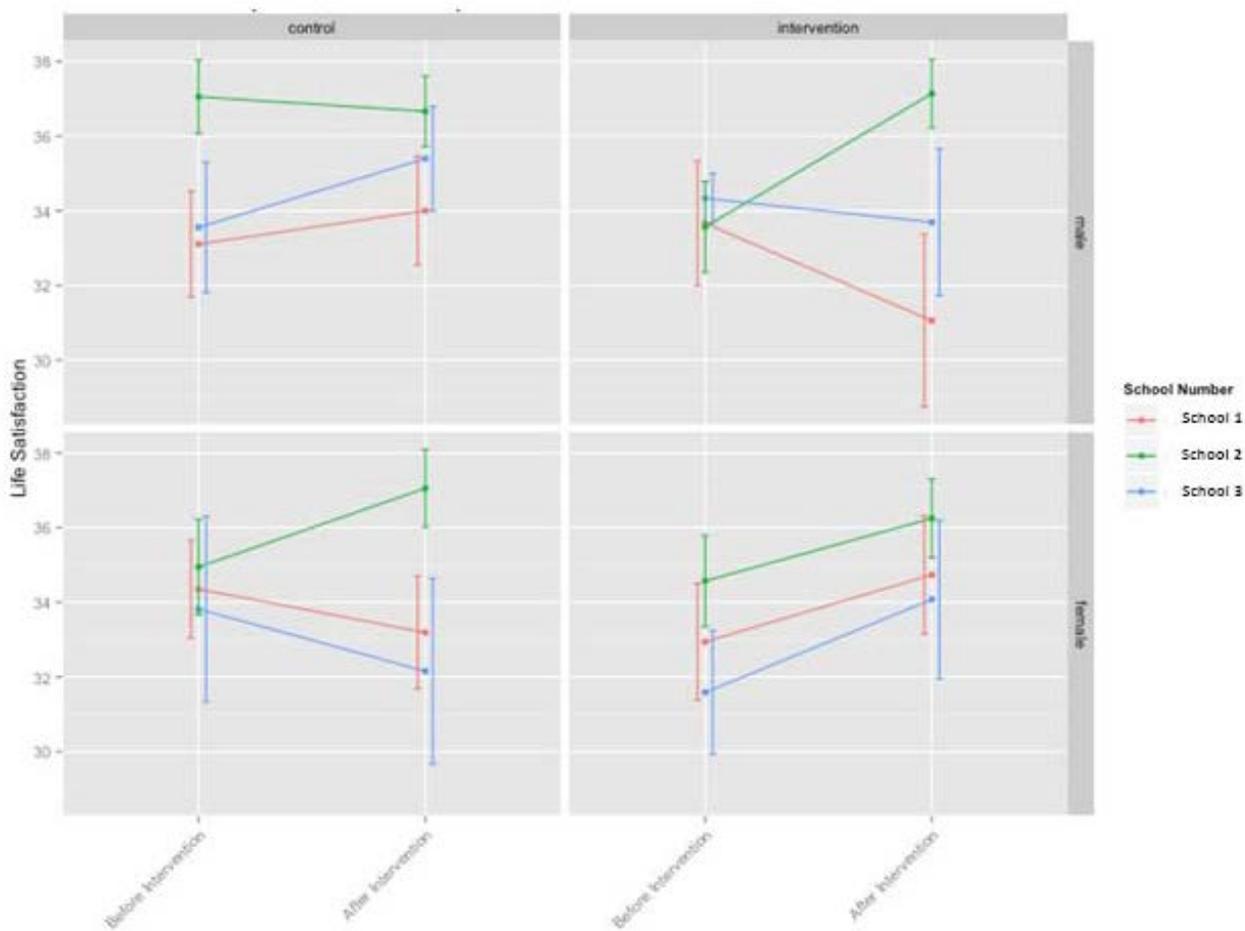


Figure 4. LSS change over time between schools and gender.

Table 15

*Life Satisfaction Scale Tests of Within-Subjects Contrasts: Measure: Time and LLS as Dependent Variables*

Source	Time	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Time	Linear	87.283	1	87.283	5.423	.021
Time * gender	Linear	1.914	1	1.914	.119	.731
Time * schools	Linear	26.027	2	13.014	.809	.447
Time * intervention	Linear	9.977	1	9.977	.620	.432
Time * gender * schools	Linear	2.260	2	1.130	.070	.932
Time * gender * intervention	Linear	29.727	1	29.727	1.847	.176
Time * schools * intervention	Linear	39.463	2	19.732	1.226	.296
Time * gender * schools * intervention	Linear	91.170	2	45.585	2.833	.062
Error (time)	Linear	2639.332	164	16.093		

Table 16

*Life Satisfaction Scale Tests of Between-Subjects Effects: Measure: Time and LLS as Dependent Variable: Transformed Variable: Average*

Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Intercept	384148.344	1	384148.344	5562.280	.000
Gender	10.945	1	10.945	.158	.691
Schools	471.560	2	235.780	3.414	.035
Intervention	38.665	1	38.665	.560	.455
Gender * schools	18.840	2	9.420	.136	.873
Gender * intervention	.561	1	.561	.008	.928
Schools * intervention	6.524	2	3.262	.047	.954
Gender * schools * intervention	10.664	2	5.332	.077	.926
Error	11326.349	164	69.063		

**Children's Happiness Scale.** A total of 191 students (94 boys and 97 girls) completed both pre and post Happiness scales.

Table 17

*Happiness Scale Participation Between Subject Factors*

	Variable	Value Label	<i>n</i>
Gender	1.00	male	94
	2.00	female	97
Schools	1.00	School 1	72
	2.00	School 2	75
	3.00	School 3	44
Intervention	.00	control	96
	1.00	intervention	95

The mean of the Happiness Scale (HS) at pretest was 3.27 for both boys and girls in the intervention and control groups. This is noticeably above average in comparison to the scale measurements undertaken by Morgan (2014) who evaluated 2,188 children, which resulted in a mean score of 3.22. Overall, no significant CHS change over time was found, regardless of intervention group, with a mean HS of 3.275 before intervention to a mean of 3.270 at post intervention. Upon examination of the means, no significant interaction between time and age, time and intervention group, or time, school and interaction group was found (all  $p > 0.05$ ) as presented in Table 18. In further exploring the data within subject contrasts, a significant interaction between time and schools for School 2 was revealed,  $F(2, 178) = 4.203, p = .016$ , which was not duplicated with the other two schools (see Table 19). ). Further discussion of the significance of these findings is addressed in Chapter 5.

Table 18

*Happiness Scale Tests Within-Subjects Contrasts: Measure: Time and HS as Dependent Variable*

Source	Time	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Time	Linear	.008	1	.008	.248	.619
Time * age real	Linear	.009	1	.009	.254	.615
Time * gender	Linear	.050	1	.050	1.492	.223
Time * schools	Linear	.015	2	.008	.227	.797
Time * intervention	Linear	.014	1	.014	.422	.517
Time * gender * schools	Linear	.073	2	.036	1.085	.340
Time * gender * intervention	Linear	.006	1	.006	.168	.682
Time * schools * intervention	Linear	.016	2	.008	.234	.792
Time * gender * schools * intervention	Linear	.007	2	.004	.109	.897
Error (time)	Linear	5.966	178	.034		

Table 19

*Happiness Scale Tests of Between-Subjects Effects: Measure: Time and HS as Dependent Variable: Transformed Variable: Average*

Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Intercept	22.316	1	22.316	181.366	.000
Age real	.225	1	.225	1.829	.178
Gender	.186	1	.186	1.508	.221
Schools	1.034	2	.517	4.203	.016
Intervention	.063	1	.063	.516	.474
Gender * schools	.003	2	.002	.013	.987
Gender * intervention	.024	1	.024	.192	.662
Schools * intervention	.359	2	.180	1.459	.235
Gender * schools * intervention	.062	2	.031	.251	.778
Error	21.902	178	.123		

**Reviewing the data by accounting for pretreatment differences.** In light of the above mixed results, it was deemed appropriate to reevaluate the data by establishing and isolating for potential pretreatment differences. The first aim was to examine whether the intervention group differed significantly from the control group before the beginning of the study period. The researcher found that the intervention group did not significantly differ from the control group with regard to LSS score,  $F(1,183) = 1.651, p = 0.200$ . Nor was there a difference between the groups with regard to HS score,  $F(1, 199) = 0.077, p = 0.782$ , or BERS-2 teacher score,  $F(1,219) = 2.359, p = 0.126$ . Importantly, there was no significant difference between the groups with regard to BERS-2 student score,  $F(1, 205) = 3.901, p = 0.050$ , however this effect was on the cusp of significance. This nearly significant result was driven by nonsignificantly lower scores in the intervention group (mean = 116.47) compared to the control group (mean = 120.81).

**Controlling for pretreatment differences.** Previous results found that some schools and genders exhibited significantly lower pretreatment scores, so we hypothesized that these differences could be driving some of the results (or lack thereof), as detailed earlier. To that end, we reexamined the BERS-2 student scale, while covarying for pre-intervention LSS and HS scores. In order to reduce the complexity of the model, we eliminated the school and age variables, after they were found to be nonsignificant.

Although there was not a significant main effect of time, a significant interaction between LSS pre-intervention score and time was found,  $F(1, 169) = 4.516, p = 0.035$ . Further exploration of this relationship indicated that a one-point increase in pre-intervention LSS score translated to a 0.452 point increase in the improvement of BERS student score. Importantly, we also found a significant interaction between time and intervention group,  $F(1, 169) = 4.332, p = 0.039$ . This effect was driven by an increase in BERS-2 student score (3.107 points) over time

within the intervention group, compared to the control group, which decreased (-1.324 points).

However, it is important to note that these means have been adjusted to account for the covariates of LSS and HS score. (See Tables 20, 21, and Figure 5 for results.)

Table 20

*BERS-2 Student Rating Scale Accounting for Pretest Variables*

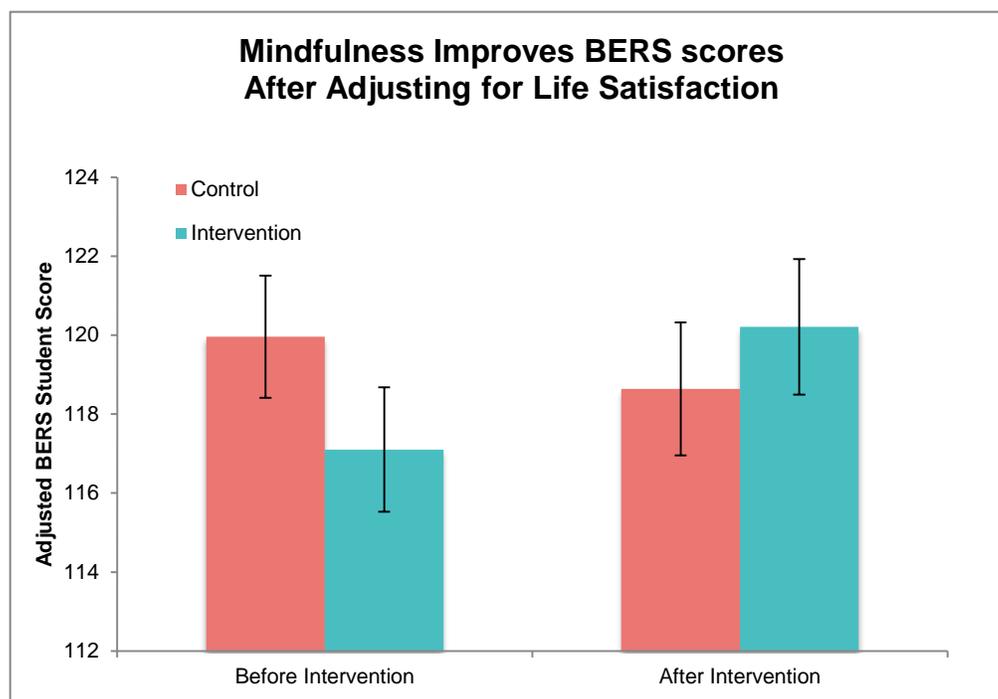
Source	Type III Sum of Squares	<i>df</i>	Mean Square	<i>F</i>	Sig.
Intercept	11050.511	1	11050.511	30.328	.000
LSS.pre	9683.226	1	9683.226	26.576	.000
HS.pre	208.039	1	208.039	.571	.451
Intervention	35.484	1	35.484	.097	.755
Gender	2818.029	1	2818.029	7.734	.006
Intervention * gender	18.704	1	18.704	.051	.821
Error	61577.205	169	364.362		

Table 21

*BERS-2 Student Scales Controlling for Pretreatment (Intervention \* time)*

Intervention	Time	Mean	Standard Error	95% Confidence Interval	
				Lower Boundary	Upper Boundary
Control	1	119.961 <sup>a</sup>	1.548	116.905	123.016
	2	118.637 <sup>a</sup>	1.684	115.313	121.961
Intervention	1	117.102 <sup>a</sup>	1.578	113.986	120.218
	2	120.209 <sup>a</sup>	1.717	116.819	123.599

*Note.* <sup>a</sup> Covariates appearing in the model are evaluated at the following values: LSS.pre = 33.99, HS.pre = 3.29.



*Figure 5.* Improvement of BERS-2 student scores after adjusting for Life Satisfaction.

## Qualitative Data

Ten student interviews were conducted. The following data presentation has been organized by in-class (journals) data then by student and teacher journal data.

**Student journal data.** Over the course of the 8-week innerU Embodied-Mindfulness program, students were asked to journal on a weekly basis using creative expression and imagery after the first of two weekly mindfulness classes. Drawing materials were not provided, and students used classroom materials to draw in their provided journals. Although uniformity of drawing media would have standardize the outcomes (e.g., markers and crayons produce different quality of line), the researcher believed that using classroom materials would mirror student's everyday access to drawing materials in their respective classrooms, and thus more accurately echo the study's intention to observe the student's expression in their natural environment (i.e., not a research lab setting). Further discussion of the drawing media and its influence upon visual data is discussed in Chapter 5.

Students were invited to choose two colors (crayons or markers), in silence—one color to express how they felt before the mindfulness exercises and another for how they felt after the mindfulness class. If students experienced no change in their experience as a result of the class, they were asked to keep the same color for both drawings. Students were then invited to spontaneously make shapes, forms, and lines without overly thinking about their drawing; they were encouraged to allow the drawing to be reflective, looking back at the experience and then being present to their current feelings.

Once the students completed their two drawings, they were also invited to add a title to each drawing using a single word that best described each image. The use of a single word aimed at minimizing struggle with sentence grammar, so as to not inhibit the children's verbal

expression. One word represented the essence of the experience. By the end of the program, each child's journal contained eight drawings, reflecting the child's experiences of before and after the innerU Embodied-Mindfulness weekly classes. Over the course of the 8 weeks (16 classes in all), most entries were conducted on the days where mindfulness was taught (six journal entries) and two entries where heartfulness was taught (week 4 and week 8). A total of 106 journals (848 journal entries, resulting in a total of 1,696 drawings) were collected from the three schools that participated in the study.

Given that the creative expression was only intended as qualitative data, it is important to note that only the intervention group engaged in this creative expression activity and therefore no comparison was made against the control group. Due to the large number of visual data, 36 weekly journals were selected to represent the breath and variances of the student journals. Selection of the journals involved sitting with all 106 participants' journals, grouping them by week, and intuitively selecting 36 journals from each week's drawings that particularly drew and intrigued me. From those 36 journals, 12 were selected to be analyzed using *Imaginal Resonance* (Netzer, 2008, 2013), as an established researcher's approach to data analysis of nonverbal data, which structures intuitive and experiential epistemologies.

It is noted that the following selected journals were not categorized by class or grade level, as no significant variance was identified between grade level or class drawings. Weekly journals presented in this chapter according to weeks 1-8, do not include any one student's entire journal, as students often missed one to two classes throughout the 8 weeks of the program. Selection of drawings was based on the following criteria: legibility of the drawings, completion of both before and after drawings, and the completion of a minimum of 6 of the 8 journal entries. The researcher was aware of the risk of confirmatory bias, and so was mindful to not be selective

based on comparing before and after images she associated with the intended outcomes of the mindfulness lesson. Only the raw data is presented in this chapter. The *Imaginal Resonance* procedure and discussion of the researcher's analysis outcomes are presented in Chapter 5.

**Week 1 journals—breathing, touch and listening.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 1. Journals were completed following a 20-minute Embodied-Mindfulness class, where children were invited to focus on listening to their breathing, like the whales, and to notice what happens when they allowed themselves to breathe deeper and slower.

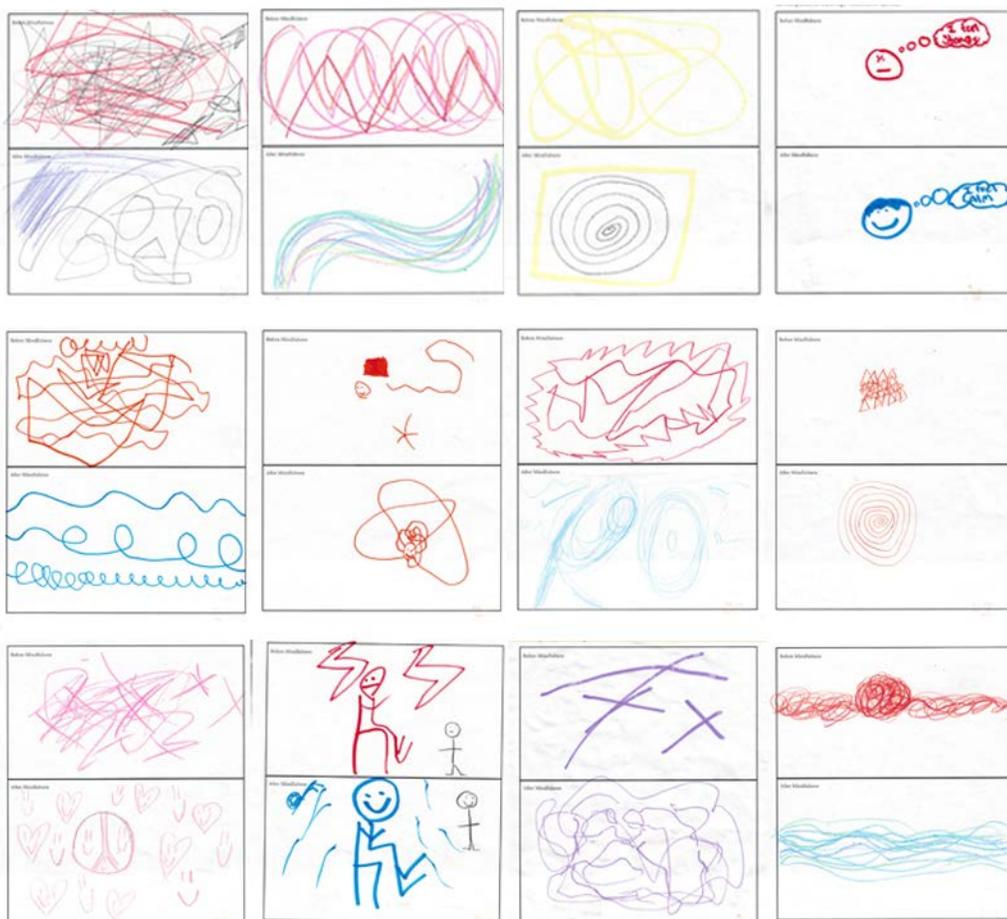


Figure 6a. Selected children's drawings for week 1.

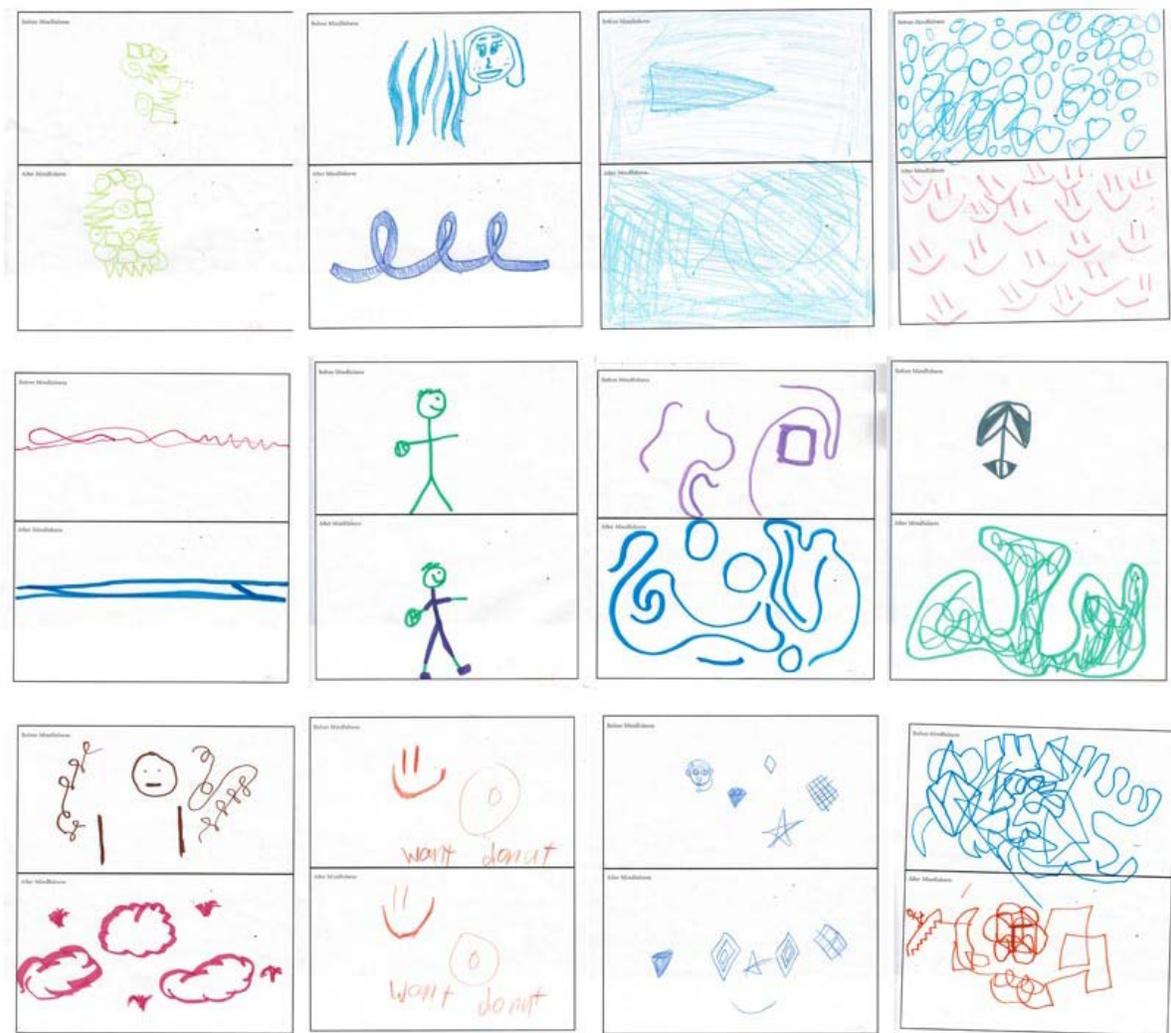


Figure 6b. Selected children's drawings for week 1(continued).

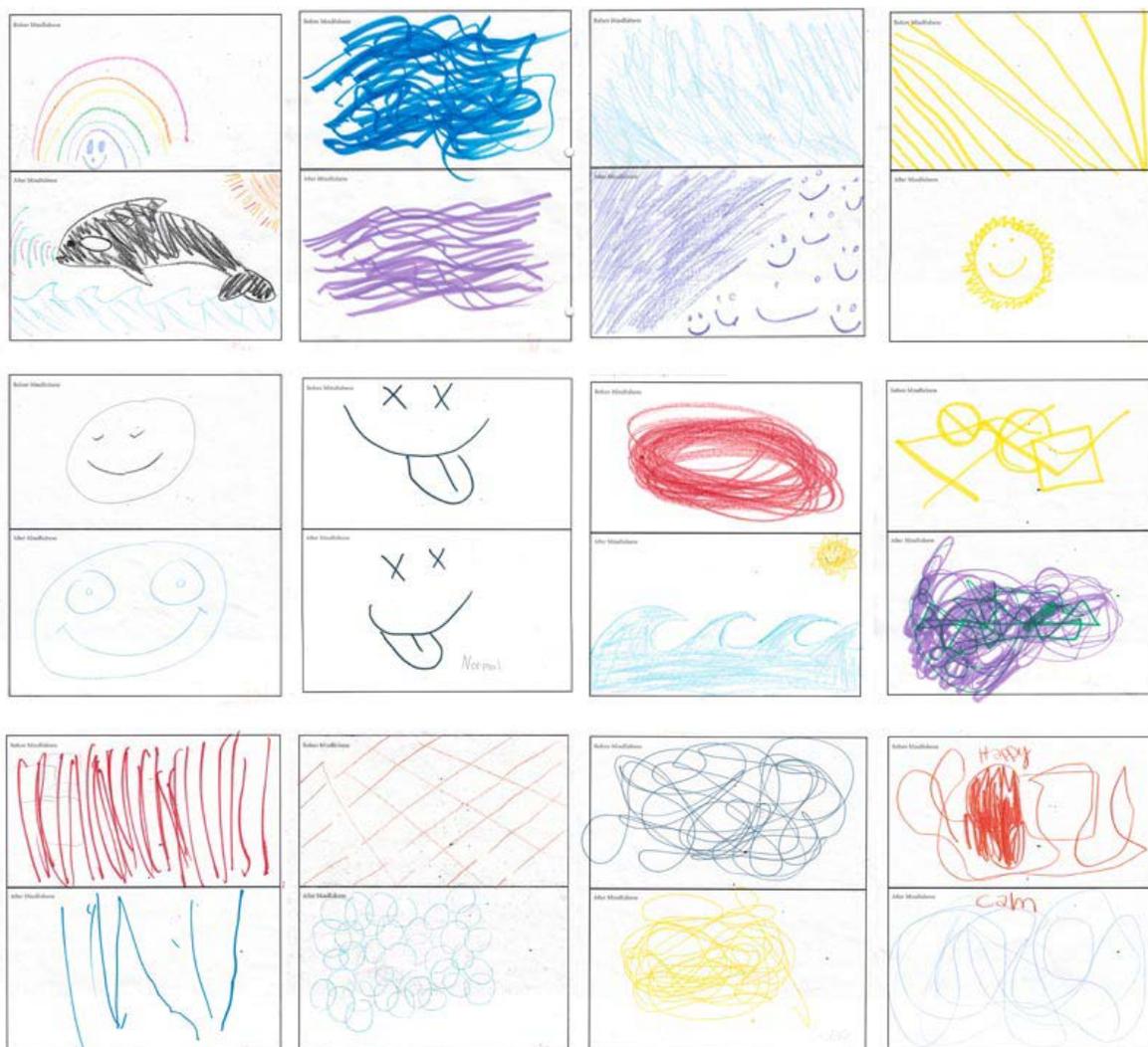


Figure 6c. Selected children's drawings for week 1(continued).

*Week 2 journals—the senses.* The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 2. Journals were completed following a 20-minute Embodied-Mindfulness class, where children were invited to become acutely aware of their bodily senses, like the dolphins, and to pay attention to various sensations throughout their body.

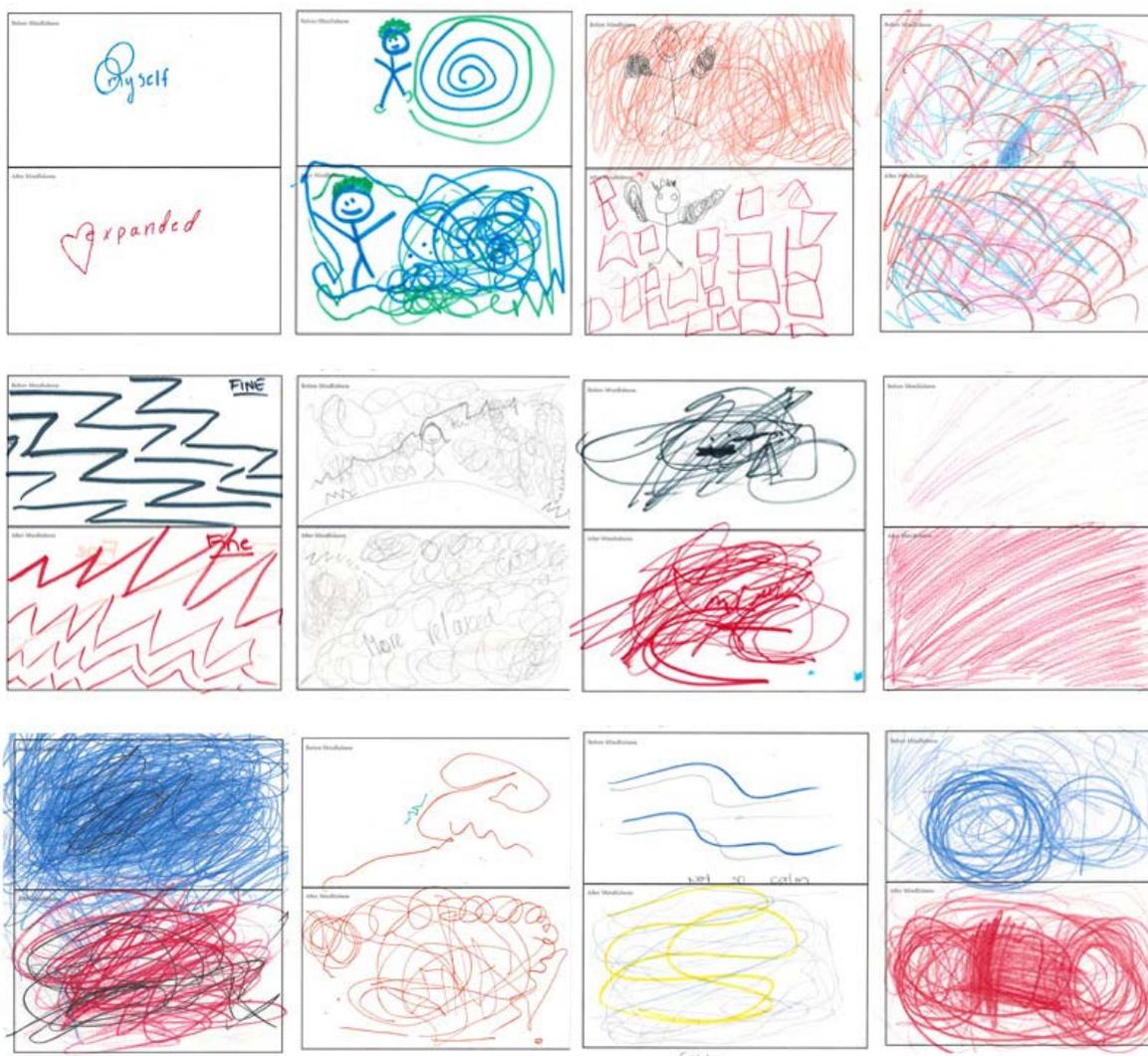


Figure 7a. Selected children's drawings for week 2.



Figure 7b. Selected children's drawings for week 2 (continued).



**Week 3—wandering mind.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 3. Journals were completed following a 20-minute Embodied-Mindfulness class, where children were invited to become aware of their thoughts and to observe the nature of their thoughts such as the tendency to drift away like Jellies. Students were invited to partake in several embodiment activities to observe their thoughts as well as to practice focusing.



Figure 8a. Selected children's drawings for week 3.





Figure 8c. Selected children's drawings for week 3 (continued).

**Week 4—heartful gratitude.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 4. Week 4 journals were completed following a 20-minute Embodied-Mindfulness class, where children were invited to engage in a living-kindness practice where students consciously extended their gratitude to aspects of their lives which felt important to them.

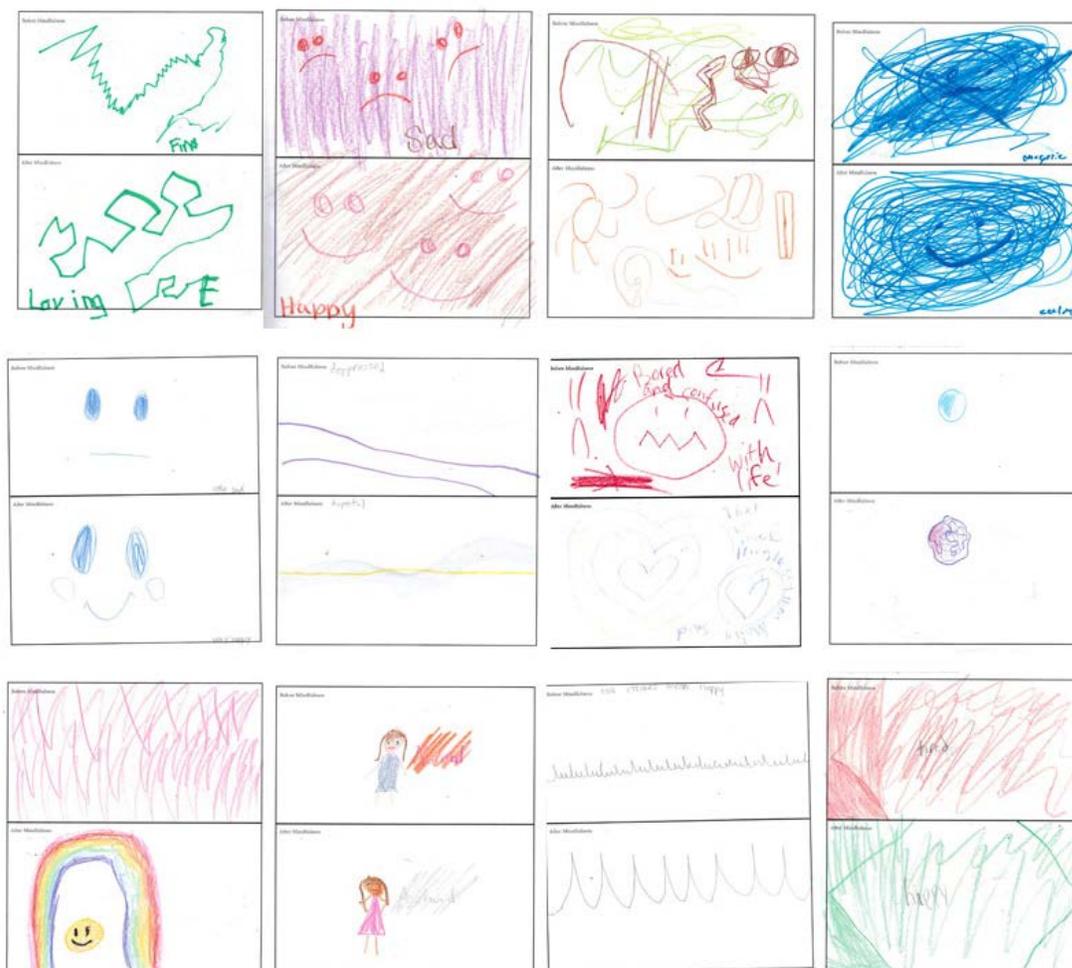


Figure 9a. Selected children's drawings for week 4.



Figure 9b. Selected children's drawings for week 4 (continued).



Figure 9c. Selected children's drawings for week 4 (continued).





Figure 10b. Selected children's drawings for week 5 (continued).



**Week 6—mindful eating.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 6. Week 6 journals were completed following a 20-minute Embodied-Mindfulness class, where children were asked to focus on the sensations associated with eating two raisins.



Figure 11a. Selected children's drawings for week 6.

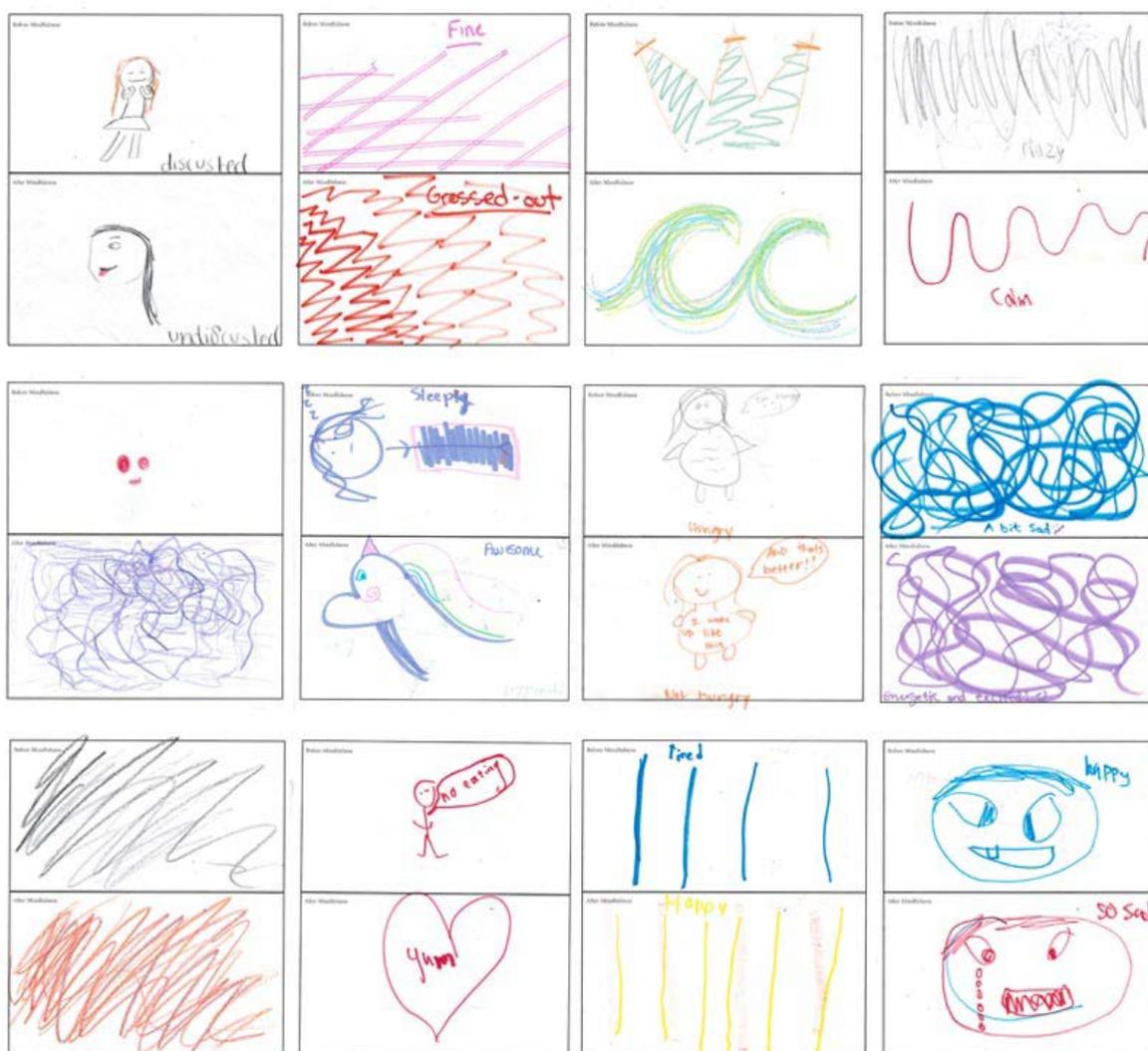


Figure 11b. Selected children's drawings for week 6 (continued).

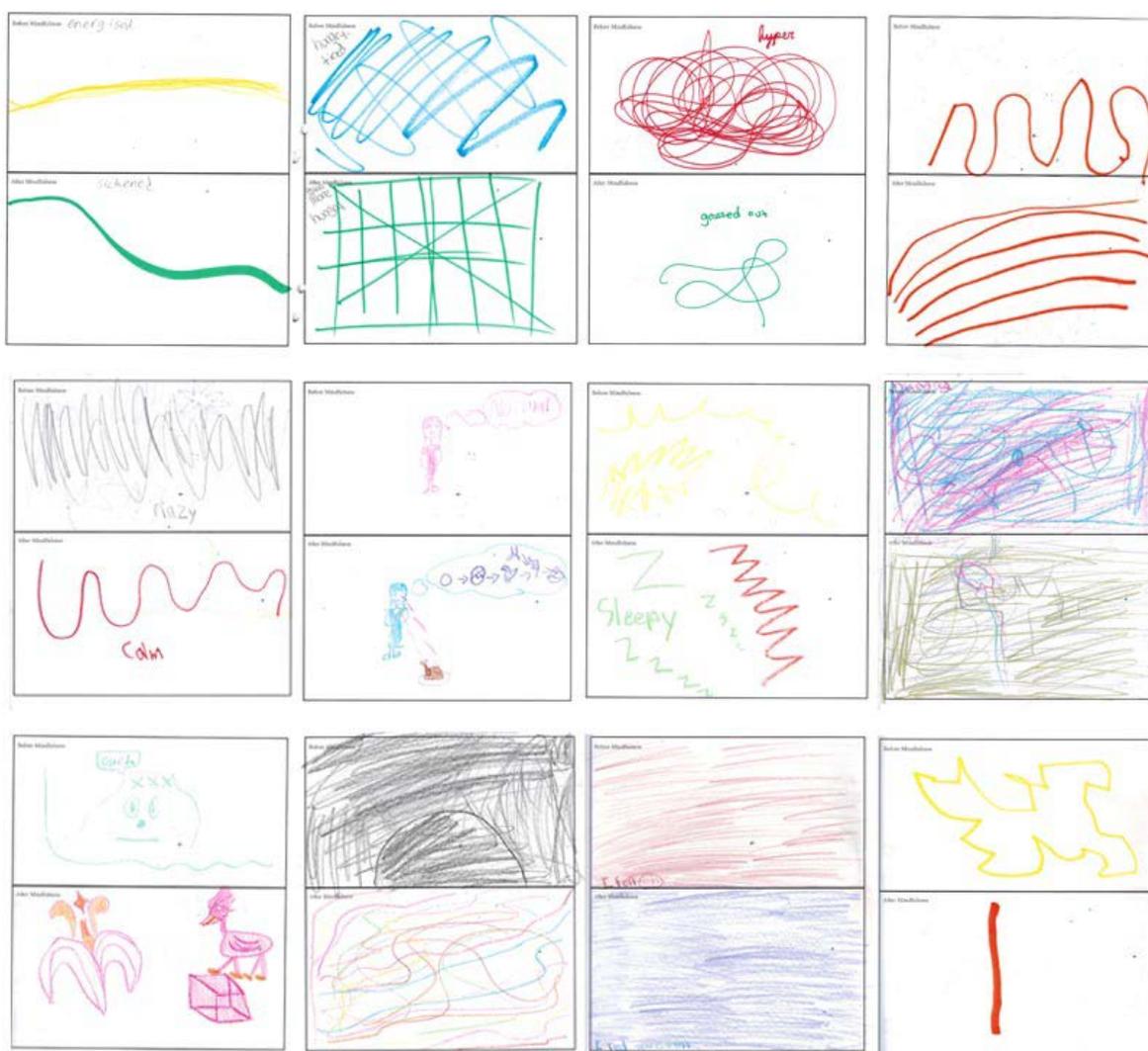


Figure 11c. Selected children's drawings for week 6 (continued).

**Week 7—mindful walking.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 7. Week 7 journals were completed following a 20-minute Embodied-Mindfulness class, where children were asked to utilize all their senses as they mindfully walked within the classroom setting.

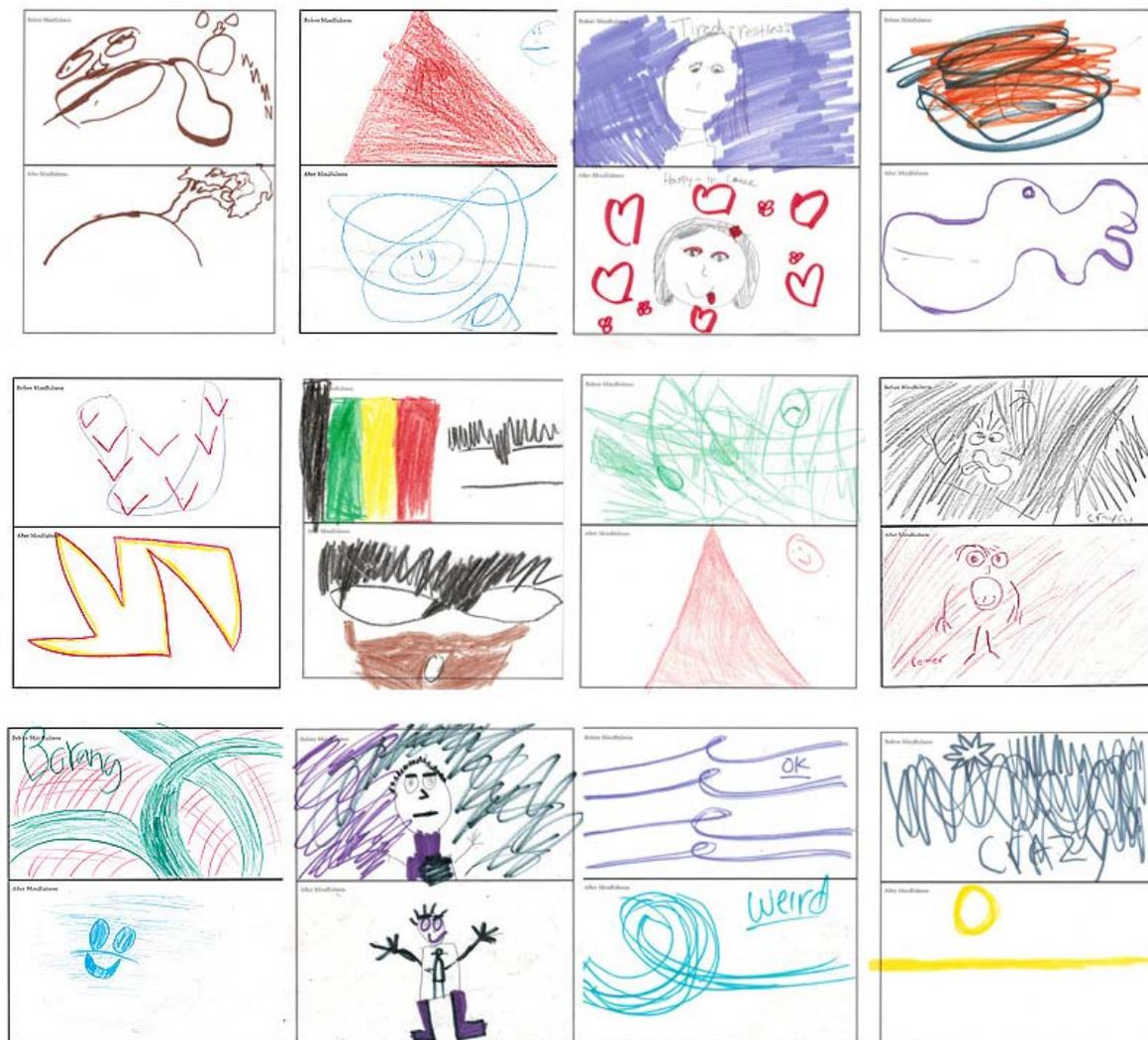


Figure 12a. Selected children's drawings for week 7.



Figure 12b. Selected children's drawings for week 7 (continued).

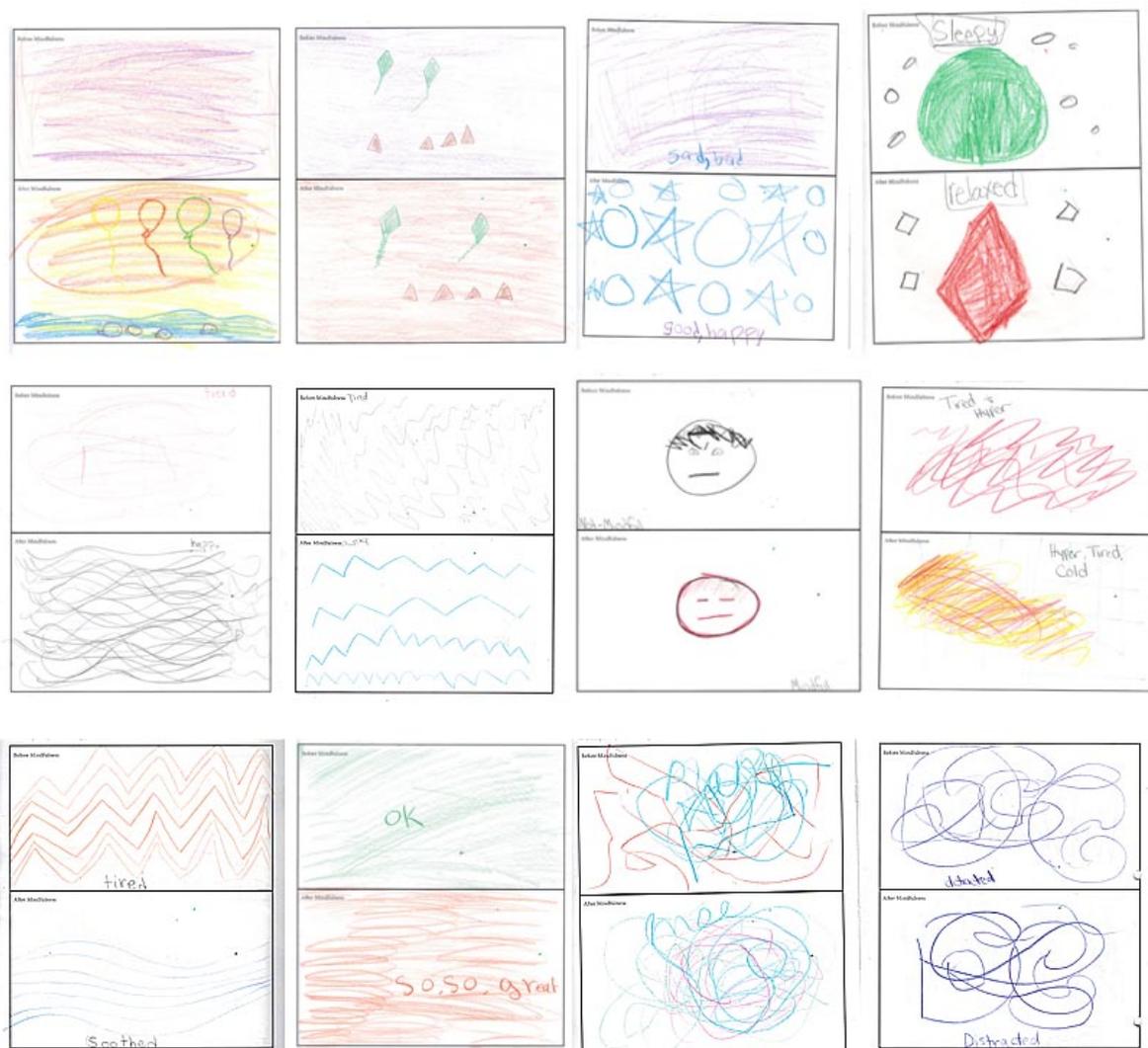


Figure 12c. Selected children's drawings for week 7 (continued).

**Week 8—mindful living.** The following 36 journal entries (each constitutes a pair of drawings) were selected to illustrate the journal entries (about 106), gathered subsequent to the intervention during Week 8. Week 8 journals were completed following a 20-minute Embodied-Mindfulness class, where children were invited to reflect on the various ways they learned to be mindful over the last 8 weeks and how this experience might have impacted them. Students were asked to draw how they perceived themselves before engaging in the mindfulness program and a second drawing for how they perceived themselves now that they completed the program.

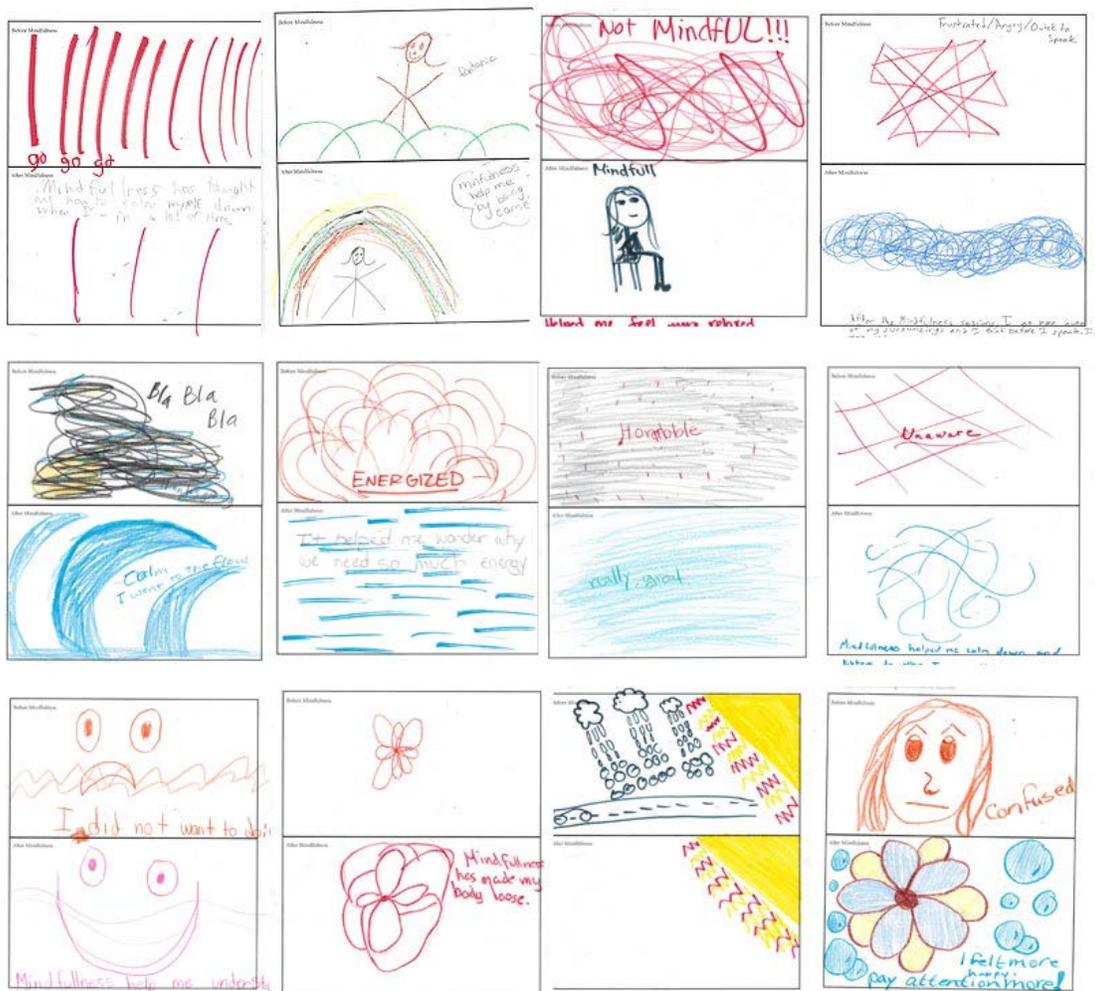


Figure 13a. Selected children's drawings for week 8.



Figure 13b. Selected children's drawings for week 8 (continued).



## Student Interview Data

Semistructured interviews were used within the qualitative context of this study as a vehicle to offer augmentative understanding of the influence of mindfulness intervention on the students' perception of their wellbeing. Ten students were interviewed the week following the completion of the quantitative posttest. To help minimize any potential gender bias, class representatives comprised of both genders. Two students (1 girl, 1 boy) were selected from each class. Selection criteria were: (a) student's attendance rate in the mindfulness session of 95% or higher; (b) student who presented visible participation in class, based on researcher's observation; and (c) student who is articulate and communicates well. The following organization of data by question provides an overview of the essence extracted from each statement. Meaning and interpretation are provided in Chapter 5. It is important to note that not all questions were answered by each participant. The following is organization of the data by interview questions; students are identified by a unique identifiers (e.g., S1F4-9) represented by the following: S# representing the school (S1, S2, S3), F or M indicating gender, the numerical number prior to the dash representing the student grade (4th, 5th, or 6th grade), and the numerical following the dash representing the student's identification number within his/her class.

1. Now that you have completed the innerU program, what does mindfulness mean to you?

Essence of responses: Various responses to question 1 depicted the following qualities: caring about others; paying attention to every and each move you make; to be calm, not angry; makes life better; connection to self (physical, mental, heart); joy, happiness, be yourself;

looking into yourself; stress relief. No one particular quality was predominant, but all represented *positive emotional states* which the children associated with the term mindfulness.

Table 22

*Selected Children's Associations With Mindfulness*

Student	Essence	Children's Statements
S3F4-9	caring	I think that mindfulness is caring about others and paying attention to every and each move you make.
S3M4-22	calm not angry	To be calm. Mindfulness, it is to make yourself not be angry that much.
S1F4-1	makes life better	It is a great pleasure to be mindful to other people and having mindfulness in my life just makes it better.
S1M4-19	connection w/ self (physical, mental, heart)	To me mindfulness means having a connection . . . your physical self and your mental self, to your heart.
S2F5-18	calm noticing	It's being calm and noticing everything around you and taking all the little tiny factors and figuring it all out.
S1F6-7	happier	I guess it means that we're happier.
S1M6-11	joy happiness be yourself	Joy, happiness, and just be yourself once in a while.
S2F6-12	calm down happier	Well, it's a way to calm yourself down and make yourself happier and more aware of your surroundings.
S2M6-23	looking into yourself, stress relieving	I guess it's like looking into yourself or you could probably use it as a way of stress relieving just to take a moment and sit down and think about yourself, I guess.

2. How has innerU helped you and what are the changes, if any, that you have noticed within yourself as a result of participating in the innerU Embodied-Mindfulness program?

Essence of responses: Students' responses to question 2 presented a trend in children's capacity of *becoming more aware* of the following aspects: self (emotional and somatic), relationships, personal habits, surroundings, personal actions, their pace in life, inner levels of comfort toward self and others, and aware of one's surroundings. A secondary important trend was marked by *shifts in stated of being*: from nervous and jumpy to calm and happy, from tired to energetic or exhausted to excited, and nervous to great tingling feelings. *Happiness* was also identified by numerous students as an important outcome of mindfulness and identified by students' statements expressing that they felt better, happier of their personal accomplishments, enjoyable, appreciative, and thankful. Other less noticeable trends included students *feeling calmer* as experienced by: a greater peaceful mind, feeling relieved, and less worried and anxious. Finally, *resiliency* was marked by an increase in perseverance and an excitement to keep on going, while a *spiritual dimension* was noted with statements such as: my soul was closer to my heart, I know that I'm there now, I am closer to myself.

Table 23

*Students' Observations Regarding Their Own Changes and How Mindfulness Has Helped Them*

Student	Essence	Children's Statements
S3F4-9	concentrate	I feel like it's helped me like keep my mind off of maybe problems in the past I've had, and just concentrate on the things that I have to do.
	takes my mind off of being upset	Like the first time I got detention. That made me feel sad. But now that I had mindfulness for 8 weeks it sort of made me take my mind off of it.
	listen to my heartbeat	I would listen to my heart and it would be like hard bumps.
	calm, I know that I'm there now	. . . like I would calm down. After I would be running to catch my ride to school, I would sort of calm down because I know that I'm there now.

Student	Essence	Children's Statements
	excited to keep going happy shift from exhausted to excited	I would be excited to keep going on the day, because I knew that I can be happy.
	discovered a habit	I discovered that I have written really weird, like how I hold my pencil.
	shift from sad/tired; feel relieved throughout the day	Like if I would be sad in the morning, or tired, you would come in the classroom to teach mindfulness, and it would relieve my day as well.
S3M4-22	Incorporating mindfulness to all activities; enjoyment; shift from tired to more energetic	It helped me by doing stuff mindfully. Like mindful eating, mindful motions, mindful . . . mindful playing. At first when you got in I was sleepy, but then I started waking up when we started doing the exercise. It gave me more energy. It was fun, doing the exercise.
S1F4-1	Aware/happier of personal accomplishment	Well, it has changed my life a lot by making me happier of what I accomplished in life, and so it was amazing.
	Become aware of relationships with friends and let the problems go	I think it's helped me a ton. It helped me because normally I have problems with my friends, but it makes it easier for me to kind of let the problems go and think about it.
	calmer less anxious, at ease about self and others; Happy and thankful.	I felt calmer, less anxious. So it made me really feel better. Happy and thankful.
	feel better; make other and like	It's made me feel inside more like...I don't know how to explain it, but like the . . . like being able to make other people happy like

Student	Essence	Children's Statements
	myself feel happier	easier and making myself feel happier.
S1M4-19	mind more peaceful	I'm not sure much as changed, but some parts have changed, like my mind has become more peaceful.
	think easier, not worry as much	It helps me think easier . . . to be able to not worry as much.
	talking about ideas, speak more openly, share ideas	Now I get to talk personally, my mom told me last night that the greatest minds share ideas. Now, I have a friend, I had this friend before, now I go up to my friend I go to the top of our space net and we started talking about ideas that we have. Probably [I] would not have talked about ideas [before mindfulness].
	my soul closer to my heart, mind/heart connection	When I did the exercises, I felt like my soul was closer to my heart.
	integration/ now I feel my heart/ smoother	I loved that before I was like spread apart and now I feel my heart so much better. It feels smoother.
	aware/feels very good to give compliments	I noticed that it feels very good to give compliments and also to receive compliments.
	happier/closer to self	Well, it definitely made me happier now, I am closer to my heart.
S2F5-18	shift from excited/ jumpy to happy/calm/ collected	Yeah, like sometimes before the classes, I would feel like just I'd be excited and jumpy and all over the place and then afterwards, I'd still be happy but I'll be more calm and collected.
	focus calm down of emotions	It would help me to focus sometimes, like right afterwards in Math, it helps me to focus. I could focus a lot better sometimes and I'd be able to calm down if I was like mad or something.
	persevering/ keep my mind straight	I can be a little more persevering in confusing things, like when we're doing math, sometimes we get really difficult things and that helps me push through it and keep my mind straight on it.

Student	Essence	Children's Statements
	I went over to her and helped her/aware/altruism	I guess the other day I was like ... All my friends would talk about Harry Potter which is like my favorite book and I'm completely obsessed with it and they really like it too, but one of my friends, she doesn't really like as much so she always gets left out. Even though I really liked Harry Potter, I went over to her and helped her. That helped me notice that and get out of my Harry Potter craze.
S2M5-11	aware  shift from tired/hyper to calm	Mindfulness made me be aware ...  I was usually [am] very, very tired. If you looked in my journal, sometimes I'll be like super hyper before, but then you would see like relaxing, "tiredish" shapes after, so I was always very, very calm, but also a little tired and lazy after every Mindfulness session.
S1F6-7	I feel better about myself.  helped me to feel better	I feel better about myself. When I wasn't doing [mindfulness] I felt really bad about myself. You have no friends. Nobody likes you but then after mindfulness I felt like I'm okay. I don't need friends. School's not really about friends. It's about learning. I just put that in my mind because mindfulness helped me think more about that. Helped me to feel better.
	I know my surroundings more / unaware to aware /	I would be really clumsy.... Now I'm more mindful and looking around. I'm like, "Oh, the stool's here so be careful and go around it." It makes me feel like I know my surroundings more. I'm like, "Oh, the chair's right there. Oh, the table's right there. The trash can's over there."
	aware of own actions at home/ I think more	My feelings, my parents, my mom usually gets really mad at me mostly, then my dad. I think, "Oh my God, my mom hates me." Then I would think, "Maybe she's just getting really mad because I'm leaving my books on the ground and she's telling me to pick them up and maybe I can pick them up so she won't be really mad." I think more. I'm like, "Oh, I'll go pick up my books now."
	aware of relationships/happiness	I guess it makes me feel a little happy. If they're happy I feel happy but if they're sad I feel a little sad. I'm just happy.
	resilience/ acceptance/self-esteem	Like I told you in the beginning I was doubting myself. People had been saying mean things to me. Now I'm just learning how to take it, not like saying, "Oh," but sort of take it as a compliment and I won't even say anything back. I'll just say,

Student	Essence	Children's Statements
		"Okay."
	academic improvement/ and I want to read more books	In school, too, I was really failing in reading but then mindfulness, when I would breathe more and read my book it felt more like better to read and I want to read more books and more. It was nice because I've read 14 books already.
	I'm studying more	Yeah, I'm studying more with our tests because our teachers hand out these study packets for homework to study and I really didn't do that so I really missed the assignment but now I would study my study packet and I would breathe more like mindfulness and yeah, it just helped a lot.
S1M6-11	calm I feel pretty good	It's been a good, helpful type of experiment that I never tried until now. Good, and helpful. I've been pretty calm lately after [mindfulness], I feel pretty good.
	I don't get angry as much, aware of actions/ more productive	I don't get angry more often. And I'm playing carefully and nicely with my friends. Well, when I was hyper I just played fast and had too much fun in here, didn't notice what I was doing. When I was calm I felt I knew what I was doing, and I got work done better.
S2F6-12	happy helped me feel better outside school	I thought it made my happiness a bit more better. Happy. One example was I wasn't feeling good one night and I said "healthy" when I breathed in and "good" as I breathed out and it really helped me feel better.
	slow down / no need to rush. aware of your surroundings	Well, I guess I have done a little bit of the mindful walking, so I'm just "slow down," you don't have to rush through everything. Just realize and be aware of your surroundings.
	nervous to great tingling feeling	I almost calmed down and I almost had this tingling feeling, like my nerves almost just went "phew" and just . . . I wasn't as nervous almost and I just like embodied body mindfulness because I get that feeling and that feeling is really great.
	shift from nervous/jumpy to calm/happier	I actually do feel a little bit happier because, again, with the nervous thing, I'm not as nervous and not as jumpy so that goes to calm but it also goes to more happy too. That's another thing I feel.

Student	Essence	Children's Statements
S2M6-23	calm/no stress I'm okay now. don't rush / check my work	Calm. No stress. I'm okay now. Yeah, just like that. I guess it makes it so you don't rush without thinking about what you're doing. It gives you kind of hey, now I need to check my work now that I've finished.
	emotional awareness/ You're not go, go, go.	It makes you think a whole lot more about your emotions and what you're feeling without changing them. You're not go, go, go.

3. Where in your life are you also seeing changes, if any? At home, with friends, or in class?

Essence of responses: Students' responses to question 3 presented a trend in children's becoming *more aware of their relationships with friends* with helping to *reduce disputes* and *cultivating appreciation, altruistic behaviors*, and a *capacity for forgiveness*. Influences and changes at home and with family members were also noted. In class, benefits were noted through the improvement in focus, capacity to pay attention, to listen to the teacher, and to be less distracted. *Resiliency* was marked by the capacity to better deal with school-work, an observable increase in *self-confidence*, and a deeper knowing that all will be fine. Finally, *awareness of one's surroundings, emotional state*, and *improvement in self-esteem* was commented on by students.

Table 24

*Student's Observations Regarding Where They Were Seeing Changes in Their Lives*

Student	Essence	Children's Statements
S3F4-9	understand/ become aware/ feel lucky to have friends	Like at recess I would sort of have an argument with my friends, and when I started mindfulness I would just understand how lucky I was to even have friends.

Student	Essence	Children's Statements
S3M4-22	calm focused paying attention More	Everybody was calm when you had to do something quietly, and everybody did whatever the teacher told them, and started right away and got focused. They [classmates] have been paying attention more.
S1F4-1	altruism  just makes life better	It is a great pleasure to be mindful to other people and having mindfulness in my life just makes it better.
S1M4-19	I wanted someone else to give it a try / altruism  less disputes with friends  help friends	In class . . . I remember this morning, I was going to raise my hand to answer a math question, I thought I answered a few. I wanted someone else to give it a try.  Now I've nowhere near as many disputes with my friends. We get to talk more and I remember, still this recesses my friend Kane, he had a scraped knee. Me and my other friend told him what to do and we told him to wash it off. He walked it off . . . he took his own route . . . he walked it off, which I think was fine as well. I feel now it's a better opportunity to give suggestions to your friends.
S2F5-18	faster shift from mad /irritated to calm down/apologetic	I was able to, like if I was mad at my brothers or like that, I was irritated with them, I'd be able to calm down or make sure I apologize for, like if I did something back to them, faster than I usually would.
S2M5-11	resiliency/ shift from jumpy to relaxed and calmer, able to deal with school work	Well, I think sometimes in class there's things I don't really like to do and it's not the funnest thing in the world and it's just not very fun. I think sometimes it's just too much and I just get all active and want to jump up and down and run around, but I think if I take those three mindful breaths then that will help because I'll relax my body and be more calm.

Student	Essence	Children's Statements
S1I6-7 (G)	<p>altruism: shift from I do not like to be touched to I gave my friend a hug</p> <p>I felt happy and good about myself.</p> <p>I listen to my teacher more/ shift from distracted to attention/ school work is easier.</p>	<p>I usually wouldn't like being hugged or touched before mindfulness but now I'm thinking maybe a friend wants to hug me because they need a hug or they're just really sad in their life and they just need a hug. Then yesterday, [my friend], her sister's having a lot of problems and I felt sad for her because she had to go through that with her sister. I gave her a hug yesterday but I didn't tell her why. I just gave her a hug. She was really happy. I felt really good about myself.</p> <p>I listen to my teacher more. When I wasn't doing mindfulness I'd be looking around, looking around. Then the teacher, when it was time for the test or the assignment I'd be like, "Wait, what did you say?" She's have to tell me again. Now with mindfulness when I'm being distracted I'll be like, "No, you have to look at the assignment, what she's telling you to do." I would have to look at the teacher and then when I got my assignment I'd be like, "Oh, I know this." It'd be pretty easy.</p>
S1I6-11 (B)	<p>getting more work done calm focus</p>	<p>Getting more work that I need to do done. Just being calm and focused and raising my hand for a question or something.</p>
S2F6-12	<p>it calms me down and it makes me realize it's going to be okay, you'll do fine on this test</p> <p>slow down aware of your surroundings</p> <p>felt some change at home with my sister</p> <p>they just seemed so relaxed resiliency: I can do this</p>	<p>Well, so far I don't like math tests, even though I'm kind of good at math. I just really don't like it, so sometimes I take a really big deep breath and kind of close my eyes and do a little bit of innerU before I take a math test or any other test. Well, it calms me down and it makes me realize it's going to be okay, you'll do fine on this test.</p> <p>Well, I guess I have done a little bit of the mindful walking, so I'm just "slow down," you don't have to rush through everything. Just realize and be aware of your surroundings.</p> <p>I haven't felt so much change in my friends, but I have felt some change at home with my sister.</p> <p>I saw someone . . . they were doing innerU right before a test and then they opened their eyes and they just seemed so relaxed. They were "I can do this," so I think that that helped them too.</p>

## 4. Did you notice any changes in any of your classmates?

Essence of responses: Students' responses to question 4 presented a significant trend in class observations pointing to the *class environment becoming calmer, relaxed, quieter, positive, happier, and playful*. One student noticed this change within the teacher as well. One student observed no class changes. Perceived individual changes in others included a shift from selfish to nicer and caring friend and friend slowing and calming down, acting more mature. Only one student stated that she did not observe changes in the class as a whole, but said that she noticed some changes in herself and in other individual students. She provided specific examples for those individual changes.

Table 25

*Student's Observations Regarding Noticing Changes in Classmates*

Student	Essence	Children's Statements
S3F4-9	individual shifted from selfish to caring and nicer, I'm happier	My friend, she used to be a little selfish, and now she noticed how it would make others feel, and she stopped, and now she's more caring and she's nicer. It makes me feel happy because it doesn't hurt my feelings.
S1F4-1	class more calmer and less energetic	They're more calmer. They're more calmer and they seemed like less energetic. Some people are still really energetic, but I've noticed that like most people in my class are now more calm and know when to do mindfulness when they have to.
S1M4-19	class environment got calmer/ brain can think more	I noticed . . . the classroom was a much calmer environment than it was before. It's become calmer . . . your brain can think more mindfully.
S2F5-18	no overall class changes	I didn't really notice a lot of big changes, but there probably were if you were just to see them at the time.

Student	Essence	Children's Statements
S2M5-11	class got relaxed and quieter /everyone is happier and more positive, including the teachers	I felt like the whole class got more relaxed and quieter when we did it. . . . the class doesn't talk as much. Sometimes, yeah, and so I think it really helped with that too. Well, everyone's happy and more positive and same with my teacher.
S1F6-7	individual shifted from energetic to slowing and calming down  more mature	. . . she'd be really energetic in class but now I'm seeing that she takes a second to slow down and sometimes she looks up and it seems like she's telling herself something and she calms down. I see it in her that she's trying to calm down a little more.  They're different now. They're not bad different but they're acting a little more mature about things.
S1M6-11	class got more calm and playful	They were more calm and more playful about how their life is going. They always would like to do stuff fun with you more often because they really liked doing it. Because I could see that in their eyes.
S2F6-12	no overall class changes / individual change	I didn't see it so much. I saw it more in some individuals than the class as a whole.
S2M6-23	no overall class changes	It didn't change it as much as I thought it would. It didn't really make that much of a difference (referring to his classmates). I haven't seen really much of a difference.

5. Did you share some of the innerU practices at home with your family?

Essence of responses: Responses to question 5 presented a noticeable trend in student's capacity to *share mindfulness* with family members: tried it at home with mom, I tried it on my dad and my brother; my mom and I started mindful walking, shared with parents/shared with

mom when I can't sleep. One student felt she could not explain it but practiced mindfulness on her own, while another student simply forgot to share due to a hectic and busy lifestyle.

Table 26

*Student's Responses to Sharing Their Practices at Home With Family*

Student	Essence	Children's Statements
S1F4-9	tried it at home with mom	My mom, she just had surgery a couple months ago, and one night I was telling her about mindfulness, and she suggested that we should try it at home. I was asking her what she had dreamed of, and I found some meditation and mindfulness things like online. After when I told her that she can open her eyes now, she said that she felt like she actually lived that dream.
	I tried it on my dad and my brother as well	Yes. I tried it on my dad and my brother as well. They noticed—my brother had noticed that he had lived that. He said he asked himself if maybe he would live that in his next life.
S3M4-22	I did several practices	I did mindful touching, mindful playing, mindful walking, and mindful eating concept.
S1F4-1	I couldn't explain it but did it with myself	I couldn't explain it to my parents just because I didn't really know how to like explain to do the stuff, so it was hard for me. But I guess . . . well, I did it with myself, pretty much, a lot. I'm sad I didn't really like know how to explain it to my parents, but it was still fun doing it with myself.
	calmed me to go to sleep told my dad/parents have no time	Well, it really helped me like calm myself down so it was easier for me to go to sleep at night because like when I go to sleep I'm like so amped up, so I try to do that so I can help myself go to sleep and stuff. And it's actually one of the times that I told my dad, so I have told him, it's just that he hasn't really . . . both of my parents don't really have any time. Same with my sister. She's like in her job and stuff.
S1M4-19	my mom and I started walking /dad works a lot	Ever since we started mindfulness, me and my mom started walking to school. I taught my mom how to do mindful walking. I could not do much with my dad because he works a lot, so there's pretty much no time. I think my mom likes mindful walking.

Student	Essence	Children's Statements
S2M5-18	forgot/ lots of activities/pushed out of my mind	I didn't really do a lot of them . . . I forgot. . . . I do a lot of activities so it gets pushed from my mind, but, so yeah.
S2F6-12	told dad	Yeah, I did. I told my Dad . . . I did the whole ceiling thing with my Dad and I also did some mindful eating.
S2M6-23	shared with parents  shared with mom/can't sleep	I told them [parents] a little bit about the mindful eating. She [mom] asks me at night when we both can't sleep, when we're both awake at 10:00, she asks me about some of it. She also told me a little bit about a different kind of exercise to help you sleep really. You close your eyes and you think, "My arms are getting very heavy." Then the rest of the parts.

6. What part of the program did you like the most? And why? (Meditations, Movements Component, Creative Journaling, Videos, Questions, Content)

Essence of responses: In their responses to question 6, students expressed *appreciation for several aspects of the program*. Mindful walking was noted as a trend with *students' appreciation for movement*, not having to sit in a chair, and *feeling less tired* than walking normally. Other aspects of the program that stood out for students were the videos for their inspiration to help students imagine and "bring it together" for them. Heartfulness activities were also highly appreciated such as: heartful thoughts, heartful playing, heartful gratitude, and heartful generosity, for their capacity to make students feel happy. Finally some students appreciated sitting mindfully as it made it easier to find her inner self. Mindful eating cultivated a shift in perception where a student became aware of a shift from disliking raisins to liking them. Mantras helped one student focus more, while journals offered another student the opportunity to express their feelings.

Table 27

*Students' Responses Regarding What Aspects They Liked the Most*

Student	Essence	Children's Statements
S3F4-9	liked to discover how raisin tasted /shift in perception	I liked how we sort of found out more about how raisin tasted, and how they would feel in your mouth. What we used to think about raisins, and then what we thought about raisins now.
	I liked to move around/ touch and feel stuff/ makes me feel good to discover life	I liked the activities, like when we would move around the classroom to touch and feel stuff. Because we discovered things that we've never seen in the classroom, like a plastic apple on the teacher's desk. If you would let it roll on the ground, it would stop at some point and we would just wonder why it would stop. It makes me feel good because I know how we just get to find new stuff, and just live new things in life.
S3M4-22	walk slowly around/I was less tired	Mindful walking. [I liked] that we had to walk slowly around the classroom. I could hear like scratching. I was less tired than walking normally.
	different activities/ bell/closing eyes	There were different activities when you kept coming in, and then whenever you came we did the bell and then we would start calming. Doing the bell. Closing your eyes.
S1F 4-1	heartful playing, mindful seeing	I like the heartfulness, the heartful playing and the mindfulness, mindful seeing.
	sitting meditation made it easier to find my inner self	I liked the sitting meditation because it's easier to find my inner self while I'm sitting still. It made it much easier for me.
S1M4-19	walking meditations/ mantra	I think it's probably the walking meditation, that was my favorite mindfulness class, the mindful walking. I was thinking of also doing it, the thing when you breathe "ocean?" I forget it what it's called? (mantra). Maybe put the mantra into the mindful walking.

Student	Essence	Children's Statements
S2F5-18	liked how it related to the ocean	I liked how it all, like everything related to the ocean, and all those really cool pictures and videos that they had. It's fun to watch them and how each one of them taught us the lesson. That was really cool.
	mindful moving/did not need to sit in the chair	I think I liked the moving one, because we get to move around a little, but it'd still be mindful. We'd still be practicing mindful things; we just didn't have to be sitting in our chair the whole time.
	liked the ocean pictures	I really liked the ocean pictures.
S2M5-11	journals because I got to express my feelings  shift from excited to calm colors	I liked the journals because I got to like express my feelings with just a marker, a shape and a color. Well, usually, I think of red, orange, and yellow as like exciting, active, aware, or red can be mad sometimes, but then, usually, at the end I would draw like a green or a purple or a blue, because that's like calming colors.
S1F6-7	send mindful thoughts / feel better	[I liked] mindful thoughts. I didn't have any friends and I would get really mad and be mad at other people but then I would send mindful thoughts to people and I feel much better.
	videos/ actually cool to see the animals	The videos. They're really interesting. I want to watch them over and over again. They're really cool. They're like that because you can actually see animals. There was over an ocean they're just looking and it wouldn't have been that interesting but the scuba divers that went down and looked at the animal, it was really cool watching them.
S1M6-11	doing experiments & seeing what would be good for me and others	Always doing experiments and seeing what would be good for me and for people around me. I think the thing that I liked the best was actually everything we did, like the meditations, the journaling and all that, because it showed me how I feel once in a while.

Student	Essence	Children's Statements
S2F6-12	to imagine made me feel so happy	My favorite part was when you said those things we would imagine, because I really like to picture things in my mind and I could just picture it and it just made me feel so happy. I think that was my favorite part.
	sending good thoughts made me feel so happy	I liked when you would send good memories. I also did that one with my Dad and we sent good memories to people who you like, which made me feel good, and you also send memories to someone you weren't so fond of but that still makes you think "Well, even though I have this person in my life and they're not my favorite, then I learn just not to be like that sort of person and to still be grateful for them."
	gratitude toward others	
	videos helped me imagine / it brings it together for me	I like the videos because it helps me almost envision those things while I'm doing my mindfulness, so it almost kind of brings it together for me, so that's my favorite part, I think.
	I just love envisioning	I just want to tell you that I just love that part where you would say something and we would envision it because that was my favorite part. I just loved that because it was like a movie in my head and I was in the movie and I mean who wouldn't want to be in a movie? Just keep on doing that because I really liked that.
S2M6-23	heartful gratitude / sitting and thinking good thoughts and	My favorite part of the mindfulness was probably either the heartfulness as itself or if I had to be more specific, because that was pretty vague, it would be the heartful gratitude. I enjoyed that, sitting down and thinking good thoughts to sending them to someone you like and someone you don't like. That's probably what I'm going to remember the most of all of everything.
	sending to someone you like don't like	I don't remember the exact word for it . . . but the one where you'd think as you breathe in you'd think Oce- and then when you breathe out you'd think –cean [mantra]. The mantra you can focus a lot more on things than if you weren't using it basically.
	mantra you can focus more/ heartful generosity /no matter who they are	The other one I enjoyed . . . where we did the heartful generosity where you would imagine . . . someone who fell and dropped their books and you'd stop and pick them up. One of the things is I kind of did this before but I notice it more now. I feel bad for people no matter who they are if something's going wrong for them. No matter who they are. I could see my worst enemy getting bullied and probably still feel bad for him.

Student	Essence	Children's Statements
	heartfulness feels good even when you're just imagining	Heartfulness. You always feel good even when you're just imagining. You always feel happy at the end of heartfulness no matter what it is. You just do. Mindfulness always makes you calm, like I said a million times but still.

7. Did you relate to the animals that were presented as teachers/guides of Embodied-Mindfulness and which animal did you like the most?

Essence of responses: In response to question 7, all students expressed *appreciation for the ocean animals* presented throughout the program. Whales helped to connect students to their breath and to breathing more smoothly. The dolphins cultivated somatic awareness and self-esteem. The kelp supported one child in anchoring his body to his heart, while jellies helped a student learn by observing the nature of the mind. Mantis shrimp, the barracudas, and seal were also mentioned as important teachers. Two students revealed no particular preference and appreciated all ocean animals. A trend was observed in students imagining or pretending to be the animals as a means to better understand the material and concepts presented. Finally, connecting to nature was also mentioned as important in order to bridge the gap between animals and humans.

Table 28

*Students' Responses Regarding Animals as Guides and Which Was Liked the Most*

Student	Essence	Children's Statements
S3F4-9	impressed to see how we can refer to animals as humans / appreciation for animals	I was actually impressed how we can refer to animals as humans. When you think of them as the same it makes more sense. You think as yourself like unique, how animals can live and how you live, like you can sort of compare and it makes you feel how lucky you are to have animals around you.

Student	Essence	Children's Statements
S3M4-22	dolphin/don't bump into each other	My favorite animal was the dolphin, because they don't bump into each other.
S1F4-1	seals/helped me with everything	I really loved learning about the seals playing tag. Just in general it helped. Well, not just in general, but like it helped me with everything pretty much.
S1M4-19	kelp/get closer to the heart /grips to the rock/ that's what my body was doing with my heart	I think they [animal] helped me a lot and I think especially the kelp forest really helps myself get closer to the heart. Yeah. The grips—I saw the picture you showed us where it grips onto the rock, and that's what my body was doing with my heart.
	whales/helped me breathe smoother	The whales helped me breathe smoother. The barracudas, from the video that I saw, they were pretty fast, and it amazed me that they were not bumping into each other.
S2M5-18	seals	Maybe seals. I don't really know. Yeah
S2M5-11	liked learning about the animals/ barracuda for awareness/mantis shrimp could see, my favorite is dolphin/they are smart	I liked learning about the animals and what they could do, like how the barracudas could swim without touching each other and like when the mantis shrimp that could see really well because they have like three pupils in each eye. I really liked learning about how those animals work, because I never even knew there was such a thing as mantis shrimp. My favorite animal is the dolphins. They're just super smart.
S1F6-7	jellies/helped me learn, I pretend I was an animal	The jellyfish, kind of feel, in fact . . . I got the jellyfish. [It] helped me learn mindfulness. I guess I pretend I was an animal. Just tell myself I'm the dolphin or I'm the jellyfish.
S1M6-11	all of them	All of them actually.

Student	Essence	Children's Statements
S2F6-12	whale made the connection with the breath  you can imagine being the animals while you were doing mindfulness	The whale helped me because I always think of a whale, you know in Nemo how Dory talks like the whale? That made me a connection with the breathing, because when you talk you're breathing in and out. I think the whale is the main one that helped me. I think the animals helped because then you can almost imagine being the animals while you were doing mindfulness, not just "Oh, I'm myself." Yeah, I think that everyone should still do it and that I should still do it because it's really helped me a lot.
S2M6-23	Mantis shrimp/can see different levels  connect with nature around us  connecting and bridging the gap between the animals world and human world	I like most of the ocean animals. I guess that's that but I do. I think they're cute and, except for the mantis shrimp. That was really cute. I thought the mantis shrimp was pretty cool because of how three pupils and the all work on different levels or independent levels. We never think of ourselves as anything to do with nature because we make so much stuff that's not really naturous, naturally, I don't know how you say it but it's cool to see how much we actually connect with some of the nature around us. I thought it was really cool. You just never think you would be able to connect with them. They live in the ocean. We live on land. They're huge. We're tiny. I was talking about whales there. I'm so happy you did [mindfulness using] the animals.

8. Do you think it may be beneficial to continue practicing Embodied-Mindfulness now that the innerU program is over? Do you feel you will continue practicing on your own?

Essence of responses: Responses to question 8 presented a trend in that all students felt it would be beneficial to personally continue practicing mindfulness. In the context of this response no particular trend was observed. Students felt they will be able to continue practices such as mindful walking, breathing, touching, thinking, and [heartfulness](#) for their capacity to cultivate and maintain awareness of self, gratitude, relaxation, life satisfaction, as well as reduce stress and life worries.

Table 29

*Students' Observations Regarding Usefulness and Whether They Would Continue on Their Own*

Student	Essence	Children's Statements
S3F4-9	it really helped/continue/feel relieved about stuff	Yeah, I think so, because it really helped, and it could probably go on more and feel relieved about stuff now.
S1F4-1	that I can do by myself mindful walking/touching /thinking	I think maybe the easiest, well not the easiest one, but the one that I can do by myself is mindful talking, mindful touching, and thinking.
S1M4-19	I do some mindful walk	Yeah, I remember the time for mindful walking. Sometimes when I have some spare time and I'm not in a rush to walk to places, sometimes I do some mindful walk in my house to help me stay in touch my mindful self.
S2M5-11	at bedtime body relaxes with three mindful breaths	I discovered right before I go to bed every night, I take those three mindful breaths because I found out in class it always makes me sleepy, so when I can't sleep I always take those three mindful breaths. I get tired and my body relaxes.
S1F6-7	it really would change my life/more aware	I guess it really would change my life since it's making impacts right now. If I keep on doing it I guess it would make my life way better. The mindful walking one. [I] feel like my heart beating, my legs moving when I'm walking.
S2F6-12	grateful, Oh, my gosh, I live in this awesome place	That's what I think because I think that it's important to ... mindfulness and heartfulness, because you need to learn heartfulness to kind of . . . and gratefulness to be aware of "Oh, my gosh, I live in this awesome place and look at the stuff I've got" because some people don't have these things.
S2M6-23	a great stress reliever/ see what your emotions are and how quickly they change	I think it would be useful to do it again. Once again, it's a great stress reliever if you're nervous or just mad, angry at someone. I like the emotions part. I think that would be fun to do, just see what your emotions are and how quickly they change.

9. If you chose one word to describe the innerU curriculum, what would that be?

Essence of responses: Question 9 presented a trend in that several students referred to the program as calming. Other qualities included: fun, active, bright, amazing, connection, learning, happiness, helpful, and self-understanding.

Table 30

*Students' Framing of the Program in One Word*

Student	Essence	Children's Statements
S3F4-9	Fun, active, bright	It would be fun, active and . . . bright.
S1F4-1	amazing	I would choose "amazing." It was truly amazing to meet you and . . . and the program is just amazing.
S1M4-19	connection	Connection
S2F5-18	learning	Let me think of word that meant like we learned a lot of different things, like I don't know, like learning.
S2M5-11	calming	Calming
S1F6-7	happiness	Happiness
S1M6-11	Helpful/ self understanding	The word I would choose would be, it would be helpful but with a little bit of understanding about yourself and how your body is.
S2F6-12	calm	Probably "calm." I like that word and it just feels like that to me, just that word.
S2M6-23	calming	Calming

10. Do you feel that mindfulness would be beneficial for everyone in school, and how?

Essence of responses: Question 10 presents a trend in that all students interviewed felt that mindfulness would be beneficial in schools. Among their responses, students felt that mindfulness in schools would contribute to: inner peace, heartfulness, happiness, awareness of others, self-esteem, self-understanding, a more peaceful schooling environment, the respect of

self, others, and the environment, stress reduction prior to test taking, greater focus, and resiliency.

Table 31

*Students' Responses Regarding Benefits of Mindfulness Schoolwide*

Student	Essence	Meaning
S3F4-9	would benefit everyone / attention to other's feelings/ feels good & happy/ feel special	I think it would benefit everyone. I think that because it is a way of calming yourself down and paying attention to more of other people's feelings, and that makes you feel good because you make them happy. Well, I felt really happy the day that I got to ring the bell, and it made me feel special.
S3M4-22	no one trouble in class	No one would get in trouble in our class.
S1F4-1	helps them deal with themselves	Because some people cannot deal with themselves as much as other people can and so they will need a lot of help and Mindfulness is the thing that can help them.
S1M4-19	everyone would be in peace.  get close to their heart	I feel like everyone would be in peace. The disputes will be very small instead of very big. The world will be a better place.  I think everyone, if they're not already doing mindfulness in their own way . . . like if they have their own methods—their own mindful methods, that's good. I think everyone could benefit just to get close to their heart.
HI5-18	help kids focus  beneficial to keep doing it  make me notice all/keep me on track	I think it's a good idea because it might help a lot of kids focus. Like I said, with me, it [would] help them like that.  I think it'd be pretty beneficial to keep doing it, like in our class. We've been keeping this week, have been listening to the things, the ones where we did it without you, and so it's helpful to just keep doing it even if you're not there.  Breathing, yeah. It helps me like just make me notice all. It all

Student	Essence	Meaning
		I was going to say something. It'll keep me more straightforward and keep me on track for things
S2M5-11	learning experience  help deal with life and stay calm/relaxed	I think it would. I think a lot of the people who like see it and would like the learning experience, like me, would like how each animal works and what their talent is. I think they would like to do it once and they would like to do it because sometimes in life you have problems that you don't like and you just have to calm yourself down and relax.
S1F6-7	calmer school/ listening to teachers  Respect of others	Yeah, I think it would because if everybody did it, like in the school if everybody did it then people would be more calmer walking in the hall, listening to the teachers. The yard duties, too, some people would be if they're talking to them they would be, "I don't care. I'll do it again." If they did mindfulness people would be like, "Oh, I'm sorry," and apologize.
S1M6-11	respectful to others, yourself, environment	I think it would be beneficial for everyone, because it teaches them how to be respectful to others and be respectful to yourself on like doing things that harms your environment or your health or your body.
S2F6-12	helps everyone calm down  deep breaths before a test	That's what I think because I think it just helps everyone calm down because some kids are more jumpy than others and some kids get nervous before tests, so I think that everyone should know that it really helps you if you take some deep breaths before a test.
S2M6-23	Yes, helps deal with so much to do, you'll feel better	I think it would be beneficial for everyone because everybody has those times where you're freaking out. You've got so much to do. You know there's no way you're going to finish everything. Everybody has those times. You can do mindfulness, acknowledge that, and you'll feel better.

11. Now that you've learned mindfulness, how do you think or how do you feel that your life might be different in the future?

Essence of responses: Question 11 presented a variety of student responses including [students](#) feeling that they would be: calmer, more accepting, more aware, more grateful, less stressed, more focused, less reactionary to emotional stimuli, capable of dealing with insomnia,

better equipped for academic success and healthy relationships, and overall feeling better prepared for life. Only one student felt he would not continue practicing mindfulness.

Table 32

*Students' Observations on Impact of Mindfulness on Their Future*

Student	Essence	Meaning
S3M4-22	calmer life	My life will be different because my life will be calm.
S1M4-19	wish it could never end	I really enjoyed mindfulness, and most of the time I wish it could never end.
S2F5-18	awareness/ relationships/ focus	It will probably keep helping me be more aware, like with my family and my brothers and also help me in school, I think, with focusing, like I've said.
S2M5-11	not react when I get super mad or excited	I think when I get like really excited or like mad or angry or something, like sometimes I get so mad with my little brother, especially, that I'll kind of react, very badly, I think that will help me like not react when I get super mad or excited.
	I don't think I'll continue	I think it might help with like small things and I think that it was cool to do it once and see what it was like and I think it would help to just do it a little bit. As I said, just the sleeping thing, sometimes I can't sleep and I just have to do those three mindful breaths and like when I get mad. I think it was just cool to do it once and see what it was like, because I've never done this before or heard of it. It might help, but I don't think I'll continue it very much, but just like I said, the sleeping. Yeah
S1F6-7	better studying and education	I guess studying, college, getting a better education in college. Studying. The teacher, too, if he's mad I'll try to work harder on my essays or papers.
S1M6-11	calmer, more focused and better prepared for life	It would be different for me because I see how things get better and how things would not get worse in life [more positive]. I would feel more calm, more focused, and more prepared on what life brings me.
S2F6-12	more grateful	I think I'm going to be more grateful for what I have than these other people that don't know mindfulness and I also think I'm going to be able to deal with things a little bit better instead of

Student	Essence	Meaning
	able to deal with things	freaking out because I know how to do mindfulness. I think that's a few other things that I would be better at.
S2M6-23	stress relieving	I'll probably have a better way of stress relieving to start.
	acknowledge things without change them.	Something I'm not able to do very well is acknowledge things without changing them. That's something I'm not good at and I think I'll be able to do that a lot easier now.

### Teacher Interview Data

To further evaluate the impact of embodied mindfulness on wellbeing in class environments, teachers were interviewed the week following the completion of the Embodied-Mindfulness program. Semistructured interviews were used as a vehicle to deepen the understanding of the influences of mindfulness on wellbeing. All 5 teachers who participated in the research as part of the intervention groups (classes) were interviewed. Teacher demographics were 100% female and Caucasian. It is important to note that not all questions were answered by each teacher interviewed. Teachers were identified by unique identifiers (e.g., 1(S1-4) signifying the following: # representing each individual teacher, S# representing the school, and the numerical number following the dash representing the grade level. The following represent an overview of the collected data, organized by question, along with the essence of each teacher selected statement. Meaning and interpretation are provided in Chapter 5.

1. Have you noticed any individual or classroom changes as a result of the innerU Embodied-Mindfulness program in the last 8 weeks, if any? If so, can you please give me examples?

Essence of responses: Question 1 teachers' responses presented a very significant trend in that all teachers observed how the program had contributed to introduce a new common language that was beneficial to the functioning of the class as a whole as well as of value to the teacher. Students and teachers were observed using the newly introduced mindfulness language in class. Other noticeable class trends included: calming and grounding effects, greater class focus and thoughtful student responses, and a greater awareness of their class surroundings. A trend was also noted in that teachers mentioned not being able to notice overall class changes, yet observed changes in certain individuals. One teacher expressed observing changes in attitude and the program's support of children with difficult family lives in terms of providing a new approach to coping.

Table 33

*Teachers' Responses Regarding Change as a Result of the Program*

Teacher	Essence	Teacher's Statements
1(S1-4)	students used mindfulness language quite a bit  responded to it right away  integrated in class  they instantly settle/ body recognizes it  language used between students/ something that we all	I noticed at times students used the language of mindfulness and said things like, "Oh, Mrs. Richman, be mindful of the things on the carpet. You don't want to step on them." The vocabulary is something that they used quite a bit. I noticed that for myself that I could use the vocabulary and that they would respond to it right away. Even today they were very anxious and excited about the weather changing but I just said, I actually said, "If I was Mrs. Mermaid, what would she tell you to do right now?" They were like, "Take three mindful breaths."  I feel that, and I think that that's probably the point is that they can take those breaths and they instantly settle. Their body recognizes it as this is the outcome of these breaths and they can just do it like that. I guess what I would say is just generally that they talk about it and they, I hear the language between each other also. When they've had issues I've been able to bring up this language and have them problem solve a little bit and talking about having mindful hearts and mindful thoughts and actions. It's something that we all understand so we can use it to solve problems. (15-32)

Teacher	Essence	Teacher's Statements
3 (S1-6)	understand to problem solve	I would say as a whole, I think the class really benefited from the innerU program. (19-20) Okay. Just because, with our Daily Dives , that practice every day helps to ground us in the day and calm down a little bit before our meeting and for the rest of the day after that too, so we've continued to do that practice, just even a minute of silence, and sometimes, besides just our Daily Dives, I would have students, if I felt like the energy was too much and we weren't being focused, I would have us take just a little bit of time to just take a breath, calm yourself down. Let's focus back here. It just became a strategy for any time of the day when we're having a hard time with that, so I think that has helped us transform into a more focused class, but then there's also more individual students that have, I think, changed. (22-32)
	helps to ground students	A student that you interviewed earlier was, I think, really affected by it because she tends to be a little more scattered, especially with her body and space, and so I think that helped her to come to consciousness of herself and her surroundings. (34-37)
	became a strategy that helped transform us into a more focused class	There's a few other students that are the same way. They just rush through things and aren't being mindful of being in the moment and focusing on what their task is now. They're rushing around so now I think it's helped them to focus in on those moments. Then, just for me personally, I feel like it's helped me and so even if there's students that haven't really voiced their opinion or how it's affected them, I feel like, for me, it affected me so it has to have affected them as well. I'm not sure how much, but I think there's some quiet girls in my class that may not have expressed anything. (39-46)
	consciousness of herself and surroundings	
	shift from rushing to focus	
	it affected me not sure how much	
6 (S2-5)	was still getting to know them	Yes. First to note is that we started it pretty early on in the beginning of the year, so I was still getting to know the kids. It's not like I can compare really knowing kids well and then seeing how they change through an experience because I was still getting to know them, and they were still finding their way in the classroom.
	it's hard to tell	There were some kids who were just very quiet in the beginning of the year, and then it's hard to tell, when they're talking more, is that just because they're becoming more comfortable, or could it be

Teacher	Essence	Teacher's Statements
9 (S2-6)	<p>No noticed change/ common language</p> <p>changes in attitude</p> <p>provided tools to cope challenging family life</p> <p>stop and think</p> <p>took time to do it/ after recess/calmed them down/ could really feel a difference</p> <p>gets them to stop and think</p>	<p>I don't know that I've noticed any change, but it's a common language that we can use when it gets loud. You need to sit down and find your innerU space, and like that, but I have 2 things.</p> <p>I think (student1). I've seen a change in his attitude toward it, but that was you, I think, coming forward and helping him to see it. Do you know who (student2) is? He was very reluctant.</p> <p>At his conference, I found out, he is this calm polite kid at school. He's very angry at home, and he blows up, and we talked . . . It's not a great situation, but he lives with his grandmother, and I said, "You know, we're learning how to listen to ourselves. When you get that mad, can you not take those deep breaths," . . . He heard what I had to say, because he had been through all of this. That, to me, makes it all worthwhile. (24-38)</p> <p>I think it's a really good thing to make them stop and think. (44-45)</p> <p>I think that we took the time to do it. I think the most beneficial time that I did it, was when right when we came in from recess, and we did our 2 or 3 minutes, and that calmed them down. So, I could really feel a difference. (48-51)</p> <p>(Academically) That's harder to see . . . When we're taking a test, it's like, "Okay, take those deep breaths that we learned," and I don't know that academically it did help, but I think it gets them to stop and think about what they're doing, instead of (being reactionary). (5-56)</p>
7 (S3-4)	<p>calmer and attune</p> <p>I didn't notice a huge change</p> <p>but it was definitely helpful</p> <p>language used in class</p>	<p>I noticed that they were calmer and would attune to the lesson. Honestly I didn't notice a huge change because this class is just needy in lots of different areas, social, emotional, and academic. I think had it been a different group of kids, it would've made a more significant difference. By any means, I don't think that hurt anything. Not that I didn't see all these grand life-changing moments but it was definitely helpful. (11-16)</p> <p>I don't have any specifics but I could whisper in a person's ear, "Sit up like the blue heron," and they would. It was a little bit nicer to relate it back to an animal. (30-32)</p>

2. Have you noticed, if any, gender differences in practicing mindfulness? If so, how were they manifested?

Essence of responses: Teachers' responses to Question 2 presented an important trend in that all teachers observed gender differences in practicing mindfulness. Among those differences boys were "antsier and giggly, unsure, looked around more, had a hard time focusing, had difficulty in closing their eyes, and were concerned about appearances and group conformity." Girls on the other hand "participated more, voiced their feelings more, raised their hand more, were more comfortable in practicing mindfulness, and were more aware of self and others." Several teachers observed how mindfulness contributed to helping the boys relax and be more focused. An outlier in this regard was one teacher, who had an opposite experience in observing gender differences, as the class was composed of primarily boys and only 5 girls. Here boys were more outspoken and the girls quieter.

Table 34

*Teachers' Observations Regarding Gender Differences*

Teacher	Essence	Teacher's Statements
1(S1-4)	boys: a little antsy and giggly/but not girls  boys unsure appearance  looking around  group influence	I noticed when you come into the room and we do the mindful reading at first, I like to do it myself so I don't often take a peek but sometimes I do just to see who is responding to what and I definitely notice if anyone's going to have their eyes open and be a little antsy and giggly, in here it has been the boys. I haven't noticed any girls, actually, respond like that. I would say that perhaps boys at this age are a little unsure of appearances. Am I going to look silly doing this? That's kind of what I see because they look around. I noticed it less and less because I think they've settled into it and I think they've realized plenty of boys are in here relaxing, that it's okay. (35-44)
3 (S1-6)	girls: participated	I feel like in general, during your classes, the girls participated more and were able to voice their feelings easier, because when you ask

Teacher	Essence	Teacher's Statements
	<p>more voice feelings raise their hand more boys: have a hard time focusing girls just more aware help (boys) focus it helped them</p>	<p>questions to the students, they would, I think, raise their hand more often. That's why I feel like, whereas in general, I think of my class, there's a lot of boys that have a hard time focusing and would really benefit more from this program, but it's a little harder to tell how it affected them because they didn't voice their opinions as much. (61-66). Girls are just more aware. (75)</p> <p>. . . generally, it did help them (boys) to be able to focus better, but then, at the same point, as the year went on, with some kids there were increased behavior problems. I don't think there's any relation, but then it's hard to sometimes compare because, in the beginning of the year, they were like just wanting to please and still nervous. It started pretty early on where they were still becoming comfortable in the classroom. Some students, as the year went on, there was a decrease in their positive behavior because they made some bad choices, but I think that, overall, the mindfulness, even if they were someone who would make a bad choice on the field—sometimes that happens—I still think it helped them to, at times at least, be able to be more mindful. (60- 71)</p>
6 (S2-5)	<p>girls: outshined boys: outgoing</p> <p>Helped boys focus</p>	<p>We only had five girls participate out of 24. (45-49) The girls are so outshined in the classroom a lot. They just tend to be a lot more quieter because there are so many boys and the boys are so much more talkative and outgoing. (55-57)</p>
9 (S2-6)	<p>girls: more comfortable boys: antsy but calmed down</p>	<p>I definitely. I think the girls were much more comfortable from the get-go, most of them. I know those (boys) that are antsy, and those continue to be antsy, and some girls, some boys, but I think through the weeks, that calmed down.(62-65)</p> <p>. . . you got (Student2/boy) to go up and do the bell, and that's huge. (74). Knowing now what I know about his home life, I can see . . . It's kind of like with (student). It's like there's hard things to think about with those kids, you know? Their lives aren't like anything that I experienced growing up. So, for me, to . . . I didn't even try and</p>

Teacher	Essence	Teacher's Statements
	get anger out	coach them, or help them. My experience is so different, so this is kind of an outside thing that you can say to them, "Don't do this because I'm telling you. Think about how you feel when you take those deep breaths. It helps you get some of that anger out." (78-85)
7 (S3-4)	boys: would not close their eyes at first Relax	I think as we got further into the program, the boys definitely bought into it more. I think in the beginning, they would not even close their eyes and they weren't going to be a part of it but then after they're like, "Okay, yeah, we can breathe." They realized that they could take a minute to relax. (22-29)

3. How do you feel the innerU program impacted, or not, the children of your class?

What are some of the most noticeable observations?

Essence of responses: Question 3 presented a variety of responses including: 2 teachers noting their difficulty in observing the overall program impact, while the other teachers observed emotional and behavioral changes on the playground; greater reflective capacity; greater somatic awareness and how it affected others around; and the student's calmness in relating to animal images presented by researcher, as well as an impact in connecting to ocean life. The benefits and use of a common mindfulness language was, again, mentioned here by 2 teachers.

Table 35

*Teachers' Observations on Impact of Program on Their Class*

Teacher	Essence	Teacher's Statements
1(S1-4)	emotional behavioral common vocabulary mindful of another's feelings	Emotional and behavioral go together I guess in my mind and I think that's where I would see it the most because when we had a few playground issues we were able, like I said before, use that general vocabulary that we were all understood what we were talking about and we all had bought into that so we all knew the importance of being mindful of another's feelings. It's, "Were you being mindful," and not shame on you if you weren't noticing, "Yeah, this time I was not but I know that's something I want to do next time." (102-108)
3 (S1-6)	movement	I think . . . the movement piece, and I guess because it's more

Teacher	Essence	Teacher's Statements
	<p>take the time to walk slowly</p> <p>became more aware of their body and how it affects others around</p>	<p>noticeable to an observer, but just having students stand up in a slow pace or walk around the room as slow as they can. It's so different from . . . (usual). I think just the way that our society works, I feel like everyone's always in a hurry and so to take the time to walk slowly, it was a shock to some of them. They didn't know. They couldn't restrain themselves from going fast and when I excuse students, let's say we're cleaning up or getting ready to go somewhere, they're just in such a rush to do those things and I find it funny that they just want to do it as fast as they can instead of being mindful, so that's another way that we've been trying to practice mindfulness, is just moving about the classroom a little more slowly. I think a lot of them, because of those movements that you did, became more aware of their body in general and how it affects others around them. (104-115)</p>
6 (S2-5)	hard to discern the effect	<p>It's hard to discern the effect on mindfulness since it happened at the start of the year. I'm not sure what's just the habit separate from mindfulness just doing the classroom activities and what mindfulness could have contributed to. I'm not sure. (92-95)</p>
9 (S2-6)	<p>streamlined</p> <p>animals meant something to them</p> <p>it's hard to tell</p> <p>sharing common language helps him stop and think</p>	<p>It streamlined for us, because we went to camp, and camp was in the ocean, and so I think all the animals, that meant something more to them than if you'd done it with them last year, because they didn't have that experience with the ocean, and what it feels like to be in the ocean. So, that was wonderful.</p> <p>I don't know. It's hard to tell. I think the real place where I'll see it is kind of in the future. You won't be coming in anymore.</p> <p>Yesterday, when we talked about the circle, they had such great answers, and this morning, I said to them, "Your answers were so right on, and so good. Do you realize we make a circle every morning for our morning greeting, and you choose to talk?"</p> <p>Well, he's sharing something, and is that what that's about? (94-106)</p> <p>So, there's this universal, or this common language that I think helps him stop and think. (108-109)</p>
7 (S3-4)	calmness in relating to the animals	<p>I think they found calmness in relating to the animals, the harmony of the animals, and the environment. I wish the videos had been longer because they were just so beautiful. I think a few times they asked to see it again and have you play it again. Especially living close by the</p>

Teacher	Essence	Teacher's Statements
	connection to the sea animals and sea life	ocean, I think a lot of them have a connection to the sea animals and sea life. (42-46)

4. Have you observed any noticeable difference in class, with school work, in the yard, or at recess?

Essence of responses: Question 4 presented a variety of responses including two of the five teachers having difficulty observing class changes. The other three teachers observed student's receptiveness to the program; student's capacity to reflect about and share feelings, and provide more thoughtful responses, in what felt like a safe environment; students talking about mindfulness; teacher's own integration of mindfulness skills in other learning school environments; and the children's ability to incorporate focusing tools in class.

Table 36

*Teachers' Observations Regarding Differences Noticed*

Teacher	Essence	Teacher's Statements
1(S1-4)	receptiveness very open with feeling  safe environment  thoughtful responses  openness	I guess just the receptiveness of the class stands out, the way they were able to be very open with their feelings. I think sometimes in class if you have one or two students who are like that then everyone else says, "Oh, it's safe for me to do that." You certainly created a safe environment. That's the kind of a thing that I knew that people would always respond with interesting thoughtful responses. That was something that was notable to me as well, just their openness. (213- 219)

Teacher	Essence	Teacher's Statements
3 (S1-6)	<p>reflect on emotions and feelings</p> <p>reflection on how they're learning</p> <p>learn to focus better</p> <p>students bringing up practices in class such as doing things for others</p> <p>applying and integrating mindfulness to other curriculums</p>	<p>By using it in various aspects of the day instead of just the 20 minutes of mindful time, having students reflect on their emotions and feelings during the lessons that we're doing, is helping them to be able to realize, oh, I'm not being focused right now. I'm probably not doing my best learning, so it's not just a reflection on how they're feeling necessarily, but how they're learning too because I think that's the purpose of your whole program, is for them to learn how to focus, I mean, in life in general, but you're implementing in the classroom so that students have the ability to focus better and be more successful academically. (182-189)</p> <p>. . . there were several times when students brought up that practice, whether it was like a story we read or something someone did for someone else in our class, it just came more to the surface, the fact that doing things for others makes both parties feel good. (193-196)</p> <p>. . . every time we run the mile now, I have to have a focus area, but I took the ideas that we had learned in mindfulness and each one of them applied to running the mile. I told them to look around as you're running. Look around in the playground and see if you find anything you've never seen before, and then it takes their mind off the actual running so they don't have to focus on that as much because some of them don't really like to run, but then the other one was . . . is it the barracuda fish? (119-129)</p>
6 (S2-5)	<p>start thinking of how they can use it</p> <p>I don't have good data to support that</p> <p>would mention things</p> <p>I felt like it had sunk in</p>	<p>It's not just a separate 20 minute activity in the middle of our day. They can see it in other aspects and then they start thinking of how they can use it on their own instead of just me asking them to do it. (139-141)</p> <p>Yeah, I feel like it did, but I guess I don't have good data to support that. When they're at PE, they're with their PE teacher and I'm not there. It's hard to know what's happening at recess because I'm not there either. We have playground supervisors. In those spaces, I feel like it did carry over, but I don't see them. I guess I'm just going by the fact that they, in the classrooms, or other times with me, would mention things that we've done. I felt like it had sunk in.</p>
9 (S2-6)	<p>integration/kids would push their</p>	<p>Yeah. I think when I would ask kids to be more still with their body at times when what they were doing was distracting other kids. At times, they need to move, and that's fine, but there's times during another student's presentation or something where it's disrespectful to be moving that much and it's takes away. There'd be times that I would ask them to settle down. It seems like some kids would push</p>

Teacher	Essence	Teacher's Statements
	chair back	their chair back. That was definitely something that they got from mindfulness. (38-44)
7 (S3-4)	not much was talked about  I didn't necessarily see the results	I think in other years, students would've been more excited and they would've talked about it outside of class or academic world. This particular group just has interesting focusing levels. I was surprised that not much was talked about. I never got asked if it was your day to come and maybe they just knew the schedule but I feel like in previous years had you come and done it with certain classes, they would've wanted it every day and they would've been asking for you to come every day. It's hard for me to analyze the program because I love it but I didn't necessarily see the results with this class that I feel I would have seen with another group that really would've embodied in . . . . (48-57)

5. What dimension of the program you felt the children responded to the most?

Essence of responses: It is important to note that some teachers did not respond to this question directly thus the following responses reflect the answers of only 3 teachers. Two of the 3 teachers commented on the student's appreciation of the *program's animal centric theme*. Comments described how the connection between those animals really brought it to life for them; offered concrete *visual examples*; and offered *new learning*. Other dimensions of the program that the teachers felt the students responded to were: overall aspects of the program, visuals and videos; the relaxing and predictable curriculum format; the age appropriate class length; journaling for its symbolic and reflective dimensions; the "Daily Dive" for its capacity to provide program continuity; and mindful walking and sitting meditations for their applicability to school environment tasks.

Table 37

*Teachers' Responses Regarding Most Liked Responses*

Teacher	Essence	Teacher's Statements
1(S1-4)	interaction with animals and visuals/videos (visualization)	I think the dimension they responded to the most was the interaction of the animals and the visuals. That's what they latch onto. Obviously they loved the videos, can we watch it a second time, but I think it's they took that visual and now they have that visual in their head when they think about their specific areas of focus. I think that that's probably what they like the most. (135-138)
	fascinated/accessible	They're fascinated with every single level of it because to them it's so accessible. Yes, I can think about mindfully eating. That's easy. Yes, I can be an expert at all of these things. There's not one that I'm not instantly able to practice. (139-142)
	I can be an expert at all of these things	
	perfect length/relaxing format	As a teacher I appreciated the time length. I thought it was perfect. Perfect amount of time. The interaction of the pattern of it, that it was usually the same structure was something that was relaxing and predictable. That makes you relax easier because you understand how this lesson is going to go. I think that the kids really responded to, I think I already said, but just the visuals. I really liked the journaling. I thought that was very interesting. I was impressed that the kids were able to be symbolic about their feelings. It was effortless to them. (150-159)
	kids really responded journaling/ symbolism about feelings	
	effortless	
3 (S1-6)	liked the animals	I guess I would say they really liked the animals. They were really interested and curious as to what was on the screen each day and they liked watching the little videos, and I think the connection between those animals really brought it to life for them. It wasn't just you telling them to sit up straight. They had something that visualized the blue heron, and they got to learn about new animals in the process too. (161-166)
	connection between those animals really brought it to life for them	
	visualization / got to learn about new animals	
6 (H5)		No Answer
9 (H6)	a quiet	I liked it a lot in that I stood there, I sat on my stool right there,

Teacher	Essence	Teacher's Statements
	environment	and the chime brought them right . . . The lights . . . I always turn the lights out, and I didn't have anything up there, so it was dark. You know, it was like a quiet environment, and they quieted down immediately, and they went into their sitting stance, or sitting posture.
	they responded really well	So, it really . . . . They responded really well. There were days where it was harder than others, and my whole thing is, "Okay, I'm going to just sit here, and I'm going to do what I need to do," and then every once in a while I'd open my eyes a little bit, and I would see a student, who can't sit still, kind of looking around the room, and then I'd see him kind of settle in. So, it really did. (112-122)
	looking around the room in the beginning	In the beginning, there was a lot of this. Like, what's everybody else doing? Is everybody else going to do this? Once they realized, yeah, that they were, then (it became normalized). (123-125)
	parents are positive	I would say, with conferences again. I would say at least 5 or 6 of my conferences, we've talked about it. How are you feeling about it? You know, so positive. There was nobody, of course, that felt that it wasn't a good thing, and their parents were really glad to hear it. (133-136)
7 (EC4)	daily dives  they knew exactly what to do  I really enjoyed actually the walking mindfulness I think they were all great	Even there were a few times where we would just do a Daily Dive and I wouldn't tell them we were doing it. I would just turn it on and they would hear that and they knew exactly what to do. I liked how even when you weren't here, we had that to continue each day. I really enjoyed actually the walking mindfulness because that's something in class and in school that we do all the time, how to walk in the hallways and how to walk outside in recess. Can't run until we get to the. Just having a large class and not a lot of space in here, we are always mindful of how we walk. I liked that one a lot, more so than maybe the food. When I think the walking mindfully made a huge difference with this class on how we excuse them out to recess, we could always pull back in that lesson. (81-94)  I thought that was good, and then definitely the sitting and the breathing. I think they were all great. (96-97)

6. How do you feel Embodied-Mindfulness contributed to:

a) Intrapersonal changes (such as emotional balance, attentiveness, focusing)

- b) Interpersonal changes (student’s relationships, such as with peer and teachers)
- c) Overall happiness (reported by the student and/or his parents/guardians)

Essence of responses: Question 6 presented various responses including changes in: (a) *class functioning* with observations such as *integrated vocabulary*, *calmer class environment*, and *mindfulness becoming a class “life-habit”*; (b) interpersonal strengths improvements included an overall *sensitivity to others*, *greater awareness* and sensitivity regarding others’ feelings, more *respect*, and *better understanding of feelings*; (c) intrapersonal observed changes included *calmer*, *more focused*, and *reflective attitude*, and the teacher gaining a new perspective of her classroom and students’ character through the program’s mindfulness lens. Two teachers voiced their difficulty in observing specific changes in response to the program.

Table 38

*Teachers’ Responses Regarding Contributions of Embodied Mindfulness*

Teacher	Essence	Teacher’s Statements
1(S1-4)	<p>acting heartfelt</p> <p>not a lot came up behaviorally</p> <p>integrated vocabulary</p> <p>calmness</p> <p>general sensitivity to others</p> <p>it became such</p>	<p>In general this is a particularly conscious classroom. Sensitive. They’ve been like that all year. They’re particularly empathetic, aware of others. I think that those who aren’t naturally like that then were given an opportunity to, “Oh, this is why that student acts like this because they were already practicing these behaviors and here’s a way that I can practice those behaviors also.” Like I said, if there was any sort of discord then we instantly can say, “Is that a heartfelt way to act?” (175-183)</p> <p>Not a lot came up because this is a really remarkable class behaviorally. Yes, they’re very energetic, they have a lot of personality but they’re also very aware of others. There aren’t a lot of issues socially. There have been just a few here and there and like I said, they have that vocabulary and they definitely use that vocabulary. (186-190)</p> <p>Things I would notice would be direct repercussions. That’s probably the wrong word but effects after the particular session. I would notice just like a general, like I’ve said before, a general calmness, a general sensitivity to others when it was on the forefront of their brain. I think that that’s the way I would notice the most was how the rest of the day went after that session and the importance of doing the daily practice because then you’re just</p>

Teacher	Essence	Teacher's Statements
	a life habit	training yourself all the time. I don't know. It was a gift when you came in two days a week because I know that they were very aware of those things for the rest of the day. How wonderful it would be if they had that every day so that it became such a life habit. (194-202)
3 (S1-6)	time to stop and reflect  reflect about yourself  I can't say that I saw a big change  how they make other people feel  more focused/calmed down/reflective time	<p>I think that the Daily Dives and that quiet meditation time helped the most with intrapersonal. (171) ...just because I don't know how often kids, or anyone really, has time to stop and reflect in our world today so just that quiet time when you're not sleeping, you're not thinking about what you have to do for the day, to reflect on yourself and how you're feeling is I think the biggest impact for just individual students. (175-179)</p> <p>I can't say that I saw a big change in that (interpersonal classroom behavior), but I know they're more aware of it because they brought it up several times. (200-201) The beginning of the year, there were some girl drama issues on the playground and that seems to have subsided a little bit. I don't know if that's because they're thinking about how their actions affect others and how they make other people feel. I'm hoping that that was the case. (203-207)</p> <p>I would say compared to the beginning of the year, things have definitely calmed down a little bit. We still have our moments with high energy levels, but I think overall, it's helped with the students to be more focused and calm and to have that reflective time. (212-215)</p>
6 (S2-5)	I'm not sure. I feel like it helped, but I don't have the examples to prove it	<p>It's interesting because this is the first time I'm getting to know this group of kids. I wish I could compare them to last year before they had it because, especially the boys, they can get really competitive. I wish I could compare them to last year and see if this improved it because, I don't know. I'm not sure. There are still some issues. I feel like it helped, but I don't have the examples to prove it. (112- 126)</p> <p>There's a kinetic energy in here a lot, where their minds are racing and as soon as they think of something, they want to say it. It's like popcorn in a microwave or whatever. (138-141)</p>
9 (S2-6)		No answer.

Teacher	Essence	Teacher's Statements
7 (S3-4)	I feel like it was just really an added bonus to see it through a different lens.  Emotional intelligence	Generally speaking, yes. There wasn't one thing that stood out, not one moment but from the beginning of the year since you arrived as well since we started right at the beginning, we've talked about treating other people how you want to be treated. I think it was just really good hand in hand from what our principal does school wide on the telecast and through our students assemblies, to the mindfulness program, to the character counts programs. I feel like it was just really an added bonus to see it through a different lens. When your calm voice was talking about specific times, trying to reflect on if you've ever been hurt, I think feel like we could've spent a month maybe just on that. I don't have a specific example but I think yes, it made a difference. (135-144)

7. What aspect of the innerU curriculum stood out for you, if any, and why?

Essence of responses: Question 7 presented numerous responses, including a trend in several teachers' appreciation of the accessible and engaging theme *of human-animal connection* and the *analogies to the natural world*. Other noted aspects of the curriculum that stood out for teachers included the overall contribution of the program and, particularly, *the age appropriate content*; *the awareness of the senses*, including *movement awareness*; the capacity to be aware of our thoughts; *calming of the body*; *cultivating heartfulness*; ocean theme; the use of the bell (gong); and the sitting and breathing meditations.

Table 39

*Teachers' Observations About What Aspects Stood Out for Them*

Teacher	Essence	Teacher's Statements
1(S1-4)	responded positively to animal analogies/engaging/accessible to them	I feel that just like in a just general response to it I just feel that they responded very positively, that they really enjoyed all of the animal analogies, metaphors. I think it's really easy, like when you say, "Get in your great heron pose," for them to act like the animals. I think that was really engaging. It's just so accessible to them. (91-95)

Teacher	Essence	Teacher's Statements
	<p>content was just right at their level mindfulness impacts everything about who we are</p>	<p>The content was just right at their level. They were able to, like you said, identify with the animals and just really latch onto I think the senses like the mindful listening and the mindful hearing and then realizing that our whole life is lived through our senses. That just means that being mindful impacts everything about who we are. There's not anything that we don't do mindfully. I think that that's what they realized at the end is that is there anything that you don't mindfully do? No. I can apply this all the time. (85-89)</p>
	<p>I can apply this all the time</p>	
3 (S1-6)	<p>you always have your breath wherever you go</p>	<p>I think one of the most powerful parts of that that you told us, for me at least . . . I forget what class it was . . . but you said you always have your breath wherever you go, so I thought that was interesting because anytime that you're feeling angry or stressed, you have your breath to come back to and so I've even used that myself. I don't know about my students necessarily, but I thought that was powerful. (144-149)</p>
	<p>animal connection/ mindful movements  somatic awareness  relationship of body and surroundings</p>	<p>I would say a few aspects of it, the animal connection, I think, is one of them we already talked about, but also just the movement piece because I feel like sixth graders are . . . It's kind of an awkward stage of your life where they've got a lot of hormones going on and some of them are not really aware of their body and how they're moving about the day so practicing being mindful of how they're moving around and . . . I'm just thinking of a few students in particular that are maybe like have grown more, are more developed than other students and so they don't know what to do with themselves. It's helped for them to be more aware of the fact that they've grown and are needing to think about how they move around. (217-226)</p>
6 (S2-5)	<p>focusing their thoughts and calming their body  think about the way you treat people and other</p>	<p>I think the thing I've noticed with this group that they need the most is just the ability to just settle down. Sometimes it's great to run around and be wild and crazy, but there's other times that there's a message you need to hear or you need to have a quiet moment. I think that the parts that helped them with focusing their thoughts and calming their body, I think that's what they needed the most. Those were the parts I appreciated the most. Then I also appreciated the other ones, too, because it's important to think about the way you treat people and other people's reactions and emotions. I think that's what they really needed. It was nice to see just the opportunity to try</p>

Teacher	Essence	Teacher's Statements
	people's reactions & emotions	to settle down, even though it was hard for some kids. (One student) kept wanting to zip his zipper today and put his arms in his shirt, but it was nice. I think they benefited from the time to try to be more present and still. (144-161)
9 (S2-6)	the ocean aspect	I do think the ocean aspect was very helpful with the animals, the different things. Some kids in here just absolutely love dolphins, and when that came up, it was like you could see them, "oh yeah, I get it," so I think that was a really good thing. The bell . . . (140-144)
7 (S3-4)	animals I loved the gong or the bell	I loved the gong or the bell. I loved how that was in the Daily Dives too and for some reason, that was just like this beautiful sound. (83-84)
	sitting and breathing	. . . then definitely the sitting and the breathing. I think they were all great. (96-97)

#### 8. How did the curriculum personally benefit you, if any?

Essence of responses: Question 8 presented various responses including a trend where teachers appreciated the curriculum for the capacity to *offer teachers a time to step back, relax* from a frantic teaching pace, and take a break. Other ways the program personally benefited the teachers included a shift from exhaustion to *rejuvenation*; helping to acknowledge what "is" without comparison or relativity; cultivating *acceptance*; providing reminders to take a breath when stressed; helping to *develop patience*; and providing vivid visuals that became easy reminders to shift inner energies when necessary. In-class and out-of-class personal benefits were noted by all teachers.

Table 40

#### *Teachers' Observations Regarding Personal Benefit From the Program*

Teacher	Essence	Teacher's Statements
1(S1-4)	shift from frantic pace to deep level of calm	As a teacher that's the number one thing that we don't get (quiet time). You're going, going, going. There's always the next thing to do. That's exhausting for sure. I appreciated so much that when you were in here I was able to participate because you were in

Teacher	Essence	Teacher's Statements
	I got a break acknowledging what is/move on observer without having to reacting	charge. I was able to relax and I definitely felt after you left like just a deep level of calm. As far as teaching went, I got a break from that kind of frantic pace and it was just more . . . (57-63)  I like that idea of when you're mindfully listening and you hear all the distractions to just say, "Oh, yeah, there are a lot of distractions." It's just acknowledging that helps you move on. You're not just constantly in this distracted mode. When we had people come in and out like, oh, yes, someone's talking but that's fine. That place of not having to react all the time. That's what part of the mindfulness is to be able to be that observer of whatever that is and going, "Oh, it's there and I don't have to react at it." (70-76)
	used it in my life/ practice acceptance	I totally used it in my personal life. Just in various moments like I'm running late in the car and just like, oh yes, it does not matter at all if I'm 4 minutes later than I planned. I just have to just accept it and just move on and I for sure practice that myself. (77-70)
3 (S1-6)	receiving gentle reminders of better ways to live affected me in all different ways (in class and home) stop and take a moment/breath shift from stress/more patience	I guess I didn't consider it all any implication on myself. Just the opportunity for myself to sit here and have all these gentle reminders of a better way to live. That stands out to me because I didn't think about it. (211-213)  I feel like it has affected me in all different ways, in the classroom, but also at home. As I said before, the part that you said about you have your breath anywhere you go, so if I'm ever feeling stressed at home for whatever reason, I can just stop and take a moment to just take a few breaths, because I think sometimes I must not breathe deeply enough, not get enough oxygen, and sometimes in the classroom, I'll feel like I'm a little bit stressed and I start feeling tension in my shoulders for whatever reason, and if I stop myself and take a deep breath in the classroom, I think it really helps me to have more patience. (229-236)
6 (S2-5)	association with the sea animals it's so visual  you can imagine	I thought it was great. I've done different types of mindfulness related things before, but what made this so different for me was the association with the sea animals or sea life, because it's so visual. Whereas the idea of meditating and trying to clear your mind, it could be really hard.  I found the act of concentrating on something real that you can see, that you can imagine, that was new to me. I'd never done that.

Teacher	Essence	Teacher's Statements
	letting the animals be the teacher	I thought that was really helpful. A lot of the lessons that you are teaching, I've had some exposure to in different ways in the past, but I felt like the visual of whatever it was in the ocean, letting that be our teacher, for me, that was new and really helpful and I think especially great for the kids because it's so hard for them to think abstractly at this age and they're much more literal. (162-173)
	abstract to concrete via visuals	I thought that was beneficial for me. I found myself at some times in my life in a stressful situation, like picturing some of the videos and trying to channel that energy. Thank you. (173-176)
9 (S2-6)	picturing the videos to shift my energy	No Answer
7 (S3-4)	take a step back/taking a break	It was nice for me to take a step back, participate, let you run the show, and I could actually do it with you. I know and I enjoyed that because we definitely need more mindfulness this year with ourselves. It was also interesting the few times where I wouldn't close my eyes but I'd watch the students. I don't know if I was supposed to do that or not but it was interesting to see who would just instantly follow your every direction and who would fight it and keep their eyes open, and see the progression. On some days they would participate. On others, they wouldn't. I was always curious to know what was going on with that child maybe that day on the days they would participate and the days they just wouldn't. I think there was one day I remember when you had your hands on the back of a student who was sitting on the front row because you were just really trying to help him participate. (100-112)
	on some days they would participate. On others, they wouldn't.	

9. Do you feel that Embodied-Mindfulness, such as the innerU curriculum could be beneficial as a regular practice in classrooms, on a regular basis? Why?

Essence of responses: Question 9 presented a significant trend in that all teachers felt it would be beneficial to continue embodied-mindfulness in one form or another. A trend was also noticed in teachers expressing challenges with an already packed curriculum. Teachers felt comfortable continuing "Daily Dives" or 1 to 2 minutes of mindful breathing on a daily basis. They saw the possibility of incorporating tools such as inviting children to move away from their desk and breathing exercises. Other responses included appreciation for the curriculum's

capacity to cultivate academic resiliency, creating greater awareness, and contribute to better class transitions. One teacher expressed that the curriculum was too short, and that a school wide adoption of the practice would simplify teaching.

Table 41

*Teachers' Responses Regarding Ongoing Usefulness of the Program*

Teacher	Essence	Teacher's Statements
1(S1-4)	creates a mind frame to tackle challenging things/ greater awareness  struggle with crammed curriculum	I think it's beneficial because it just creates a mind frame that allows you to tackle perhaps harder and more challenging things throughout the day. Even if we're doing something really difficult in math then we just have an awareness like this is hard and that's okay so I'm going to work a little harder and move on from there. I think ideally it would only be beneficial. The answer about so many things is if there could only be so much more time in the day. That's the problem. We have so many wonderful things but they come into our classroom again and again and again and again and then we're still like, "When are we going to teach long division?" Just that constant struggle. Finding space for everything. (236-244)
3 (S1-6)	teachers are very busy  benefits the students and the teachers  makes up for time later	Yes, definitely. (240) I know teachers are very busy, especially right now. We have a lot on our plates, learning new standards and implementing new practices, but I don't feel like this is an added something that we have to . . . I feel like in all ways, it benefits the students and the teachers and everyone involved, and it really doesn't take up that much time in your day and the time that you're spending to do that probably makes up for time later on when students aren't being focused, so even if you're just doing your daily dive for 1 or 2 minutes, that really helps to center the students and let them focus on what they're supposed to be doing in class. I'm sure it benefits time in general later on. (242-250)
	school-wide practice/less teaching	If it became a school-wide practice, I think there wouldn't be as much teaching involved, like if students just came into sixth grade knowing that that's a practice that we do every day, it would be really easily to implement. (253-255)
6 (S2-5)	moving their chair away from their desk	I think the simple practice of moving their chair away from their desk and not touching things at their desk, but just putting their hands on their lap. I think that is simple and easy, but meaningful. I think that could be something that we could easily continue with. (250-254)

	makes it easier to transition	It's interesting because I, for years, have the kids do different breathing exercises where I'm like, "You're breathing in oxygen. It's refreshing all the cells of your body. You're exhaling carbon . . ." I don't know how much it does, but it stills the room a little bit. Then I feel like it makes it easier to transition or to listen to the next instruction. I like the way that you did it. (261-266)
9 (S2-6)		No Answer
7 (S3-4)	long day for them	A lot of kids come when the bus drops them off at 7:15. I get here usually between 7:00 and 7:15. Oftentimes there are students on the playground. Then the majority of them stay until as much as 5:30. That's a long day for them. (117-119)
	being tired go home to chaos	Being tired. Then oftentimes when they go home, it's not just a relaxing day at home. Sometimes their school day is the most part of their day because when they go home, they might go home to chaos. (121-123)
	program was just too short their buy-in takes a while	Of course, yes. You should come all year long. Yeah. I would say the program was just too short. Again, I'm not sure if it's just this group but I think their buy-in takes a while. I feel like now they're starting to miss you that you're not here. Maybe it was because we started at the beginning of the year and so they just feel like, "Okay, this is another thing we do." Now they're realizing that you're not going to be coming back so now that they're showing their sadness . . . (149-154) I think by far it can benefit every classroom. (155)

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10. Do you have any additional comments you'd like to share?

Essence of responses: Only 3 out of 5 teachers responded to this question. They expressed their appreciation for the program and particularly for the following reasons: easily accessible to students; can be used instantly by teachers and students; appreciated the animal interaction and connection via the visuals and videos; the creation of a safe environment; making students feel successful no matter what; ability to allow students to be 100% themselves; nonjudgmental approach; and appreciation for introducing life skills that may otherwise not be learned in the home environment.

Table 42

*Teachers' Additional Comments*

Teacher	Essence	Teacher's Statements
1(S1-4)	<p>personally enjoy it/ accessible/ can use instantly</p> <p>loved the interaction, visuals and videos</p> <p>felt successful no matter what</p> <p>create a safe environment</p> <p>they could just 100% be themselves</p>	<p>Just that I enjoyed it on a personal level. I enjoyed it on a level of being a teacher and felt it was very accessible and something that I could use instantly. I appreciated it because I felt like the students could instantly use it. Any time a child can instantly connect with something then they're more likely to engage with it more. I already told you but I thought that the length of time was perfect. I felt that they really loved the interaction, the visuals and the videos. They loved to come up and ring the bell. I just felt like it was an opportunity where they all felt successful no matter what. Any time you can do that, that's just awesome. I have nothing but positive things to say about it. (292-300)</p> <p>The other thing too that, just as a teacher, I think probably my number one goal is to create a safe environment because I don't think that any learning will go on if you don't feel completely safe. We work hard on that the beginning of the year. To me that was gratifying in a sense to know that we had a student that could sit on the ground and no one even blinked. Other students said things that was maybe unusual to them and they just . . . . It was really great to see that they could just 100% be themselves and not worry about what someone else was going to think. (223-230)</p>
3 (S1-6)		No, I think I said everything that I needed to say. (297)
6 (S2-5)	liked animal connections/ makes it real	I appreciate your time. I think it was a benefit to the classroom. Thank you. I really liked the animal connections. I think that for anyone, especially a group in Santa Barbara that lives by the ocean, it's something that's so real to them. Yeah, I appreciate it. We'll keep using the language in our classroom. (289-293)
9 (S2-6)		No answer.
7 (S3-4)	I liked the heartfulness/ The whole thing was great.	I like the heartfelt part. The whole thing was great. It's hard to pick one specific example but I'm hoping I was going to ask you if we keep the Daily Dives and if we can still keep doing that aspect. (168-167)

Teacher	Essence	Teacher's Statements
	No judgment	I really liked the part where you would say, "No judgment. If that was hard for you, just think about it and don't judge yourself. It's hard for you to close your eyes for a minute. It's hard . . ." I think that's really important and for anybody to understand, like take a step back, "That was really hard for me." I think that part was really beneficial. It wasn't like a test. It's not getting something right, getting something wrong. It wasn't a music class where they have to follow a beat or . . . (184-191)
	beneficial for these children that might not have that example at home	I also think it's so beneficial for these children that might not have that example at home. When we're talking about busy lives, hectic schedules, parents working multiple jobs, and brothers and sisters raising them, I think they don't ever have that time where they get to just be with themselves, their breath, and thinking things through. (179- 183)

11. What percentage of the time did you engage in the *Daily Dives* on the days that I did not come in and teach?

Table 43

*Teachers' Percentage of Time Engaged in Daily Dives Over 8 Weeks*

Teacher	Percentage of time engaged in Daily Dives over the 8 weeks
1(S14)	65%
3 (S16)	99%
6 (H5)	90%
9 (H6)	95%
7 (EC4)	I would say we had a hard time at the beginning just getting into the swing of the routine but then we would do that every day so I would say 90% overall. We'd do one in the morning and then I would find that moment where we needed that coming in the afternoon.

## Summary

In addition to disclosing the demographics of the study's participants, this chapter presented summaries of both quantitative and qualitative findings. For the presentation of the quantitative results the Behavioral and Emotional Rating Scale (BERS-2; Epstein, 2004), the

Children's Happiness Scale (CHS; Morgan, 2012), and the Student's Life Satisfaction Scale (SLSS; Huebner, 1991a) were used. Following an ANOVA analysis, data were presented to evaluate the effectiveness between the independent (Embodied-Mindfulness practices) and dependent variables (wellbeing in children) presented in this study.

For the presentation of the qualitative results, the researcher organized the data gathered through visual journaling, as well as her interviews with 10 selected students and all 5 teachers. She then extracted the essence of students and teacher's responses and provided a summary of extracted essences which was organized by interview question. Visual journal data collected were also identified by selecting 36 out of 106 journals for each week, in order to help identify visual patterns in children's drawings. To organize the vast visual data, the researcher engaged in *Imaginal Resonance* (Netzer, 2013), a transpersonal approach to data analysis of nonverbal data, which she continued to employ in the following chapter Data Analysis and Discussion.

## Chapter 5: Data Analysis and Discussion

### Quantitative Data Analysis Summary

This Explanatory Mixed-Method study was conducted to evaluate the effects of a mindfulness curriculum that featured embodied practices in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, and affective strengths of primary school children ages 9-12. It also served to elicit a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within the context of primary school settings. According to the data presented, no overarching significance over time was found for both the student and the teacher Behavioral and Emotional Rating Scales (BERS-2; Epstein, 2004). In further exploring the BERS-2 Student Scale data to isolate possible changes within the measurement's subscales, a significant interaction  $F(1, 182) = 7.601, p = 0.006$  was found between intervention and time indicating intervention effect on family involvement (Family Functioning – FS subscale). A discussion of its significance follows later in this chapter. No other BERS-2 Student subscales results showed significance. In further exploring the BERS-2 Teacher Scale for possible subscale significant interactions, a four-way interaction  $F(1, 180) = 5.1222, p = 0.007$  between time, gender, school, and intervention was revealed within the School Functioning (SF) subscale. In an exploration of school differences, it was found that School 1 and 2 presented no significant improvement in score, while School's scores significantly improved  $F(1, 45) = 5.251, p = 0.027$  over the control group. This significance was likely primarily driven by a gender difference in females, who in the intervention group improved more  $F(1, 24) = 8.042, p = 0.009$  over boys' scores. The Children's Happiness Scale (Morgan, 2012) showed no intervention influence, and the Student's Life Satisfaction Scale (SLSS; Huebner et al., 2003) presented results of a trend among time, gender,

school, and intervention, at  $F(1, 164) = 2.833, p = 0.062$ . After identifying pretreatment differences, where schools and genders exhibited significantly lower pretreatment scores, it was suggested that these differences could be driving some of the results (or lack thereof), as detailed above. To account for pretreatment variances it was deemed appropriate to control for pretreatment differences. BERS-2 scales were reexamined while covarying for pre-intervention LSS and HS scores. A significant correlation was identified in BERS-2 Student Scores  $F(1, 169) = 4.332, p = 0.039$ . This analysis was repeated for the BERS-2 Teachers Score revealing no effect in results, contrary to the hypothesis. In summary, the quantitative test measures showed little to moderate effect of wellbeing over time when accounted for independently, yet showed significant improvements in the BERS-2 student scale when accounting for pretreatment score differences.

### **Qualitative Data Analysis Summary**

The following section provides an in-depth analysis of both student journals as well as of student and teacher interviews. Each section details the approach to the analysis, which will be followed by discussion of any significance found in the results.

**Student journal analysis.** Within the qualitative dimensions of this study, *Imaginal Resonance* (Netzer, 2008, 2013) was adopted as a vehicle for nonverbal data analysis (see Chapter 3 for detailed description of this approach's origin and grounding theories). My *Imaginal Resonance* process involved sitting with all 106 participants' journals, grouping them by week, and intuitively selecting 12 journals from each week's drawings that particularly drew and intrigued me. I did not question why, despite naturally being curious about the reason. In addition, I did not identify whether I resonated with journals from [the](#) same participants. Once 12 drawings were selected for a given week, I spent unrestricted time observing and sitting with the

images until I felt an inner urge to respond to the collective expression via my own *Imaginal Resonance* (Netzer, 2013). This process involved responding to the children's drawings (Figures 14a, 15a, 16a, 17a, 18a, 19a, 20a, 21a) with my own drawings (Figures 14b, 15b, 16b, 17b, 18b, 19b, 20b, 21b), utilizing the same template of "before" and "after" drawings. Upon completion of my *Imaginal Resonance* drawings, I engaged in embodied writing (Anderson, 2001) to capture the subtleties of my experience through the exploration of my embodied, lived experience. Through mindfulness, awareness of all the senses, visceral connection, and intuitive exploration, an experiential knowing was brought to light to help inform and reveal a language suitable for nonverbal hermeneutic analysis (Netzer, 2013). Following each embodied writing process for both the "before" and "after" drawings, I allocated time to identify and reflect on the experience as a whole. The following represents each week's drawing selection along with my *Imaginal Resonance*, creative drawing, and embodied writing responses.

**Week 1. Journals—breathing, touch, and listening.** The following figures are selected week 1 student's drawings (Figure 14a) and the researcher's Week 1 *Imaginal Resonance* response (Figure 14b).

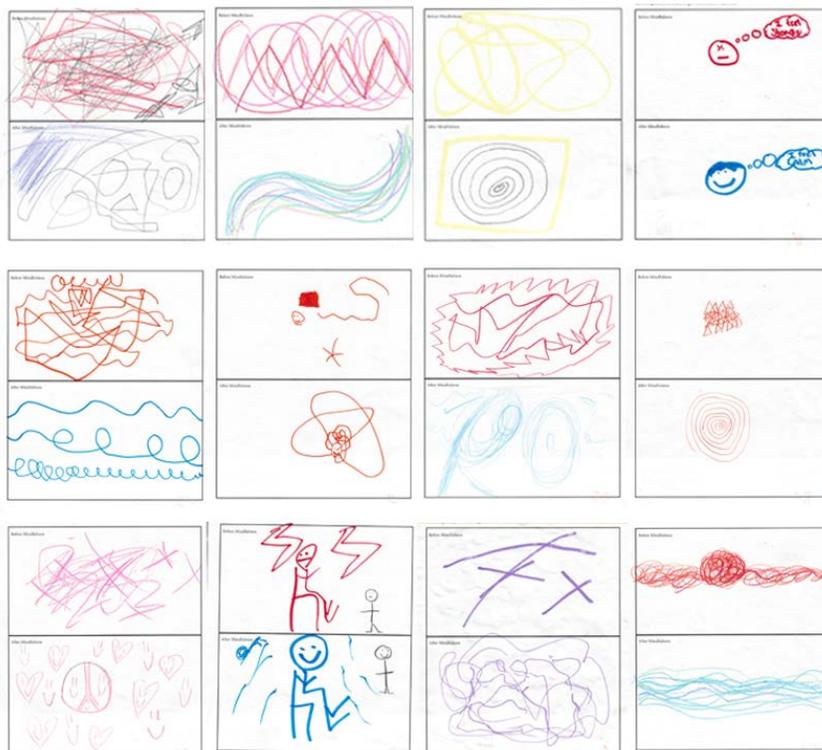


Figure 14a. Week 1 students' drawings selected for researcher's *Imaginal Resonance* process.

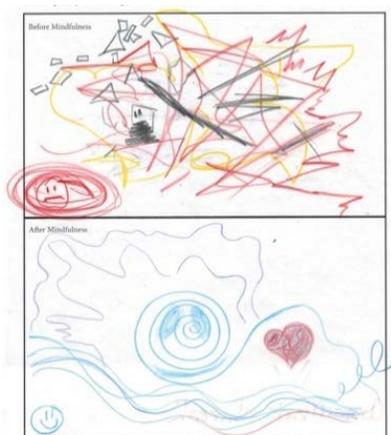


Figure 14b. The researcher's *Imaginal Resonance* response for week 1.

**Week 1. Before mindfulness, researcher's embodied writing.** As I sat with week 1 drawings, the following impressions emerged, and I recorded them in embodied writing.

Jagged edges, chaos, fragmented, linear, scattered, and lost. Alert, alert. . . . Red and black. Go this way, no this way, do this, no, do that . . . I feel pulled in all directions. My fragmented soul cries in exhaustion. "I am so tired," my cells cry out. My muscles clench onto my bones, ready to jump as my breath has stopped flowing. I am swirling and lost amongst the chaos that inhabits and surrounds me. Where am I? Nowhere to turn, I stop and go, then turn endlessly with nowhere to rest and nowhere to go. I am lost. "When will this madness end?" my body asks? Swirling energy sharply jars the layers beneath my skin as I continue to figure out where am I to land. Stop, turn, go . . . it's endless, this immense madness. One piece here and another there. Where am I? Is it time to breathe now?

**Week 1. After mindfulness, researcher's embodied writing.** The above exercise was repeated for after mindfulness drawings. The following impressions emerged, and I recoded them as well through embodied writing.

Flowing, circular patterns, spiral, centered, and alive. Blue, purple, orange. I am here, can you see me? An emergent self begins to form amidst the flowing river of life. Various parts are reclaimed as a new reality is witnessed. "Welcome home" to all that was lost and to each sensation I say welcome. Sitting at the center of the universe feels good. With a quiet inhale a smile emerges. Cells dance their dance of life, tingling gently, as my body sings a gentle melody of peace and serenity. Harmonic bodily rhythms rock me peacefully like the gentle waves of the ocean. Water like sounds gurgle inside me as my heart wants to play. Oh! I sense my body again. I am here floating within THIS BODY. And with this, a new self is forming.

**Week 1. Experience as a whole.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage that represents my personal impressions for week 1.

I felt resistance to engage in the *Imaginal Resonance* process. I was sensing a level of awkwardness and discomfort, a little like not knowing exactly what I was to do. I felt a level of uncertainty regarding whether or not I was doing this right. I then realized that this might have been how the students felt during their first week of class in the face of doing something unfamiliar such as mindfulness in school environments. With such awareness, my body settled into sensing without judging. I saw myself pulled by the red and blue expressions that seemed to pop in front of me.

Table 44 summarizes qualities or expressive terms extracted from my embodied writing in response to my “before” and “after” *Imaginal Resonance* drawings.

Table 44

*Researcher’s Imaginal Resonance Themes for Week 1*

Before Embodied Mindfulness	After Embodied Mindfulness
Jagged, edgy	Circular
Agitated	Smooth
Chaotic	Flow
Nondirectional	Alive
Vertical	Directional
Crazy	Horizontal
Fire, red-hot	Chilled
Formless	Blue
No-center	Emergent form
	Center
	Welcome home

**Week 1. Observations.** It was interesting to observe how quickly my body moved into resonance with what was in front of me (Before Mindfulness drawings). It was almost as if my body became the canvas for the images themselves. A noticeable sensation of being pulled in all directions created chaos inside me. Through this exercise, I was informed of the challenges that students might generally face, when they are pulled in so many directions and having to do so much throughout their days. My inability to focus became apparent, which experience might reflect the challenges that students face in class. I also felt scattered, disjointed, and restless. Conversely, I became deeply aware of the oceanic sensation that can result from experiencing calm. A faint sense of self emerged through integration.

Both the before and after drawings of the children (Figure 14a), although initially chaotic, felt very spacious overall. I was intrigued by the children’s tendency to use blue and red as the vehicle to express their inner state. I also noted that many of the after images are represented by

flowing, horizontal imagery as well as circular spirals. I found it important to note that the focus of the class was on touch and listening, which were also introduced in class as the first senses to develop in utero. This relationship may have triggered the predominant oceanic experience that seemed to have emerged throughout the week 1 journals.

**Week 2. Journals—sensing.** The following are week 2 selected students' drawings (Figure 15a) and the researcher's *Imaginal Resonance* response (Figure 15b).

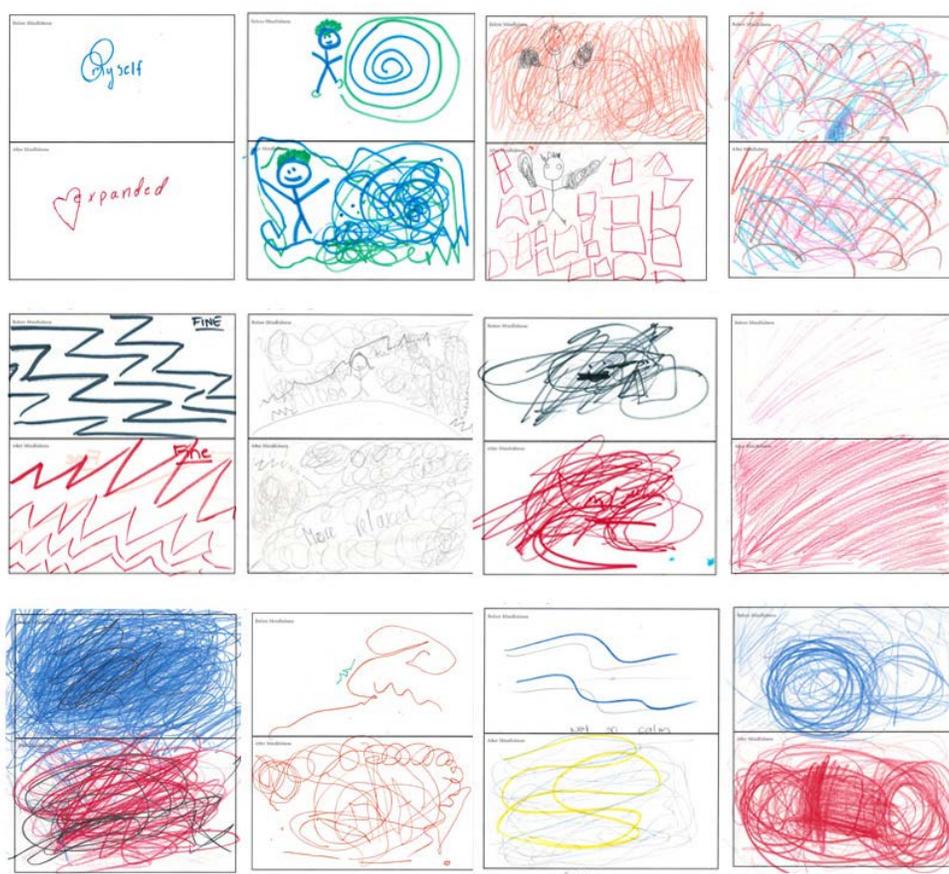


Figure 15a. Week 2 students' drawings selected for researcher's *Imaginal Resonance* process.



Figure 15b. The researcher's *Imaginal Resonance* response for week 2.

**Week 2. Before mindfulness, researcher's embodied writing.** As I sat with week 2 drawings, representing children's expression of how they felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Scattered, not quite me, all over the map, dark, confused, hyper, unclear. I am lost floating somewhere. The intensity of the moment keeps me bound to my undefined world. Yet, I am here . . . Or am I? Linear lines parceled with tension cover and blanket my thoughts, my body, my emotions, preventing me from truly connecting; but to what? Blue and black contrast the crispness of the white space. Somewhere behind this fog, I am there.

**Week 2. After mindfulness, researcher's embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 2. The following impressions emerged for this researcher, and were recorded.

Expanded intensity. Something wants to explode. AAAAAAH! What is all this energy? Help! Help! What do I do with all of this? Is this really a part of me? The fire grows bigger and bigger as new sensations ignite within me. What are all these unfamiliar sensations? How much more heat can I stand? Every cell of my body is vibrating and firing off tingling sensations that scare me. Sadness, anger, and frustration, continue to expand leaving me with even more confusion. I am trapped within my cells with no place to go. Conflicting signals kept me from settling into something deeper. I need to move . . . the energy. Block by block I begin structuring this unknown world while sensations bring me to expand more . . . alert, open, happy, relaxed, focused, tired, sad, angry. It's all there in me. Is this normal? In this space of too much, where do I stand? Is this truly me? Can anyone hear my call, my questions, my distress? Help!

**Week 2. Experience as a whole.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage from my journal that represents my personal impressions for week 2.

Despite the overall trend and movement from agitation toward calm in a majority of student's journals during the week 2 sensing activity, I found myself drawn to selecting all journals that reflected an increase in activation and energy as a result of the sensorial mindfulness practice during week 2. I was torn between expressing this increase in sensorial awareness and heightened agitation in contrast to the overall class drawings which depicted a noticeable movement toward states of calm. This being said, my body spoke louder than my desires to represent the norm. An inner voice shouted: I needed to be heard and acknowledged. As I allowed myself to express the unseen tensions, my body began to relax, making way to a deeper state of being.

Sitting and waiting, I began observing a plethora of emotions that navigated my inner world. An overall sensation of expansion and busting at the seams prevailed. I felt the energy traveling in all directions, wanting to expand even more, as if a part of me wanted to be seen. As I perceived sensing a growth of energy, I became aware that the awareness of my senses itself contributed to the heightened sensorial experience. I could also sense a juxtaposition between conflicting energies as something in the background was forming itself into a comprehensible form.

Table 45

*Researcher's Imaginal Resonance Themes for Week 2*

Before Embodied Mindfulness	After Embodied Mindfulness
Self	Expanded self
No structure	Structure
Centered	Un-centered
Intensity	Heightened intensity
Sensations	Hyper sensations
Calm	Excited, agitation
Blue	Red
Neutral	Confused
Subdued	Intense

**Week 2. Observations.** The introduction of sensory awareness felt like opening Pandora's Box. Students were invited to explore their sensations, a world that is seldom intentionally explored. This experience allowed me to better understand the fog that often permeates states of unawareness. I could observe how my capacity to experience (life) was

muffled by a fine coat of unconsciousness that kept me at bay from myself. This experience might have reflected that of students who can become disregulated as a result of engaging with already heightened internal energies without permission and outlets through which to express and sublimate them constructively.

The contrast between the first 2 weeks' drawings reflected a significant activation represented by more edgy, fiery, and intense imagery, indicating that mindfulness might not unconditionally result in calmness. It felt as if the lack of room on paper mirrored the lack of room in these children's souls and, in reflection, the students' bodies. It is important to note that despite this expression of heightened energy, week 2 also revealed the highest rate of movement toward calm of the entire 8 weeks of the program (see Table 52). This sharp contrast and contradiction in findings might have resulted from the researcher's unconscious transference and agitation at the time of *Imaginal Resonance*. Another more plausible explanation for this discrepancy could account for the researcher's attunement and heightened compassion toward the children's suffering. These children's painful voices needed to be heard amidst an overarching sea of calm. Organically, a compassionate inner heart reached out to the few students that were calling in despair. Through acknowledging the suffering and shedding it into the light, healing could begin. It is noted that, following this process, several of these children were referred to counseling in their respective schools.

**Week 3. Journals—wandering mind.** As I sat with week 3 drawings, the following impressions emerged, and I recorded them in embodied writing.



Figure 16a. Week 3 students' drawings selected for researcher's *Imaginal Resonance* process.

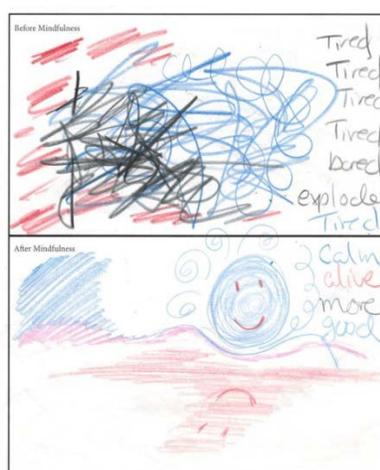


Figure 16b. *Imaginal Resonance* response for week 3.

**Week 3. Before mindfulness, researcher's embodied writing.** As I sat with week 3 drawings that represented children's expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Scattered exhaustion, edgy craziness, tired, tired, tired, tied . . . Can I say it more? Will someone get it? Will someone understand what is happening within me? I am lost in all this noise. I think I will explode. Or am I going crazy? Uncontainable energy busting at my skin. How can I escape the tension fluttering through my muscles, my veins, in my head? Thoughts, thoughts, thoughts continue spiraling in all directions. This is intense. Left, right, up, down, more pressure, encased in black, red, and dark blue. When will this all stop? Fast, fast, fast . . . we must run. So much to do. Keep it up. Can I really keep up, I ask. There is no more room in this house. I am getting dizzy and I am ready to faint. I am tired. I might just want to check out . . . into boredom or simply explode.

**Week 3. After mindfulness, researcher's embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 3. The following impressions emerged and were recorded.

Contained! Wow! How can this be? Happy swirls, electricity electrifies my body? The light just illuminated the inside of me. I can sense more clearly with swirls of soft blue. I am alive, yet no longer lost. Held comfortably within the boundaries of my own skin, I stand in thoughtfulness. Thoughts are allowed to come and go without effort. A breath brings me closer to the center. The intensity is now contained into a sea of calmness. Rocking back and forth, my ship knows where to go as I gaze at the reflection of a distant chaotic past. Just follow the star, it says. I am happy, calm, contained, and feeling alive like never before. The worlds of calm and awakened presence begin to blend together. I am here.

**Week 3. Experience as a whole.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage that represents my personal impressions for week 3.

Heavy in my body, I began witnessing the movement toward a fragmented self, exhausted by the continual movement of the mind, toward a peaceful and alert experience of being alive. Allowing myself the room to be tired also allowed to create room for my life force energy to flow again. As I continued being with the children's sacred journal expressions, I was aware of the flaring of thoughts and emotions that agitated my inner space. The more I looked, the bigger they became, then the more I continued observing, suddenly a quiet wave came over me. I felt alive once more.

Table 46

*Researcher's Imaginal Resonance Themes for Week 3*

Before Embodied Mindfulness	After Embodied Mindfulness
Tired	Calm
Uncontained	Contained energy
Edgy	Flowing
Erratic	Form
Hyper	Tired

**Week 3. Observations.** The predominant theme that emerged in this week's journals was that of being tired. The experience of being overwhelmed plummeted me into exhaustion. It informed me of the possible reality that is associated with overstimulation and a "go, go, go . . . more, more, more" paradigm of existence. What struck me here was the reality that such exhaustion permeates our culture at such a young age. I was also deeply moved to sense and experience how *quieting-down* a short exercise of mindfulness can be, in giving the body and mind time to pause, allowing for a restructuring of the inner landscape.

It is important to note that students who identified themselves as tired early in the program seemed to express this state of being for several classes. This being said, all students who experienced the sensation of being tired also experienced a significant shift from tired to happiness and calm. This might suggest the importance of small classroom mindfulness breaks throughout the school day to allow those students who seem to be continuously tired to rejuvenate themselves without impeding on class curriculum time.

**Week 4. Journals—heartful gratitude.** The following figures are week 4 selected students' drawings (Figure 17a) and the researcher's *Imaginal Resonance* response (Figure 17b).



Figure 17a. Week 4 students' drawings selected for researcher's *Imaginal Resonance* process.

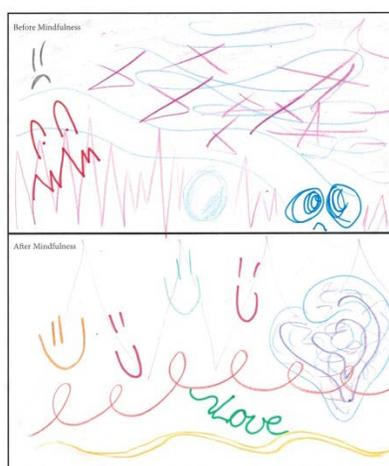


Figure 17b. *Imaginal Resonance* response for week 4.

**Week 4. Before mindfulness, researcher's embodied writing.** As I sat with week 4 drawings that represented children's expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

HELLO, ANYONE HOME? Jagged and edgy, blue and sad. Will my life always be this way? A heaviness pulls on my skin as my confused mind spirals in all directions. My body sinks into the earth in exhaustion. Slowly the canvas shuts in front of me, voices silence themselves, I am safe here in my little cocoon, separate from the frenzy of the outside chaos. I feel split. More confused, stressed, jittery, and uneasy. I am lost again. More, more, more . . . tightness and constriction. A wave of sadness returns . . . what is that? Is this normal? What is normal anyway?

**Week 4. After mindfulness, researcher's embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 4. The following impressions emerged and were recorded.

A calm electric flowing wave circulates in gentle pulses from my heart. From contracted muscles I find space. My cells begin to breathe once more. A calm aliveness permeated my renewed cells. A yawn, a sigh, a smile. Through the expansiveness of my being, a center is born. There is an emerging, awkward, and unfamiliar warm sun-like feeling birthing at the center of my chest, re-organizing and re-structuring the chaotic waves into an inner glow, radiating from within. Ah! The quiet rays flow outwardly bringing a smile to my face as rainbows of colors cascade around me. The fullness of my connection allows me to see the multitude of smiles that populate my life. I am not alone. I feel happy. I am LOVE.

**Week 4. Experience as a whole.** Following my embodied writing experience, time was allocated to journal regarding my overall experience throughout the embodied writing process.

Below is a passage that represents my personal impressions for week 4.

At first I was caught by the continuation of jagged and chaotic shapes. I could sense the confusion, the frustration, and varieties of mixed emotions. I could sense in my body a heaviness of having to deal with all of this daily chaos. As I began looking at the post mindfulness drawings, a multitude of faces emerged from the background. This made my heart sing as a smile emerged from a corner of my mouth and in my heart. I became aware that such expressions were mirroring the heartfelt gratitude exercise that was conducted prior to journaling. As my pen moved on the page gratitude and love filled the air around and within me.

Table 47

*Researcher's Imaginal Resonance Themes for Week 4*

Before Embodied Mindfulness	After Embodied Mindfulness
Depressed, sad, blue	Happy
Normal	Strange sensation
Scattered and confused	Focused and aware
Tired	Joyful
Small sharp jagged	Tall flowing
Incoherent and edgy	Coherent
Contracted	Expansive
Chaos	Contained
Bored and Confused	Heart centered and appreciative

**Week 4. Observations.** It was observed that a significant number of selected journals reflected a movement from various states of being to happiness. This trend was representative of the overall student journaling, with 39/106 journal entries explicitly demonstrating a movement toward happiness. Amongst the 39 journals that presented a movement toward happiness, 13 journals reflected a movement toward happiness as expressed in an increase in energy in the drawings, while 26 journals reflected a movement toward happiness as expressed in a decrease in the overall energy in the drawings. This suggests that a larger number of students benefited in a reduction of energy versus heightened energy. It is also important to note that week 4 was 1 of 2 weeks that included conducted journaling following a class that focused on heartfulness. Week 4 focused on exploring gratitude and the impact it has within when we are grateful. This trend coincided with the introduction of a loving kindness practice that is known to cultivate happiness and wellbeing. Based on my observed personal resonance patterns, such practices seem to regulate the areas associated with the heart, contributing to a vagal response and coherence often associated with states of wellbeing. This might have an important implication for students, as well as highlighting the overall understanding that mindfulness alone may not be sufficient in





Figure 18b. *Imaginal Resonance* response for week 5.

**Week 5. Before mindfulness, researcher’s embodied writing.** As I sat with week 5 drawings that represented children’s expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Under all that fragmented chaos something lives inside me. Rage, sadness, fury, fatigue, and the fear of the great unknown all pull on my bones like the strings of a puppet manipulated by its puppeteer. Clenched jaw, I reach for red, then the black. Where is my soul? Movements of hope split anger with edges of green. Will I succumb to the cauldron of anger that keeps pulling on me? Hidden beneath the anger, a glimpse of sadness erupts in the background. A tear is shed. What are all these uncontrollable colors? My inner space is pulled in all directions.

**Week 5. After mindfulness, researcher’s embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 5. The following impressions emerged and were recorded for week 5.

Standing in the midst of this intensity, a ray of red appears. I can now see the anger that dwells inside. No longer bound by its shackles, I am free to simply be that anger that explodes within the confines of my skin. The tornado has transformed itself once more. Sad, angry, bored . . . Who cares anyways? Up, down, and all around. My gut rides a roller coaster as my fists begin to clench for safety. Beneath the fear, the anger and the sadness dwell as another wave ignites another fire in me. A breath, a moment . . . and light emerges once more. A flowing river spirals its way through my body. With each turn a moment of hope bursts from my chest reminding me that all is impermanent. A smile emerges. I am happy once more.

**Week 5. Experience as a whole.** Following my embodied writing experience, time was allocated to journal regarding my overall experience throughout the embodied writing process.

Below is a passage that represents my personal impressions for week 5.

In the beginning I felt resistant as I was once again pulled by the tensions displayed in front of me. I felt big, bold, energies that presented themselves as unstructured. I felt confused and torn not knowing where to start. A flutter of emotions muddled my direction and perspective. In the tension, I also felt frozen, not knowing how to proceed. I let myself sink in until jagged edges of anger began to free themselves within me, followed by more confusion, and layers of sadness. When I allowed myself to be moved by the “After mindfulness” drawings, I felt that my body was the container of all the chaos. Allowing myself to sense the chaos gave room for an organic restructuring to occur within me. There was really nothing to do other than to observe. As the movement from unstructured to structured formed itself, the intensity subsided. The intensity shifted and was soon followed by a soothing wavelike calm. As the soft structure emerged, so did my light.

Table 48

*Researcher’s Imaginal Resonance Themes for Week 5*

Before Embodied Mindfulness	After Embodied Mindfulness
Chaos	Directional explosive
Unstructured	Structured
Sadness and confused	Angry
Mad or sad	Happy
Tired	Happy
Frustrated	Less Frustrated
Nervous and stressed	Calm
Contracted	Spacious
Black or blue	Red
Fragmented	Integrated
Bored	Alive

**Week 5. Observations.** Working with the awareness of my emotions seemed to ignite the awareness of layers that were not recognized in the earlier weeks of mindfulness. It was also observed that my internal resonance seemed to have picked up on the intensity of the students’ experiences. This was reflected by my “before” drawing that was intense in colors and pressure

on the crayons. I also became aware of how I was mirroring the drawings of the children versus allowing myself to simply be moved within my own experience. The awareness of relationship was significantly more present in conducting this exploration. Such an understanding might point to the necessity of developing mindfulness programs in school that not only cultivate mirroring responses but truly develop opportunities to awaken deeper inner understandings and fostering internal locus of control movement.

**Week 6. Journals—mindful eating.** The following figures are week 6 selected students' drawings (Figure 19a) and the researcher's *Imaginal Resonance* response (Figure 19b).



Figure 19a. Week 6 students' drawings selected for researcher's *Imaginal Resonance* process.

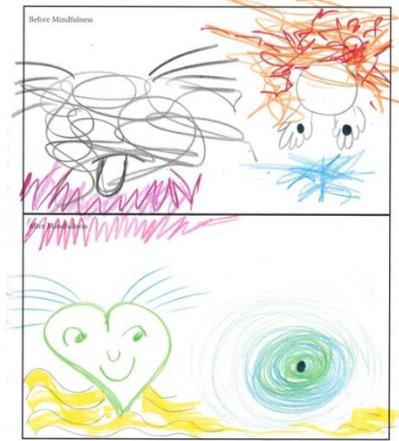


Figure 19b. *Imaginal Resonance* response for week 6.

**Week 6. Before mindfulness, researcher’s embodied writing.** As I sat with week 6 drawings that represented children’s expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Apprehensive, hyper, tired, and hungry. Sharp pain penetrates my stomach as my mind keeps me out of focus. Feeling of disgust, yuck . . . more tension. Wiggle here, wiggle there . . . I have trouble seeing what is in front of me. “This is too confusing,” my mind cries out. Torn between bodily calls, I want to rest. There is really no point in all of this and it really does not make any sense to me. My belly keeps rumbling and tension keeps me bound in an inner chaos. I feel trapped. What is happening? Hyperness extends its call of hunger through my body again. There is no place to escape. Or is there? How much longer do I need to sit here, struggling? Bla, bla, bla . . . boredom prevails. Can I go now?

**Week 6. After mindfulness, researcher’s embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 6. The following impressions emerged and were recorded.

My eyes focus on a single dot. Focused energy opens the door to a new experience. Wow, I am here, awake, and alive again. Feelings of resistance make way to a new exploration. Textures, sensations, and smells appease the tensions for a moment. Tingles and the cold air bring a smile on my face. A deep breath soothes the jaggedness. This is not so bad after all. The hunger is still there rippling its calls for attention, but I am here now. The energy is no longer outside of me but rather in me. Delightful textures and colors swirl as waves of appreciation fill my heart. I feel calm, alert, and vibrant once more.

**Week 6. Experience as a whole.** Embodied writing was also utilized with after mindfulness drawings for week 6. The following impressions emerged and were recorded.

Distracted. The only thing I want to do is get up and grab something to eat. My stomach rumbled and my saliva formed in my mouth. I begin to be informed of many realities coexisting inside me and my mind skipped and jumped from one experience to another. There is so much to be seen and to honor that I get a little confused. Feeling a little overwhelmed, my stomach contracts in hunger again, allowing me to be aware of the ripples of information being sent within my body. As I allow myself to focus on what is in front of me, the feeling subsides and disappears once more. I feel present, happy, and calm.

Table 49

*Researcher's Imaginal Resonance Themes for Week 6*

Before Embodied Mindfulness	After Embodied Mindfulness
Unaware	Awakening
Agitated	Calm
Dislike	Dislike
Hungry	More hungry
Fragmented	Integrated
Tired	Alive, more energy
Bored	Less bored
Queasy	Happy
Disjointed	Focused, centered
Not present	Present

**Week 6. Observations.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage that represents my personal impressions for week 6.

It was interesting to observe how my body immediately moved into a somatic response associated with hunger. This experience was repeated three times over the course of a 2 week period and every time my attention connected to the images associated to experience prior to the mindfulness exercises, my somatic responses were marked by an increase awareness of hunger, a difficulty to concentrate and focus, and a tendency to want to get up and move. The somatic responses that occurred as a result of attuning to the second series of drawings that represented the children's experience following the mindfulness exercise included the activation of my salivary glands, a significant

refocusing and sense of self, an acceptable heightened awareness, a sense of being more integrated, as well as happier and energized. Such an understanding may help to better grasp the subtle movements and inner distractions that are not often perceived or detected in class environments. Comprehending such inner movements and triggers with food may help cultivate class environments that account for such subtle inner pulls.

**Week 7. Journals—mindful walking.** The following are week 7 selected students' drawings (Figure 20a) and the researcher's *Imaginal Resonance* response (Figure 20b).

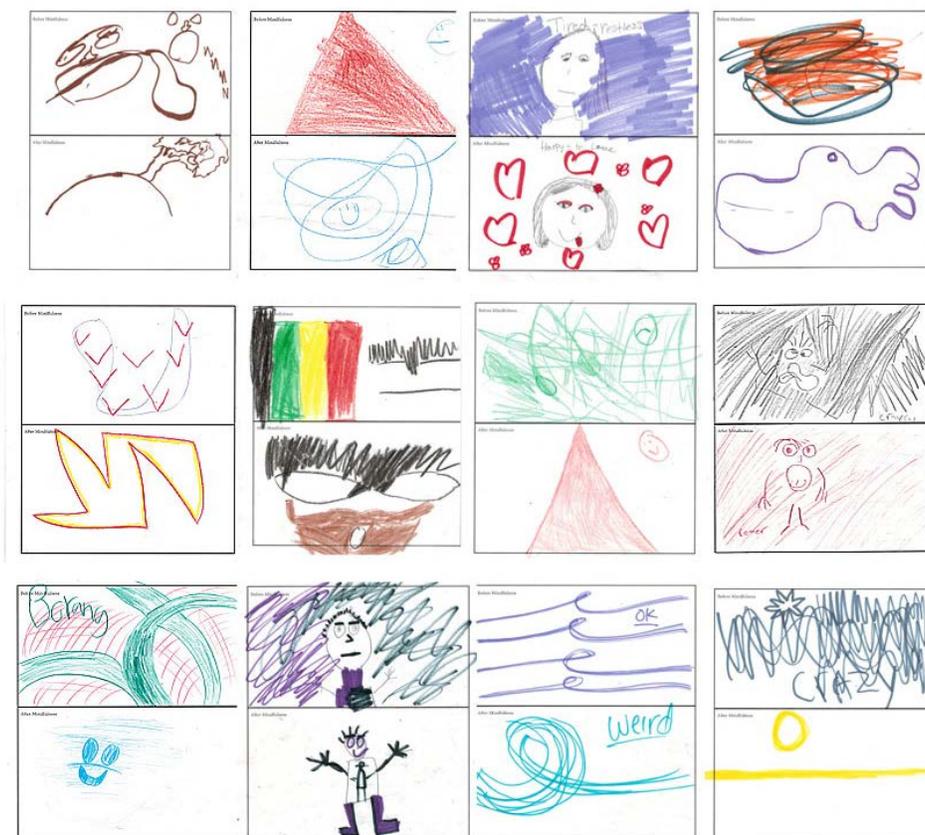


Figure 20a. Week 7 students' drawings selected for researcher's *Imaginal Resonance* process.



Figure 20b. Imaginal Resonance response for week 7.

**Week 7. Before mindfulness, researcher’s embodied writing.** As I sat with week 7 drawings that represented children’s expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Split, dazed, and restless as thoughts race through my head. A heavy heart holds my fragmented self. I am literally being pulled in all directions. So many parts are lost. Where do they go? My crazy scattered brain keeps me adrift in the formless. Where is my body? Numbness prevents me from sensing form and all attempts to reach out fail as part of myself drift away. What will I do? Where am I? Who am I? Where is my soul? This chaos is driving me crazy! I shout, but no one hears. The intensity of this chaotic landscape is driving me crazy. Come home, come home, I hear in the distance. My body echoes a call in the distance . . . come home.

**Week 7. After mindfulness, researcher’s embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 7. The following impressions emerged and were recorded.

My feet stumble like the first steps of a newborn until I begin to plant myself firmly onto mother earth. Step by step I am reunited with myself. My soul cried out, “I am here.” How strange is this body of mine as I stand in my new discovered form informed by presence. Integrated, calm, and reunited I have a sense of oneness. As I continue sensing my feet, I become grounded and anchored like a gigantic oak tree. No winds can take me down. I am solid like the great pyramids of Egypt. As I stand in the ground of my body, my soul settles within. My eyes look forward into the horizon, as a knowing emerges. I have arrived in the softness of my radiant and effervescent light. How good it feels to BE. And in the present moment, a ripple of love prevails in the ONE.

**Week 7. Experience as a whole.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage that represents my personal impressions for week 7.

At first I am struck by the faces I see and how my own drawing feels so disjointed. A part of me wants to bring all the parts together. I also recognize my need to honor all children in how they expressed themselves. I recall their drawings' elements and bring them into my drawing. Now they are seen. A relief comes over me. When beginning to draw the postmindfulness drawing, I immediately sense my entire body relaxing into something solid and grounded. A deep breath makes way to a sensation of integration and completeness. I feel calm, anchored, and grounded. I am aware of the need to focus on the eyes, the whole body, as well as elicit a larger sense of consciousness. I feel complete and immensely happy.

Table 50

*Researcher's Imaginal Resonance Themes for Week 7*

Before Embodied Mindfulness	After Embodied Mindfulness
Scattered and divided	Integrated and united – 20
Unstructured	Structured
Burdened	Present
Neutral	Anger
Linear	Non linear
Unaware	Focused
Dissociated	Integrated
Head	Whole body
Crazy	Energized
Too much energy	Calm
Tired and restless	Happy and calm

**Week 7. Observations.** The theme that seemed to emerge here is that of a movement from dissociation and fragmentation, which might result from exhaustion and sensing oneself overburdened toward integration, centering, presence, unity, and happiness. I was utterly aware of the duality that permeated many of the drawings, including how this was emerging within my *Imaginal Resonance* response. My embodied experience informed me of the subtle and at times not so subtle tensions that can propel a child into fragmentation of self. It became apparent that

mindfulness—in this case, mindful-walking—might contribute to the integration of the self, as is also depicted in the above illustrations. Within a school setting, this juxtaposition of energies may also be mirrored by the relatively sedentary nature of children’s classroom experience that is in contrast to the often more active and chaotic nature of recess or out-of-class environments. As has been presented in the above exercise description, mindful walking could potentially help bridge the gap between gross movement of recess or out-of-class experiences and the stillness of class environments in a way that feels more integrative to children. It is also suggested that it might serve in classroom settings as a transition platform to facilitate the transition between one activity and another.

**Week 8. Journals—mindful living.** The following are week 8 selected students’ drawings (Figure 21a) and the researcher’s *Imaginal Resonance* response (Figure 21b).

At the end of the last innerU Embodied-Mindfulness class, students were invited to reflect on how Embodied-Mindfulness had helped them or not helped them, overall, in the preceding 8 weeks. They were also asked to write one sentence to depict their experience.



Figure 21a. Week 8 students' drawings selected for researcher's Imaginal Resonance process.



Figure 21b. Imaginal Resonance response for week 8.

**Week 8. Before mindfulness, researcher's embodied writing.** As I sat with week 8 drawings that represented children's expressions of how they had felt before mindfulness, the following impressions emerged, and I recorded them in embodied writing.

Edgy, confused, contracted, frenetic energies swirl in and around me. My muscles tighten, as I am ready to pounce. Frustrated, I am getting mad. More confusion simply makes my head spin. My breath stops as it attempt to bring back balance to counter the chaos that inhabits me. Alert, what is this suffocating energy? I feel horrible. Go, go, go, I am told . . . Do this, do that, echo in the background as I slip away into another dimension. Maybe I am safe here. The noise has subsided, so I believe. Where am I? It is quite dark in here. Where is the light? Voices continue to faint away . . . bla, bla, bla as I cannot distinguish words any longer. Suddenly, I am jolted back into chaos, movement, and confusion. This is just too much.

**Week 8. After mindfulness, researcher's embodied writing.** Embodied writing was also utilized with after mindfulness drawings for week 8. The following impressions emerged and were recorded.

The clouds of thoughts have dissipated, calming the storm within me. The sun shines once more in me as gentle oceanic waves rock me back and forth into a deeper knowing of who I am. "I am here," I can say. I feel the containment of my sun within the boundaries of my skin. A warm glow moves from within gently and softly pushing the boundaries of my heart and rippling waves of happiness throughout my body. My eyes are bright and open. "I am here" I shout again. Shivers go up my spine as I can see what is around me. The air softly caresses my face reminding me that I AM alive. A smile emerges from the corner of my lips as my body says, "Now I stand." From here, in this body, I am alert, ready for my next adventure.

**Week 8. Experience as a whole.** Following my embodied writing experience, time was allocated to journal on my overall experience during the embodied writing process. Below is a passage that represents my personal impressions for week 8.

I was utterly struck at the prevalent red and black colors that drape the landscape in front of me. As I shift my attention to the after mindfulness drawing, flow, expansiveness, integrations, nature speaks loud. Somatic awareness informs me of a new emergent state that kept a calm and content smile on my face. In this space, time does not exist.

Table 51

*Researcher's Imaginal Resonance Themes for Week 8*

Before Embodied Mindfulness	After Embodied Mindfulness
Go, go, go	Relaxed
Frenetic	At home
Frustrated	Content
Reactionary	Thoughtful
Red	Blue
Energized	Calm
Unaware	Aware
Chaotic	Flowing
Horrible feeling	Feeling good
Tight body	Loose body
Resistant	Understanding
Cloudy	Sunlight
Edgy	Peaceful

**Week 8. Observations.** The predominant colors that depicted the state of being of the children prior to their engaging in the innerU Embodied-Mindfulness course were predominantly red and black. The images were very chaotic, jagged, edgy, and dark, which seemed to present a lot of movement, heightened energy, and confusion. In contrast, the image colors that represented the state of being following the innerU program were often represented by blue and yellow. The sharp contrast in states of being from chaotic, confused, and highly disregulated to more flowing, open, and expansive states might suggest that mindfulness practices may act as an important bridge to facilitate class transitions in class environments.

### **Summary of the Emergent Qualities of *Imaginal Resonance* Exercise**

Figure 22 summarizes the intrapersonal (IaS) states of being that were captured throughout the intervention and reflected through the researcher's *Imaginal Resonance* (Netzer, 2008, 2013) and embodied writing (Anderson, 2011) processes. Two emergent subthemes were identified and categorized into embodied states of contraction/dissociation and flowing/alert.

Embodied contractions states were marked by experiences of chaos, fragmentation, agitation, confusion, and nervousness; while embodied flow states were marked by experiences of softness, relaxation, expansiveness, calm/peace, joyfulness, and spaciousness. These qualities were also juxtaposed with states of dissociation and alertness. Dissociation was marked by qualities such as unstructured, no-center, boredom, fragmented, uncontained, and nondirectional; while alertness was represented by qualities such as form, awareness, integrated, focused, awake, whole body, directional, and contained. Such polarity in embodied experiences might help illuminate the deeper landscape that occurs in children as a result of mindfulness practices. It is proposed that such embodied flow/alert themes mark the foundation of internal states of wellbeing in children.

<b>Before Mindfulness Drawing Qualities</b> <b>Embodied Contraction / Dissociation</b>	<b>After Mindfulness Drawing Qualities</b> <b>Embodied Flow / Alert</b>
<ul style="list-style-type: none"> <li>• <b>CONTRACTED</b></li> <li>• Jagged</li> <li>• Agitated</li> <li>• Chaotic</li> <li>• Crazy</li> <li>• Hyper</li> <li>• Excited</li> <li>• Confused</li> <li>• Erratic</li> <li>• Edgy</li> <li>• Small</li> <li>• Scattered</li> <li>• Tired</li> <li>• Incoherent</li> <li>• Frustrated</li> <li>• Nervous</li> <li>• Contracted and tight</li> <li>• Restless</li> <li>• Over energy</li> <li>• Frenetic</li> <li>• Tight</li>   <li>• <b>DISSOCIATION</b></li> <li>• Disconnected</li> <li>• Unaware</li> <li>• Unstructured</li> <li>• No-center</li> <li>• Bored</li> <li>• Formless</li> <li>• Disjointed</li> <li>• Fragmented</li> <li>• Uncontained</li> <li>• <b>Nondirectional</b></li> </ul>	<ul style="list-style-type: none"> <li>• <b>FLOW</b></li> <li>• Calm</li> <li>• Peaceful</li> <li>• Smooth</li> <li>• Flowing</li> <li>• Alive</li> <li>• Content</li> <li>• Expansive</li> <li>• Appreciative</li> <li>• Joyful</li> <li>• Spacious</li> <li>• Energized</li> <li>• Structured and loose</li> <li>• Relaxed</li> <li>• Sunny</li> <li>• Happy</li> <li>• Heart centered</li> <li>• Tall</li> <li>• Sensation</li> <li>• Soft</li>   <li>• <b>ALERT</b></li> <li>• Present</li> <li>• Form</li> <li>• Aware</li> <li>• Integrated</li> <li>• Focused</li> <li>• Awake</li> <li>• Whole body</li> <li>• Directional</li> <li>• Centered</li> <li>• Contained</li> <li>• Home</li> </ul>

*Figure 22.* Embodied experience of children prior to and following mindfulness.

### Visual Pattern Analysis of All Student Journals

As I explored all 106 drawings, week by week, and selected 36 journals from each week that stood out and called to me in resonance, I became aware of overarching visual themes that were present throughout all 8 weeks. I then categorized all 106 journals into transformation-

themes, comparing the before and after journal images, and grouped them by week. General themes included: (a) calming and flowing, (b) increase in agitation, (c) from fragmented to integrated/focused, (d) happiness, (e) unhappiness, (f) tired, (g) little to no change, and (h) incomplete journals. This process facilitated a better understanding of the overall class trends in addition to the identified *Imaginal Resonance* analysis, and provided a study-wide assessment of prevalent transformative qualities that resulted from the mindfulness practices. Table 52 categorizes the number of journals ( $n = 106$ ) by theme per week. Quantifying the qualitative data, in this case, illuminates the prevalence of each theme within each week and across the duration of the study for all age groups and participating schools.

Table 52

*Journals Categorized by Transformation Theme per Week*

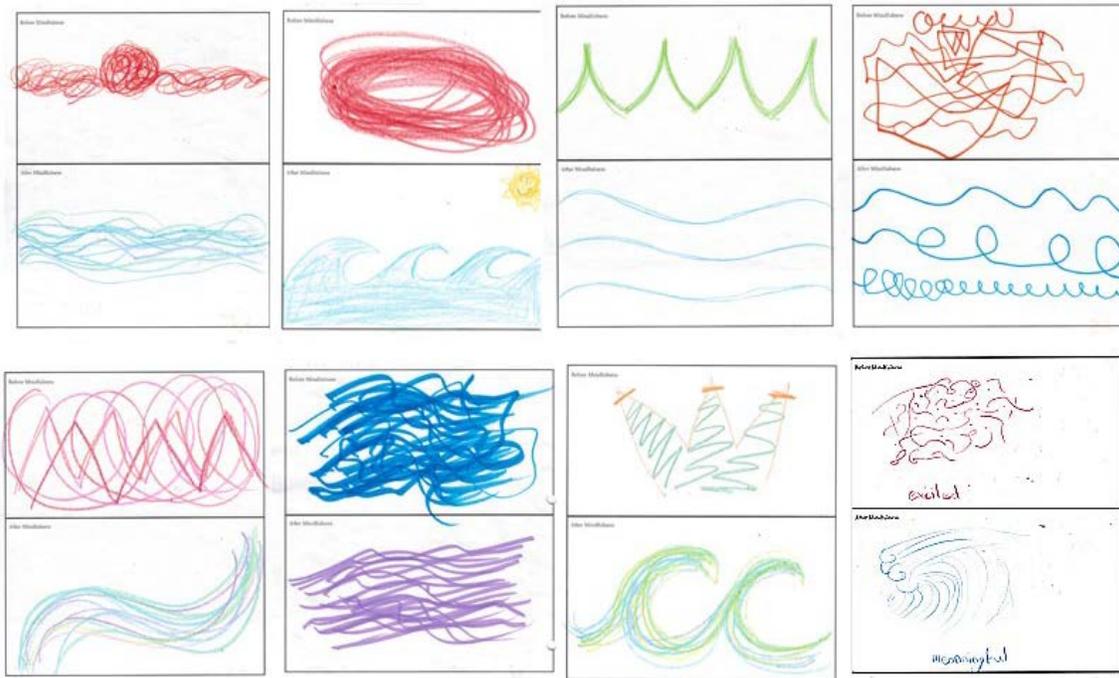
Variable	Weeks							
	1	2	3	4	5	6	7	8
<b>Themes</b>								
<b>Calming and flowing</b> (depicted by a shift from jagged, intense pressure on crayon or marker and high peaks, to softer, flowing or circular lines)	35	42	33	18	33	29	39	43
<b>Increase in agitation</b> (depicted by the increase of quantity of lines, intensity and sharpness, more expansive, or more agitated in drawing 2 compared to drawing 1)	20	24	23	11	16	23	21	7
<b>From fragmented to Integrated /focused</b> (depicted by separate parts to a sense of oneness)	11	3	4	6	1	9	15	14
<b>Shift toward happiness</b> (depicted by a smile in drawing 2)	9	19	15	41	22	10	13	38

Variable	Weeks							
<b>Shift toward unhappiness, sadness, depression, or anger Tired</b>	0	2	1	10	8	10	8	2
<b>Little to no change</b> in before and after embodied mindfulness	3	1	3	2	4	3	2	1
<b>Incomplete journals</b>	28	15	27	18	22	22	8	1

The following discussion provides a summary of the transformative qualities as summarized in Table 52. The most prevalent trends noted were movements toward calmness and flow, representing 32 % of journal entries followed by happiness, representing 20% of journal entries. Trends toward an increase in agitation also scored relatively highly with 17% of journal drawings demonstrating an increase in activation as a result of mindfulness. This percentage might be skewed by students who may have felt more energized and less fatigued after a class or by students who may have felt more expansive and alive afterwards. These drawings do not include drawings that depicted aggression or anger. Other less prevalent themes observed in the journals include a sense of integration marked by 7% of the drawing while movements toward sadness, anger, or depression were identified within 5% of journal entries. It should be noted, however, that 17% of students did not complete their journal entry at one point or another throughout the mindfulness program. The following section represents the broad trends that were identified in observing journal entries.

**Calm and flowing.** Over the course of the 8 weeks, the majority of journals depicted a movement from chaotic, jagged, and busy drawings to more fluid and flowing drawings. In the first week of class, it was noted that among the 35 journals identified as a representation of a calming movement, a significant number of images (11/35) reflected oceanic themes, as is

exemplified by Figure 23. These images clearly expressed flow through their water-like analogy. It is also important to note that the ocean theme was explicit to the mindfulness process and that such images is not necessarily random yet might indicate an integration of the children's mindful presence to the exercise.



*Figure 23.* Ocean / Water flowing theme expressed in journals.

**Increase in agitation.** Over the course of the 8 weeks, a consistent number of students experienced an increase in agitation as a result of engaging in a mindfulness practices. This was represented by drawings that depicted an increase in the quantity of lines, the intensity and sharpness of the shapes, and/or an overall agitation in drawing 2 in comparison to drawing 1 (see Figure 24). It is noted that in 2 of the 8 weeks there was demonstrated a noticeable drop in numbers of drawings that demonstrated an increase in agitation as a result of the mindfulness practice. Both weeks corresponded to the weeks when heartfulness was the foundation of the mindfulness practice. In both of those classes, the focus was on cultivating gratitude.

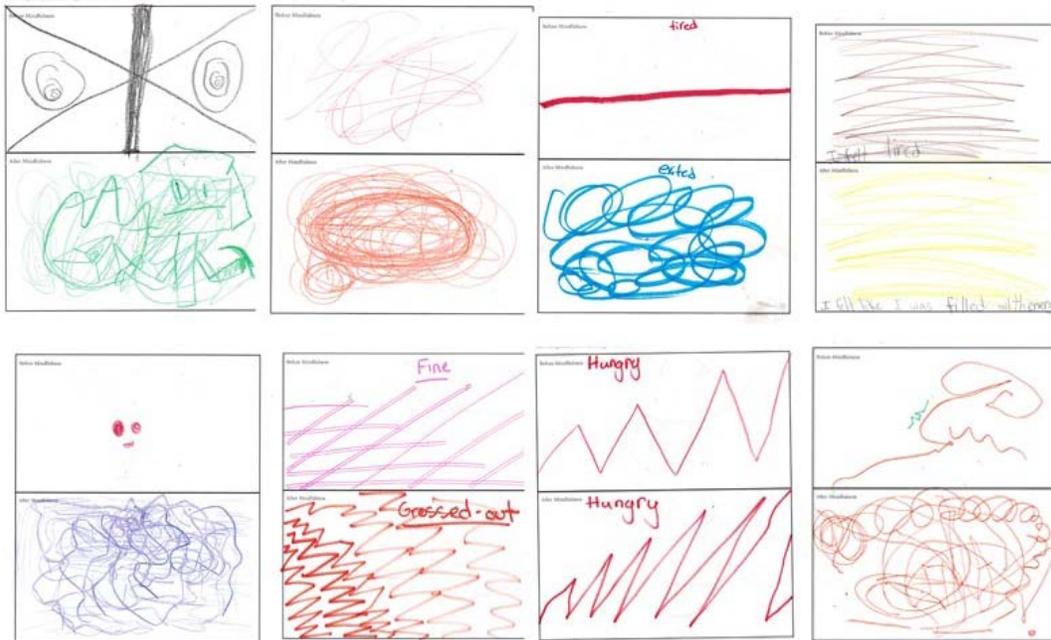


Figure 24. Agitation theme expressed in journals.

**From fragmented to integrated.** Another predominant theme that emerged while reviewing student journals is that of integration. Such imagery can be depicted by a movement from chaotic or disjointed elements to a unified whole. It is important to note that the numbers of drawings reflecting the integration theme in Figure 25 do not reflect the total number of drawings that reflect integration as such journals may have been categorized in their other, more predominant categories. For example, a particular drawing could be placed in both the happiness and the integrated categories. It is noted that a predominant number of journals reflecting integration emerged in week 7 when mindful walking was introduced. The following images suggest a movement toward integration:



Figure 25. Integration theme expressed in journals.

**Shift toward happiness.** It was also noted that many drawings expressed happiness or a clear movement toward happiness. Such journals were depicted and identified by referring to the qualifying word describing the essence of each image or by a visual indication such as a happy face. It is important to note that a significant spike in journal entries depicting happiness occurred during weeks 4 and 8 when heartfulness was taught in class. The average number of journal entries per week representing happiness at times when mindfulness was taught was 14.7, as compared to 38.5 when heartfulness was taught in class. This suggests that heartfulness practices might have a notable influence on happiness. The happier images were, in general, noted to be brighter in color, more spacious, and more integrated (see Figure 26).



Figure 26. Happiness theme expressed in journals.

**Shift toward unhappiness.** Throughout the 8 week program, a small portion of students' journals expressed a movement toward unhappiness or sadness. These themes were more apparent further into the mindfulness program.



Figure 27. Shift toward unhappiness theme expressed in journals.

**Tired.** Another interesting prevalent theme presented in the student journals was that of being tired. This theme was significantly more apparent during week 3 than during other weeks, although the theme of exhaustion could be found throughout all 8 weeks. The prevalent imagery that depicted being tired was represented by chaotic, jagged, overenergetic scribbles. The

minority of drawings that identified being tired was represented by images that had showed less energy before mindfulness classes (see Figure 28).



Figure 28. Tired theme expressed in journals.

**Little to no change.** As is demonstrated by Figure 29, very few journals on a weekly basis presented little to no change between the before and after mindfulness drawings. Journals indicating little to no change were identified by their having the same color used, as well as images in both the “before” and “after” components of the journal (see Figure 29). It was observed that the students who experienced little-to-no change in the first week journal entry, often experienced little to no change repeatedly, throughout the 8-week program. Despite observing few visual changes in their journal entries, it is also important to note that these students did express, in their last journal entry, a change that had occurred from them as a result of the mindfulness program.

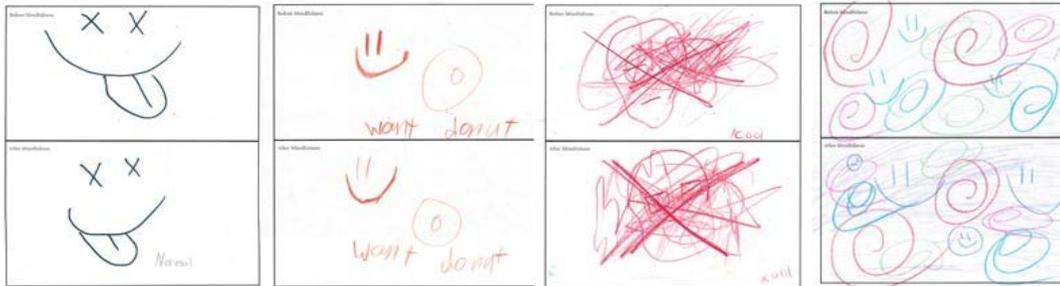


Figure 29. No change theme expressed in journals.

The opportunity to conduct this *Imaginal Resonance* qualitative research not only offered me an epistemological understanding of the realities of children's experience of influences of mindfulness but also touched me through a rich interactive and somatic dynamic that moved my soul and heart to a greater understanding of children's experiences. I felt transformed and enriched by the experience as subtle energies permeated the relationship in such a way that a deeper knowing emerged from a quiet space in between the words. It also allowed me to palpably experience the space between participant and researcher, which added to the already palpable intricacies of the research.

### **Children's Interview Thematic Content Analysis**

The following presents the content analysis of 30-minute interviews with 10 children following their participation in the innerU mindfulness program. Before addressing the various themes that emerged from the interviews, I must acknowledge several researcher biases. As a therapist in school settings, facilitating the innerU curriculum reinforced a preexisting belief regarding the need to help students manage everyday stressors. As a facilitator-researcher, having observed the students' positive responses to the program had primed me to anticipate positive responses during the interviews as well. Moreover, interfacing the challenges experienced by our youth has presented itself as emotionally challenging to me and has propelled me in helping them achieve balance and wellbeing, and thus, has sensitized me to note subtle, as

well as notable shifts in affect and behavior. It is also noted that my own natural response to life stressors and prior experience with the value of mindfulness practices to positively mitigate response to stress have likely influenced how I personally related to the children during the interviews. In other words, I acknowledge the role a qualitative interviewer (with a personal and professional connection to the topic) plays in the nature of data gathering, which cannot ever be entirely neutral. These biases have shaped my preexisting view of the benefits of mindfulness, which might also have influenced the way I identified themes in the interviews data. To mitigate such biases, the thematic content analysis (TCA) of interviews in this study has mirrored effect dimensions identified by one of the quantitative instruments, namely the BERS-2 subscales, which required the researcher to identify verbatim units of meaning that can be more objectively recognized as matching these change dimensions. This approach to TCA also resulted in similar nomenclature across the quantitative and qualitative dimensions of this study, to facilitate quantitative and qualitative data comparison.

In reviewing transcribed data from children interviews, four overarching themes organized the responses.

1. Children's perception of mindfulness
2. Children's awareness of mindfulness benefits
3. Children's experience of mindfulness learning and practice
4. Children's awareness of mindfulness program value

These overarching themes were categorized, as appropriate, under the following subthemes, as identified within the BERS-2 subscales: (a) Interpersonal Strengths (IS); (b) Family Involvement (FI); (c) Intrapersonal Strength (IaS); (d) School Functioning (SF); and (e)

Affective Strength (AS). Each subtheme was depicted by essential qualities, which were extracted from the raw data and included as units of meaning in the form of verbatim statements.

Note that the quality of “calm” was identified by the researcher as a perceived internal state of being, rather than the presence or absence of external behavior. As based on that distinction of assessment, for the purpose of this study, calm was categorized as an intrapersonal strength (IaS) rather than as an affective strength (AS) characteristic. Data were extracted from responses to all questions, for details of which, see Chapter 4.

**Children’s perception of mindfulness.** Although mindfulness has been extensively defined in the literature (Bishop et al., 2004; Charter, 2013; Chiesa, 2012; Kabat-Zinn, 2011) it was deemed important to inquire how children perceived and defined mindfulness after their 8-week mindfulness training. To initiate the interview, students were asked to define mindfulness and what it meant to them. Six of the 9 students who responded to the question employed terms associated with Intrapersonal (IaS) qualities such as referring to mindfulness as states of calm, providing greater awareness, developing authenticity, creating mind–heart connection, as well as fostering introspection. These qualities were characterized by statements such as:

- To be calm. Mindfulness, it is to make yourself not be angry that much.
- To me mindfulness means having a connection . . . your physical self and your mental self, to your heart.
- It’s being calm and noticing everything around you and taking all the little tiny factors and figuring it all out.
- Well, it’s a way to calm yourself down and make yourself happier and more aware of your surroundings.
- I guess it’s like looking into yourself or you could probably use it as a way of stress relieving just to take a moment and sit down and think about yourself.
- Just be yourself once in a while.

Interestingly, 2 of the 9 students referred to mindfulness as pertaining to Interpersonal Strength (IS), or transpersonal dimensions of one’s existence by employing statements referring

to caring and being aware of others. These qualities were characterized by statements such as the following:

- I think that mindfulness is caring about others and paying attention to every and each move you make.
- It is a great pleasure to be mindful to other people and having mindfulness in my life just makes it better.

One student referred to mindfulness as a state of happiness, categorized as an Affective Strength (AS) would be verbalized. This was depicted by the following statement:

- I guess it means that we're happier.

It is important to note that although students were introduced to the definition of mindfulness numerous times throughout the program as “paying attention in a particular way: on purpose, in the present moment, and non-judgmentally” (Kabat-Zinn, 2011, p. 64), students seemed to recognize how mindfulness is the gateway to a transpersonal dimension via one’s ability to pay attention. Students also seemed to relate to the definition of mindfulness as the lived experience of awareness, as suggested by Bishop (2004). In addition, it is also important to note that no students identified nonjudgment as an important construct to the overall definition of mindfulness. It is also noted that no reference to SF or FI were mentioned in students’ definitions of mindfulness, indicating that according to students’ perception, mindfulness is characterized as intrapersonal, affective, and interpersonal, in which dimensions “within self” and “in relationship to others,” outweighed “external” expressions of mindfulness such as those pertaining to school functioning and family involvement.

Toward the end of the interview, students were also asked to describe the innerU Embodied-Mindfulness program using a single word. Three students referred to the program as being calming, while the other students described the program with the following words: fun, amazing, connection, happiness, learning, and self-awareness. It is noted that the definitions of

calm, amazing, fun, and self-awareness are all related to IaS dimensions, as compared to constructs such as learning and connection that can be categorized as IS states. The mention of happiness pointed to an AS dimension associated to mindfulness. Interestingly, student responses to both questions 1 and 10 were couched in terms that refer to mindfulness as pertaining to the IaS, IS, and AS dimensions of knowing rather than to school functioning or family functioning dimensions of existence.

**Children's awareness of mindfulness benefits.** When children were asked to share how mindfulness had helped them or not over the course of the 8-week program, 100% of students interviewed reported significant, positive changes as a result of the mindfulness program. This being said Interpersonal Strengths (IS), School Functioning (SF), Affective Strengths (AS), Intrapersonal Strengths (IaS), and Family Involvement (FI) were predominantly at the forefront of identified benefits. Each child's statement was categorized by the subthemes that follow in the next sections.

**Interpersonal Strengths (IS).** One of the predominant themes that was noted as a result of the students' interviews was Interpersonal Strength changes (IS) experienced by students as a result of mindfulness practices. Students noted the impact of mindfulness in helping with IS skills such as developing greater appreciation for friendships (gratitude), contributing to conflict resolution, fostering connection with others, and helping to cultivate friendship, as well as caring for friends. Other noted subthemes mentioned were acceptance of other, emotional intelligence with friends, compassion, consciousness of others, and a greater awareness of surroundings. Interpersonal Strengths (IS) were marked by 6 of the 10 students with statements such as the following:

- Like at recess I would sort of have an argument with my friends, and when I started mindfulness I would just understand how lucky I was to even have friends.
- I think it's helped me a ton. It helped me because normally I have problems with my friends, but it makes it easier for me to kind of let the problems go and think about it.
- It's made me feel inside more like . . . I don't know how to explain it, but like the . . . being able to make other people happy like easier and making myself feel happier.
- Now I get to talk personally, my mom told me last night that the greatest minds share ideas. Now, I have a friend, I had this friend before, now I go up to my friend I go to the top of our space net and we started talking about ideas that we have. Probably [I] would not have talked about ideas [before mindfulness].
- I noticed that it feels very good to give compliments and also to receive compliments.
- I guess the other day I was like . . . All my friends would talk about Harry Potter which is like my favorite book and I'm completely obsessed with it and they really like it too, but one of my friends, she doesn't really like as much so she always gets left out. Even though I really liked Harry Potter, I went over to her and helped her. That helped me notice that and get out of my Harry Potter craze.
- And I'm playing carefully and nicely with my friends.
- It is a great pleasure to be mindful to other people and having mindfulness in my life just makes it better.
- Now I've nowhere near as many disputes with my friends. We get to talk more and I remember, still this recesses my friend Kane, he had a scraped knee. Me and my other friend told him what to do and we told him to wash it off. He walked it off . . . he took his own route . . . he walked it off, which I think was fine as well. I feel now it's a better opportunity to give suggestions to your friends.
- I usually wouldn't like being hugged or touched before mindfulness but now I'm thinking maybe a friend wants to hug me because they need a hug or they're just really sad in their life and they just need a hug. . . I gave her a hug yesterday but I didn't tell her why. I just gave her a hug. She was really happy. I felt really good about myself.
- In class . . . I remember this morning, I was going to raise my hand to answer a math question, I thought "I answered a few [already]." I wanted someone else to give it a try.
- Well, I guess I have done a little bit of the mindful walking, so I'm just "slow down," you don't have to rush through everything. Just realize and be aware of your surroundings.

Students also noted interpersonal changes in their friends as a result of mindfulness. These student observations indicated IS strengths in others such as being caring and more mature.

These student observations were marked by the following statements:

- My friend, she used to be a little selfish, and now she noticed how it would make others feel, and she stopped, and now she's more caring and she's nicer. It makes me feel happy because it doesn't hurt my feelings.

- They're different now. They're not bad different but they're acting a little more mature about things.

**School Functioning (SF).** SF was marked by students' reporting of their capacity to better focus and concentrate, to be more resilient in the face of a challenging curriculum, to center themselves for better problem solving skills, to help them reenergize themselves when tired, to offer conflict resolution tools, and to help develop greater awareness of themselves and their school surroundings. SF qualities were marked by 6 of 10 students by statements such as:

- I feel like it's helped me like keep my mind off of maybe problems in the past I've had, and just concentrate on the things that I have to do.
- I would be exhausted or sleepy before class, and then I would be excited (energized).
- I discovered that I have written really weird, like how I hold my pencil.
- Like if I would be sad in the morning, or tired, you would come in the classroom to teach mindfulness, and it would relieve my day as well.
- At first when you got in I was sleepy, but then I started waking up when we started doing the exercise. It gave me more energy. It was fun, doing the exercise.
- It helps me think easier . . . to be able to not worry as much.
- It would help me to focus sometimes, like right afterwards in Math, it helps me to focus. I could focus a lot better sometimes and I'd be able to calm down if I was like mad or something.
- I can be a little more persevering in confusing things, like when we're doing math, sometimes we get really difficult things and that helps me push through it and keep my mind straight on it.
- In school, too, I was really failing in reading but then mindfulness, when I would breathe more and read my book it felt more like better to read and I want to read more books and more. It was nice because I've read 14 books already. Yeah, I'm studying more with our tests because our teachers hand out these study packets for homework to study and I really didn't do that so I really missed the assignment but now I would study my study packet and I would breathe more like mindfulness and yeah, it just helped a lot.
- Calm. No stress. I'm okay now. . . . I guess it makes it so you don't rush without thinking about what you're doing. It gives you kind of hey, now I need to check my work now that I've finished.

When the interview was specifically addressing how students observed changes in class or with their classmates, 4 students mentioned School Functioning (SF) observations specifically referring to the class having become more calm, more engaged, happier, and more focused and

attentive; while 3 students reported not being able to observe any difference with their class as a whole.

- I felt like the whole class got more relaxed and quieter when we did it. . . . The class doesn't talk as much. Sometimes, yeah, and so I think it really helped with that too. Well, everyone's happy and more positive and same with my teacher.
- They were more calm and more playful about how their life is going. They always would like to do stuff fun with you more often because they really liked doing it. Because I could see that in their eyes.
- Everybody was calm when you had to do something quietly, and everybody did whatever the teacher told them, and started right away and got focused. They [classmates] have been paying attention more.
- I saw someone . . . they were doing innerU right before a test and then they opened their eyes and they just seemed so relaxed. They were "I can do this," so I think that that helped them too. I didn't see it so much [with the class as a whole]. I saw it more in some individuals than the class as a whole.
- . . . she'd be really energetic in class but now I'm seeing that she takes a second to slow down and sometimes she looks up and it seems like she's telling herself something and she calms down. I see it in her that she's trying to calm down a little more.
- They were more calm . . . .

**Affective Strengths (AS).** Students reported how mindfulness contributed in helping them with various Affective Strengths (AS), such as developing emotional resiliency and emotional intelligence, as well as with cultivating happiness and self-esteem. It is notable that 6 of 8 students identified mindfulness as a contributing factor in experiencing happiness. AS qualities were marked by 8 of the 10 students with statements such as these:

- Like the first time I got detention. That made me feel sad. But now that I had mindfulness for 8 weeks it sort of made me take my mind off of it.
- I would be excited to keep going on the day (after mindfulness) because I knew that I can be happy.
- Well, it has changed my life a lot by making me happier of what I accomplished in life, and so it was amazing.
- I felt calmer, less anxious. So it made me really feel better. Happy and thankful.
- It's made me feel inside more like . . . I don't know how to explain it, but like the . . . like being able to make other people happy like easier and making myself feel happier.
- It helps me think easier . . . to be able to not worry as much.

- Well, it definitely made me happier now, I am closer to my heart.
- School's not really about friends. It's about learning. I just put that in my mind because mindfulness helped me think more about that. Helped me to feel better. Like I told you in the beginning I was doubting myself. People had been saying mean things to me. Now I'm just learning how to take it, not like saying, "Oh," but sort of take it as a compliment and I won't even say anything back. I'll just say, "Okay."
- I guess it makes me feel a little happy. If they're happy I feel happy but if they're sad I feel a little sad. I'm just happy.
- It's been a good, helpful type of experiment that I never tried until now. Good, and helpful. I've been pretty calm lately after [mindfulness], I feel pretty good.
- It makes you think a whole lot more about your emotions and what you're feeling without changing them. You're not go, go, go.

**Intrapersonal Strengths (IaS).** Various Intrapersonal Strengths (IaS) were also observed by students as a result of the mindfulness classes. Characteristics used in descriptions included becoming more peaceful and calm, sensing the integration of the soul, feeling centered, capacity to think more clearly, and being more aware of self and surroundings. IaS themes were marked by 7 of the 10 students with statements such as these:

- . . . like I would calm down. After I would be running to catch my ride to school, I would sort of calm down because I know that I'm there now. I'm not sure much as changed, but some parts have changed, like my mind has become more peaceful.
- When I did the exercises, I felt like my soul was closer to my heart.
- I loved that before I was like spread apart and now I feel my heart so much better. It feels smoother.
- Yeah, like sometimes before the classes, I would feel like just I'd be excited and jumpy and all over the place and then afterwards, I'd still be happy but I'll be more calm and collected.
- Mindfulness made me be aware . . .
- I was usually [am] very, very tired. If you looked in my journal, sometimes I'll be like super hyper before, but then you would see like relaxing, "tiredish" shapes after, so I was always very, very calm, but also a little tired and lazy after every Mindfulness session.
- I feel better about myself. When I wasn't doing [mindfulness] I felt really bad about myself. You have no friends. Nobody likes you. But then after mindfulness I felt like I'm okay. I don't need friends.
- Well, I guess I have done a little bit of the mindful walking, so I'm just "slow down," you don't have to rush through everything. Just realize and be aware of your surroundings.

- I almost calmed down and I almost had this tingling feeling, like my nerves almost just went “phew” and just . . . I wasn’t as nervous almost and I just like embodied body mindfulness because I get that feeling and that feeling is really great.
- Calm. No stress. I’m okay now.
- I felt calmer, less anxious.
- It helped me by doing stuff mindfully. Like mindful eating, mindful motions, mindful . . . mindful playing.

**Family Involvement (FI).** In responding to how mindfulness had helped students, only 1 student referred to a Family Involvement (FI) theme, which pointed to the child’s greater capacity to understand her mother’s frustration. In addition, when students were asked if they had shared some of their mindfulness practices at home with their family members, 5 of the 7 students who answered this question reported sharing a practice at home at one time or another during the program. Family Involvement (FI) was marked by students who shared a practice with a family member and this development was identified by the following statements.

- My feelings, my parents, my mom usually gets really mad at me mostly, then my dad. I think, “Oh, my God, my mom hates me.” Then I would think, “Maybe she’s just getting really mad because I’m leaving my books on the ground and she’s telling me to pick them up and maybe I can pick them up so she won’t be really mad.” I think more. I’m like, “Oh, I’ll go pick up my books now”.
- My mom, she just had surgery a couple months ago, and one night I was telling her about mindfulness, and she suggested that we should try it at home. I was asking her what she had dreamed of, and I found some meditation and mindfulness things like online. After, when I told her that she can open her eyes now, she said that she felt like she actually lived that dream. Yes. I tried it on my dad and my brother as well. They noticed—my brother had noticed that he had lived that. He said he asked himself if maybe he would live that in his next life.
- I did mindful touching, mindful playing, mindful walking, and mindful eating concept.
- Ever since we started mindfulness, me and my mom started walking to school. I taught my mom how to do mindful walking. I could not do much with my dad because he works a lot, so there’s pretty much no time. I think my mom likes mindful walking.
- Yeah, I did. I told my Dad . . . I did the whole ceiling thing with my Dad and I also did some mindful eating.
- I told them [parents] a little bit about the mindful eating. She [mom] asks me at night when we both can’t sleep, when we’re both awake at 10:00, she asks me about some of it. She also told me a little bit about a different kind of exercise to help you sleep really. You close your eyes and you think, “My arms are getting very heavy.” Then the rest of the parts.

- I haven't felt so much change in my friends, but I have felt some change at home with my sister.
- I was able to, like if I was mad at my brothers or like that, I was irritated with them, I'd be able to calm down or make sure I apologize for, like if I did something back to them, faster than I usually would

It is to be noted that the above FI statements are closely correlated to IS dimensions due to the nature of relationships with family members and their inherent interpersonal nature. This being said, although interpersonal qualities are explicitly presented here, the above statements pertained specifically to familial involvement and thus were categorized accordingly.

Students who reported FI involved expressed sharing and discussing mindfulness practices with family members and exploring the efficacy of mindfulness outside the class environment. Transpersonal expressions (compassion) were also noted with students attempting to help family members with pain management, awareness, or sleep disturbances. It is important to note that students were not informed in class of the above mentioned mindfulness benefits, and that, thus, these students made the correlation on their own. This seems to point to a higher level of integration of mindfulness concepts on the part of these students. In addition, unsolicited statements of awareness of changes pertaining to family involvement are not typical from a developmental perspective, as a preadolescent tends to be more peer-oriented (Crain, 2011).

### **Children's Experience of Mindfulness Learning and Practice**

In an attempt to better understand how children related to various mindfulness practices, students were asked to identify what part of the program they liked and/or related to the most. Several practices were identified as preferred: movement, imaginal guided practices, imagery (video or animals), heartfulness practices, mantra, journaling, and sitting meditations. The following section addresses how various aspects of the curriculum facilitated their learning.

**Learning.** Students pointed to the fact that mindful-movement practices helped with reducing fatigue, becoming more aware, and exploring new sensations via new activities, as well as allowing for kinesthetic exploration and awareness. References to enjoying movement practices were mentioned by 3 of the 10 students and were identified by the following references:

- I liked the activities, like when we would move around the classroom to touch and feel stuff. Because we discovered things that we've never seen in the classroom. . . . It makes me feel good because I know how we just get to find new stuff, and just live new things in life.
- Mindful walking. [I liked] that we had to walk slowly around the classroom. I could hear like scratching. I was less tired than walking normally.
- I think I liked the moving one, because we get to move around a little, but it'd still be mindful. We'd still be practicing mindful things; we just didn't have to be sitting in our chair the whole time.

Another noticeable activity preference that emerged from students' interviews was the appreciation for imaginal activities. This included various mindfulness practices in which students were invited to use their imagination to send heartfelt thoughts or to find themselves in the midst of various life situations. Three of 10 students identified the imaginal dimensions to be their preferred activities.

- My favorite part was when you said those things we would imagine, because I really like to picture things in my mind and I could just picture it and it just made me feel so happy. I think that was my favorite part.
- I just want to tell you that I just love that part where you would say something and we would envision it because that was my favorite part. I just loved that because it was like a movie in my head and I was in the movie and I mean who wouldn't want to be in a movie? Just keep on doing that because I really liked that.
- The other one I enjoyed . . . where we did the heartfelt generosity where you would imagine . . . someone who fell and dropped their books and you'd stop and pick them up. One of the things is I kind of did this before but I notice it more now. I feel bad for people no matter who they are if something's going wrong for them. No matter who they are. I could see my worst enemy getting bullied and probably still feel bad for him.

Heartfulness also seemed to capture students' attention through its capacity to transform affect. Students often felt happier following this practice, which was steeped in positive psychology constructs. Overall, the practice made them feel good and happier. The following testimonials demonstrate 3 students' appreciation and preference for heartfulness practices.

- My favorite part of the mindfulness was probably either the heartfulness as itself or if I had to be more specific, because that was pretty vague, it would be the heartfelt gratitude. I enjoyed that, sitting down and thinking good thoughts [and] sending them to someone you like and someone you don't like. That's probably what I'm going to remember the most of all of everything.
- I liked when you would send good memories. I also did that one with my Dad and we sent good memories to people who you like, which made me feel good, and you also send memories to someone you weren't so fond of but that still makes you think "Well, even though I have this person in my life and they're not my favorite, then I learn just not to be like that sort of person and to still be grateful for them."
- I like the heartfulness, the heartfelt playing and the mindfulness, mindful seeing.

Other curriculum preferences of students included the following.

1. Videos for their capacity to help students envision and relate to relatively difficult constructs.
  - I like the videos because it helps me almost envision those things while I'm doing my mindfulness, so it almost kind of brings it together for me, so that's my favorite part, I think.
  - The videos. They're really interesting. I want to watch them over and over again. They're really cool. They're like that because you can actually see animals. There was over an ocean they're just looking and it wouldn't have been that interesting but the scuba divers that went down and looked at the animal, it was really cool watching them.
  - I liked . . . all those really cool pictures and videos that they had. It's fun to watch them and how each one of them taught us the lesson. That was really cool.
2. Journaling for its self-expression and self-awareness dimensions.
  - I liked the journals because I got to like express my feelings with just a marker, a shape and a color. Well, usually, I think of red, orange, and yellow as like exciting, active, aware, or red can be mad sometimes, but then, usually, at the end I would draw like a green or a purple or a blue, because that's like calming colors.

3. Experiments for promoting their ability to help explore aspects of self and cultivate awareness.
  - Always doing experiments and seeing what would be good for me and for people around me. I think the thing that I liked the best was actually everything we did, like the meditations, the journaling and all that, because it showed me how I feel once in a while.
  
4. The use of a secular mantra to cultivate attentionality.
  - I don't remember the exact word for it . . . but the one where you'd think as you breathe in you'd think Oce- and then when you breathe out you'd think –shen [mantra]. The mantra—you can focus a lot more on things than if you weren't using it basically.
  
5. Ocean related theme to teach mindfulness.
  - I was actually impressed how we can refer to animals as humans. When you think of them as the same it makes more sense. You think as yourself, like unique, how animals can live and how you live, like you can sort of compare, and it makes you feel how lucky you are to have animals around you.
  - I liked how . . . everything related to the ocean.
  - My favorite animal was the dolphin, because they don't bump into each other.
  - I really loved learning about the seals playing tag. Just in general it helped. Well, not just in general, but like it helped me with everything pretty much.
  - I think they [animals] helped me a lot, and I think, especially the kelp forest really helps myself get closer to the heart. Yeah. The grips—I saw the picture you showed us where it grips onto the rock, and that's what my body was doing with my heart.
  - The whales helped me breathe smoother. The barracudas, from the video that I saw, they were pretty fast, and it amazed me that they were not bumping into each other.
  - Maybe seals. I don't really know. Yeah.
  - I liked learning about the animals and what they could do, like how the barracudas could swim without touching each other and like when the mantis shrimp that could see really well because they have like three pupils in each eye. I really liked learning about how those animals work, because I never even knew there was such a thing as mantis shrimp. My favorite animal is the dolphins. They're just super smart.
  - The jellyfish, kind of feel, in fact . . . I got the jellyfish. [It] helped me learn mindfulness. I guess I pretend I was an animal. Just tell myself I'm the dolphin or I'm the jellyfish.
  - All of them actually.
  - The whale helped me because I always think of a whale, you know in “Nemo”

how Dory talks like the whale? That made me a connection with the breathing, because when you talk you're breathing in and out. I think the whale is the main one that helped me. I think the animals helped because then you can almost imagine being the animals while you were doing mindfulness, not just "Oh, I'm myself." Yeah, I think that everyone should still do it and that I should still do it because it's really helped me a lot.

- I like most of the ocean animals. I guess that's that but I do. I think they're cute and, except for the mantis shrimp. That was really cute. I thought the mantis shrimp was pretty cool because of how [its eyes have] three pupils and the all work on different levels or independent levels. We never think of ourselves as anything to do with nature because we make so much stuff that's not really naturous, naturally, I don't know how you say it but it's cool to see how much we actually connect with some of the nature around us. I thought it was really cool. You just never think you would be able to connect with them. They live in the ocean. We live on land. They're huge. We're tiny. I was talking about whales there. I'm so happy you did [mindfulness using] the animals . . . .

The use of nature centric or indigenous approaches to teaching mindfulness provided students a tangible vehicle to help them better understand difficult concepts that are often very complex for even adults to comprehend. The use of animals seemed to have facilitated the learning of mindfulness constructs. In addition, the use of a nature centric approach to teaching mindfulness offered students transpersonal experiences such as transcending self, appreciation of nature, unitive experiences, and a deeper understanding of interconnectivity. Although students had no prior experiences with mindfulness and were unfamiliar with other mindfulness approaches, it is important to note that 100% of the students interviewed identified and expressed their appreciation for the nature centric aspect of the programs and its relationship to the ocean as a vehicle to explore their inner self.

**Personal practice.** When students were asked if they would continue practicing mindfulness now that the class was over, 7 out of 7 students responded to the question by identifying Intrapersonal (IaS) benefits. Among these, stress relief, awareness, and connection to self were the predominant overarching qualities. Three of the 7 students who responded to how mindfulness would help them in the future, responded by referring to the practice's capacity to

help relax and relieve stress. Two students pointed to further practice potentially contributing to greater awareness, while 1 student mentioned that it would contribute to greater self-awareness.

The following student testimonies have been organized by subthemes that depict the personal benefits of continuing a personal mindfulness practice:

Intrapersonal (IaS) benefits were identified as [follows](#).

### 1. Stress Reduction

- Yeah I think so, because it really helped, and it could probably go on more and feel relieved about stuff now.
- I discovered right before I go to bed every night, I take those three mindful breaths because I found out in class it always makes me sleepy, so when I can't sleep I always take those three mindful breaths. I get tired and my body relaxes.

### 2. Awareness

- Yeah, I remember the time for mindful walking. Sometimes when I have some spare time and I'm not in a rush to walk to places, sometimes I do some mindful walk in my house to help me stay in touch [with] my mindful self.
- I guess it really would change my life, since its making impacts right now. If I keep on doing it, I guess it would make my life way better. The mindful walking one. [I] feel like my heart beating, my legs moving when I'm walking.
- To be aware of "Oh, my gosh, I live in this awesome place and look at the stuff I've got" because some people don't have these things.

### 3. Emotional Intelligence

- I think it would be useful to do it again. Once again, it's a great stress reliever if you're nervous or just mad, angry at someone. I like the emotions part. I think that would be fun to do, just see what your emotions are and how quickly they change.

**Practice in school environment.** When exploring whether students felt that mindfulness would be beneficial for everyone in school, 100% of the students felt that it would benefit all students. When this researcher deepened the inquiry in that regard, students identified stress reduction, greater peace, emotional intelligence support, development of compassion, greater focus, better school functioning, and develop respect as key benefits of mindfulness in school.

The following sections represent students' statements organized by identified subtheme and associated qualities.

1. Intrapersonal (IaS) with qualities of Stress Reduction / Awareness of others / Happiness / Self-esteem
  - I think it would benefit everyone. I think that because it is a way of calming yourself down and paying attention to more of other people's feelings, and that makes you feel good because you make them happy. Well, I felt really happy the day that I got to ring the bell, and it made me feel special.
  - That's what I think because I think it just helps everyone calm down because some kids are more jumpy than others and some kids get nervous before tests, so I think that everyone should know that it really helps you if you take some deep breaths before a test.
2. Interpersonal (IS) with qualities of Peace / Peace on Earth
  - No one would get in trouble in our class.
  - I feel like everyone would be in peace. The disputes will be very small instead of very big. The world will be a better place.
3. Compassion / Integration / Union
  - I think everyone, if they're not already doing mindfulness in their own way . . . like if they have their own methods-their own mindful methods, that's good. I think everyone could benefit just to get close to their heart.
4. Connection to Nature / Stress Reduction
  - I think it would. I think a lot of the people who like see it and would like the learning experience, like me, would like how each animal works and what their talent is. I think they would like to do it once and they would like to do it because sometimes in life you have problems that you don't like and you just have to calm yourself down and relax.
5. Respect of Other, Self, and Environment
  - I think it would be beneficial for everyone, because it teaches them how to be respectful to others and be respectful to yourself on like doing things that harms your environment or your health or your body.

*Affect Strengths (AS).* The importance of Emotional Intelligence was reflected upon.

- Because some people cannot deal with themselves as much as other people can and so they will need a lot of help and Mindfulness is the thing that can help them.
- I think it would be beneficial for everyone because everybody has those times where you're freaking out. You've got so much to do. You know there's no way you're going to finish everything. Everybody has those times. You can do mindfulness, acknowledge that, and you'll feel better.

***School Functioning (SF).*** Several beneficial aspects of mindfulness were noted.

1. Calmer / Better School Functioning

- Yeah, I think it would because, if everybody did it, like in the school if everybody did it, then people would be more calmer walking in the hall, listening to the teachers. The yard duties, too, some people would be—if they're talking to them—they would be, "I don't care[that I've offended]. I'll do it again." If they did mindfulness people would be like, "Oh, I'm sorry," and apologize.

2. Focus

- I think it's a good idea because it might help a lot of kids focus. Like I said, with me, it [would] help them like that.
- Breathing, yeah. It helps me like just make me notice all. It all . . . I was going to say something. It'll keep me more straightforward and keep me on track for things.

### **Children's Awareness of Mindfulness Program Value**

In order to better understand the children's perceived value of embodied mindfulness, children were asked to reflect on whether they believed that their life might be different as a result of practicing mindfulness. Eight of 10 students responded to this question and expressed benefits such as these: life will be calmer, reduce reactivity, more peaceful, able to manage emotions, be more focused, be more grateful, be more resilient, and able to accept life as it is. Among these, Affective Strength (AS) subtheme qualities emerged with 6 out of 7 students referring to AS references marked by the following statements:

- I think when I get like really excited or like mad or angry or something, like sometimes I get so mad with my little brother, especially, that I'll kind of react, very badly, I think that will help me like not react when I get super mad or excited.
- I think it might help with like small things and I think that it was cool to do it once and see what it was like and I think it would help to just do it a little bit. As I said, just the sleeping thing, sometimes I can't sleep and I just have to do those three mindful breaths and like when I get mad. I think it was just cool to do it once and see what it was like, because I've never done this before or heard of it.
- I think I'm going to be more grateful for what I have than these other people [are] that don't know mindfulness and I also think I'm going to be able to deal with things a little bit better instead of freaking out because I know how to do mindfulness. I think that's a few other things that I would be better at.

In addition, students pointed to IaS considerations such as being able to manage emotions and being able to accept life as it is.

- My life will be different because my life will be calm.
- I'll probably have a better way of stress relieving to start. Something I'm not able to do very well is acknowledge things without changing them. That's something I'm not good at and I think I'll be able to do that a lot easier now.
- It would be different for me because I see how things get better and how things would not get worse in life [more positive]. I would feel more calm, more focused and more prepared on what life brings me.

When thinking of how mindfulness might apply in the future, students also referred to SF constructs such as helping attain better grades and focus as reflected by the following statements.

- I guess studying, college, getting a better education in college. Studying. The teacher, too, if he's mad I'll try to work harder on my essays or papers.
- And [it will] also help me in school, I think, with focusing, like I've said.

Though results of this study are appropriate to qualitative studies sample size, it is important to note that despite the relatively small number of children selected to be interviewed from the overall sample size of this study, the repetition of units of meaning (qualities organized under the themes and subthemes) indicates that the student interviews had reached data saturation and that, therefore, no further sampling was needed. The children's interviews provided reference to the subjective, embodied experiences of children that resulted, for these participants, from regular engagement in Embodied-Mindfulness-based practice and provided a

solid case for conclusions. Figure 30 depicts the emergent themes, subthemes, and essential qualities that arose from the thematic content analysis of the children’s interviews.

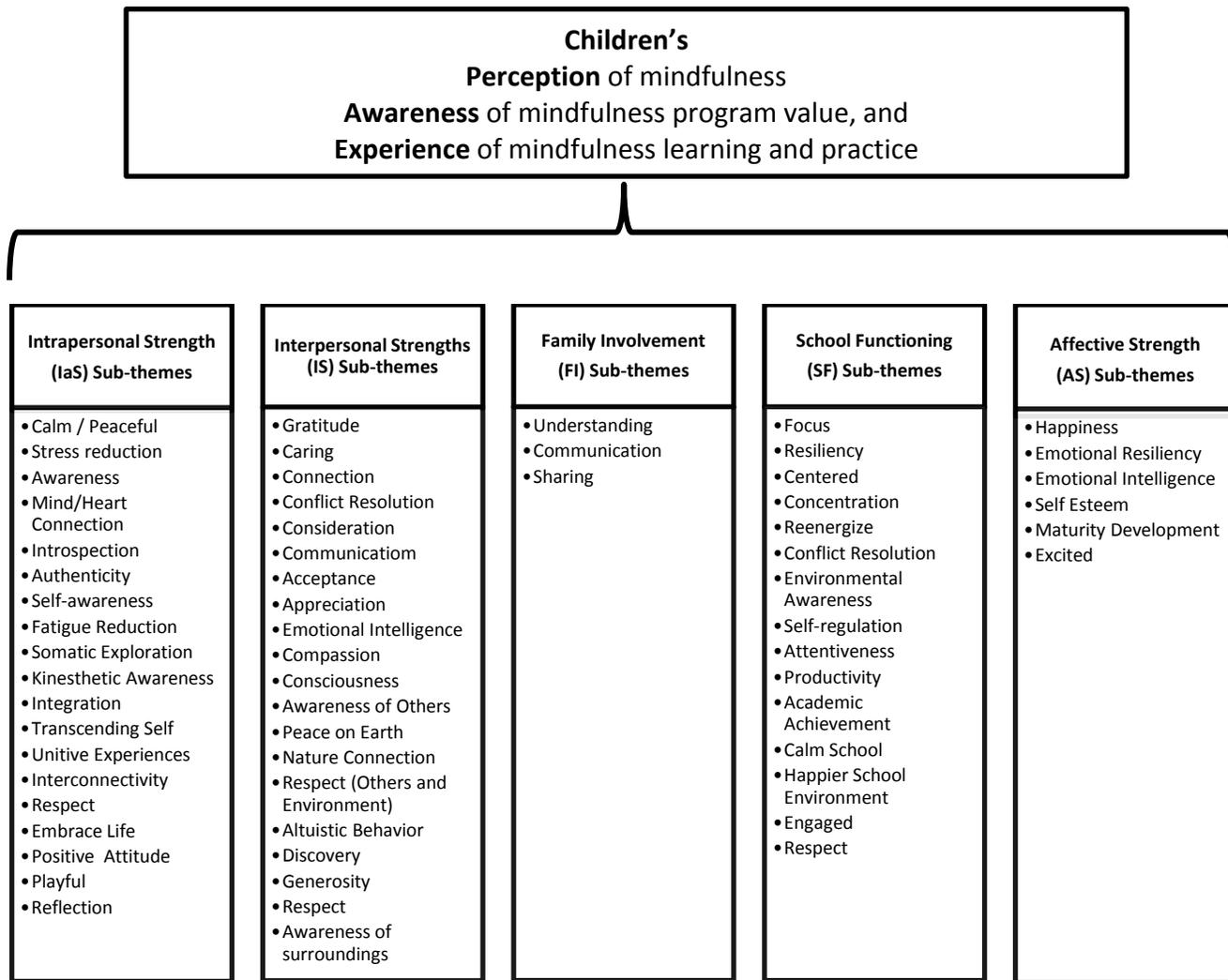


Figure 30. Overarching themes and subthemes based on children’s interviews.

**Teachers’ Interviews Thematic Content Analysis**

The following discussion presents the content analysis of five 45-minute interviews of teachers who participated as part of the intervention group in the innerU Embodied-Mindfulness program in Goleta, CA. Following the transcription of the data, teacher interviews were then

reviewed in order to identify meaning and themes, and these themes were assessed against the children's perceptions and experiences of the innerU program and its benefits. As with the data gathered from students' interviews, data from teachers' interviews were organized by themes and subthemes (data presented under each question are available in Chapter 4). In reviewing transcribed data from teacher interviews, three overarching themes organized the responses: Teacher's observations of changes in children; Teachers' experience of mindfulness training; and Teachers' awareness of mindfulness program value.

**Teachers' observations of changes in children.** All interviews began by asking teachers to identify observable changes in class or at school as a result of the innerU program. In response to the questions, "Have you noticed any individual or classroom changes as a result of the innerU Embodied-Mindfulness program in the last 8 weeks, if any? If so, can you please give me examples?" teachers observed several class changes. All of the teachers interviewed referred to the program's capacity to provide students and teachers with a common language and vocabulary that can be used in school. All teachers observed the integration of mindfulness concepts via the introduction and use of a common language on the part of students and within themselves. The introduction of mindfulness not only depicted integration of concepts but also impacted overall school functioning (SF), whether it be in class or in other areas of school. This language helped to facilitate awareness, helped to guide attentionality, to cultivate healthy interpersonal skills (IS), to manage conflict resolution, and to foster emotional intelligence. References to common language usage were marked by the following teacher statements.

- I noticed at times students used the language of mindfulness and said things like, "Oh, Mrs. [Teacher], be mindful of the things on the carpet. You don't want to step on them." The vocabulary is something that they used quite a bit. I noticed that for myself that I could use the vocabulary and that they would respond to it right away. Even today they were very anxious and excited about the weather changing but I just said, I actually said, "If I was Mrs. Mermaid, what would she tell you to do right

now?” They were like, “Take three mindful breaths.” . . . I guess what I would say is just generally that they talk about it and they, I hear the language between each other also. When they’ve had issues I’ve been able to bring up this language and have them problem solve a little bit and talking about having mindful hearts and mindful thoughts and actions. It’s something that we all understand so we can use it to solve problems.

- So, there’s this universal, or this common language that I think helps him stop and think.
- It did become like a part of our dialogue as a classroom.
- It’s a common language that we can use when it gets loud. You need to sit down and find your innerU space, and like that . . .
- There were several times when students brought up that practice, whether it was like a story we read or something someone did for someone else in our class, it just came more to the surface—the fact that doing things for others makes both parties feel good.
- I don’t have any specifics but I could whisper in a person’s ear, “Sit up like the blue heron,” and they would.

In addition to identifying the use of a common mindfulness language by teachers and students, 2 teachers initially reported observing their classes becoming calmer as a result of a mindfulness practice. This initial observation was later observed by 2 other teachers in further interview responses. It is important to note that only 1 teacher commented on her inability to notice any changes in her class, which is composed of predominantly boys (5 girls and 19 boys). This inability to witness change might have resulted from a gender bias, where boys might have been perceived as or were actually less compliant and focused, as is indicated later in this discussion.

- I would say as a whole, I think the class really benefited from the innerU program. . . . that practice every day helps to ground us in the day and calm down . . . just even a minute of silence, and sometimes.
- I liked it a lot in that I stood there, I sat on my stool right there, and the chime brought them right . . . . The lights . . . I always turn the lights out, and I didn’t have anything up there, so it was dark. You know, it was like a quiet environment, and they quieted down immediately, and they went into their sitting stance, or sitting posture.
- It’s hard to discern the effect on mindfulness since it happened at the start of the year. I’m not sure what’s just the habit separate from mindfulness just doing the classroom activities and what mindfulness could have contributed to. I’m not sure.

In response to the question, “Have you noticed, if any, gender differences in practicing mindfulness? If so, how were they manifested?” all of the teachers identified a distinct difference between boys and girls regarding participation in mindfulness. Overall, boys were perceived as more antsy and challenged by the various mindfulness practices, as well as having more noticeable difficulty focusing. This being said, it was also noticed that the boys became more comfortable with the practice over time and also gained in focusing capacity. In contrast, girls participated more readily in the program and were significantly more engaged throughout the entire program via active participation such as asking questions, sharing their experience, and fully exploring their inner world. This reflection was also noted and confirmed by the researcher through class observation. It is noted by the researcher that girls who chose not to participate as readily in the program were known by the class teacher as having internal emotional challenges overall. The following statements mark teachers’ comments regarding gender differences in mindfulness practice participation, beginning with teacher comments regarding the boys’ responses.

- I definitely notice if anyone’s going to have their eyes open and be a little antsy and giggly, in here it has been the boys. I haven’t noticed any girls, actually, respond like that.
- I think of my class, there’s a lot of boys that have a hard time focusing and would really benefit more from this program, but it’s a little harder to tell how it affected them because they didn’t voice their opinions as much. . . . generally, it did help them (boys) to be able to focus better.
- I think as we got further into the program, the boys definitely bought into it more. I think in the beginning, they would not even close their eyes and they weren’t going to be a part of it but then after they’re like, “Okay, yeah, we can breathe.” They realized that they could take a minute to relax.
- I think, generally, it did help them (boys) to be able to focus better, but then, at the same point, as the year went on, with some kids there were increased behavior problems. I don’t think there’s any relation, but then it’s hard to sometimes compare because, in the beginning of the year, they were like just wanting to please and still nervous.
- I know those (boys) that are antsy, and those continued to be antsy . . . but I think through the weeks, that [they] calmed down.

These next comments relate to the girls' responses to the program.

- I feel like in general, during your classes, the girls participated more and were able to voice their feelings easier, because when you ask questions to the students, they would, I think, raise their hand more often . . . .
- We only had 5 girls participate out of 24. (45-49) The girls are so outshined in the classroom a lot. They just tend to be a lot quieter because there are so many boys and the boys are so much more talkative and outgoing.
- I think the girls were much more comfortable from the get-go, most of them.

**Teachers' awareness of mindfulness program value.** In response to the question, "Have you observed any noticeable difference in class, with school work, in the yard, or at recess?" teachers noted a variety of visible differences in class or at school as a result of the weekly mindfulness practices. Some changes were observed at a class level while other changes were observed at an individual level. When students were perceived by the teachers as having emotional difficulties, the calming effect of attentional breathing, the use of a common language to facilitate the exploration of emotions, improvement in thoughtful responses, awareness of in-class focus, student integration of mindfulness constructs in other academic areas, and the enhancement of somatic awareness were all identified as positive impacts of the mindfulness training intervention. It is also noted that 2 teachers expressed that they did not perceive noticeable changes in the class. The following statements offer further insight and examples of perceived changes:

- I feel that, and I think that that's probably the point is that they can take those breaths and they instantly settle. Their body recognizes it as this is the outcome of these breaths and they can just do it like that.
- Emotional and behavioral go together, I guess, in my mind, and I think that's where I would see it the most, because, when we had a few playground issues, we were able, like I said before, [to] use that general vocabulary that we were all understood what we were talking about and we all had bought into that so we all knew the importance of being mindful of another's feelings. It's, "Were you being mindful?" and not "Shame on you if you weren't noticing,"— "Yeah, this time I was not, but I know that's something I want to do next time."

- I guess just the receptiveness of the class stands out, the way they were able to be very open with their feelings. I think sometimes in class if you have one or two students who are like that then everyone else says, “Oh, it’s safe for me to do that.” You certainly created a safe environment. That’s the kind of a thing that I knew that people would always respond with interesting thoughtful responses. That was something that was notable to me as well, just their openness.
- By using it in various aspects of the day instead of just the 20 minutes of mindful time, having students reflect on their emotions and feelings during the lessons that we’re doing, is helping them to be able to realize, oh, I’m not being focused right now. I’m probably not doing my best learning, so it’s not just a reflection on how they’re feeling necessarily, but how they’re learning too because I think that’s the purpose of your whole program, is for them to learn how to focus, I mean, in life in general, but you’re implementing in the classroom so that students have the ability to focus better and be more successful academically. . . . There were several times when students brought up that practice, whether it was like a story we read or something someone did for someone else in our class, it just came more to the surface, the fact that doing things for others makes both parties feel good.
- I guess I’m just going by the fact that they, in the classrooms, or other times with me, would mention things that we’ve done. I felt like it had sunk in.
- It seems like some kids would push their chair back. That was definitely something that they got from mindfulness.
- I think in other years, students would’ve been more excited and they would’ve talked about it outside of class or academic world. This particular group just has interesting focusing levels. I was surprised that not much was talked about.

In response to the question, “What dimension of the program you felt the children responded to the most?” two predominant aspects surfaced: (a) the use of animals to teach mindfulness and its capacity to offer children concrete examples that students can relate to, and (b) mindful walking for its applicability within school environments. Appreciation for journaling was also mentioned for its symbolic and reflective component, as well as the Daily Dives for their capacity to offer weekly program continuity on the days that the expert trainer was not teaching in class. The program also offered tools to children who otherwise would not have access to such rich learning at home. The following statements are samples of the teachers’ responses.

- I think the dimension they responded to the most was the interaction of the animals and the visuals. That’s what they latch onto.

- It streamlined for us, because we went to camp, and camp was in the ocean, and so I think all the animals, that meant something more to them than if you'd done it with them last year, because they didn't have that experience with the ocean, and what it feels like to be in the ocean. So, that was wonderful.
- I guess I would say they really liked the animals. They were really interested and curious as to what was on the screen each day and they liked watching the little videos, and I think the connection between those animals really brought it to life for them. It wasn't just you telling them to sit up straight. They had something that visualized the blue heron, and they got to learn about new animals in the process, too.
- I think they found calmness in relating to the animals, the harmony of the animals, and the environment. I wish the videos had been longer because they were just so beautiful. I think a few times they asked to see it again and have you play it again. Especially living close by the ocean, I think a lot of them have a connection to the sea animals and sea life.
- I think . . . the movement piece, and I guess because it's more noticeable to an observer, but just having students stand up in a slow pace or walk around the room as slow as they can. It's so different from . . . (usual). I think just the way that our society works, I feel like everyone's always in a hurry and so to take the time to walk slowly, it was a shock to some of them. I think a lot of them, because of those movements that you did, became more aware of their body in general and how it affects others around them.
- I really enjoyed actually the walking mindfulness because that's something in class and in school that we do all the time, how to walk in the hallways and how to walk outside in recess.
- I really liked the journaling. I thought that was very interesting. I was impressed that the kids were able to be symbolic about their feelings. It was effortless to them.
- I would just turn it (Daily Dives) on and they would hear that and they knew exactly what to do. I liked how even when you weren't here, we had that to continue each day.
- I also think it's so beneficial for these children that might not have that example at home. When we're talking about busy lives, hectic schedules, parents working multiple jobs, and brothers and sisters raising them, I think they don't ever have that time where they get to just be with themselves, their breath, and thinking things through.

In response to the question, "How do you feel that Embodied-Mindfulness contributed to: intrapersonal changes interpersonal changes, or overall happiness of children?" teachers were more inclined to report Interpersonal (IS) changes in relationship with improvements to school functioning (SF). These included increased sensitivity and awareness of others, as well as improvements in attentionality (more focused and calm). Intrapersonal (IaS) changes were also suggested in that the students who participated in mindfulness were given an opportunity to quiet

down and reflect, something that is often not experienced in today's fast-paced society and education system. It is also noted that 1 teacher was not able to observe any changes with her class. The following passages represent a sample of the teachers' statements.

- I would notice just like a general, like I've said before, a general calmness, a general sensitivity to others when it was on the forefront of their brain. I think that that's the way I would notice it the most was how the rest of the day went after that session and the importance of doing the daily practice because then you're just training yourself all the time. I don't know. It was a gift when you came in 2 days a week because I know that they were very aware of those things for the rest of the day. How wonderful it would be if they had that every day so that it became such a life habit.
- Generally speaking, yes. There wasn't one thing that stood out, not one moment but from the beginning of the year since you arrived as well since we started right at the beginning, we've talked about treating other people how you want to be treated. I feel like it was just really an added bonus to see it through a different lens.
- The beginning of the year, there were some girl drama issues on the playground and that seems to have subsided a little bit. I don't know if that's because they're thinking about how their actions affect others and how they make other people feel. I'm hoping that that was the case.
- I think that the Daily Dives and that quiet meditation time helped the most with intrapersonal . . . just because I don't know how often kids, or anyone really, has time to stop and reflect in our world today so just that quiet time when you're not sleeping, you're not thinking about what you have to do for the day, to reflect on yourself and how you're feeling is I think the biggest impact for just individual students.
- I would say compared to the beginning of the year, things have definitely calmed down a little bit. We still have our moments with high energy levels, but I think overall, it's helped with the students to be more focused and calm and to have that reflective time.
- I feel like it helped, but I don't have the examples to prove it.
- I can't say that I saw a big change in that (interpersonal classroom behavior), but I know they're more aware of it because they brought it up several times.

In response to the question, "What aspect of the innerU curriculum stood out for you, if any, and why?" it is noted that no overarching quality emerged from asking teachers to identify what aspects of the curriculum stood out for them. A wide spectrum of attributes was mentioned. This might point to the breadth of the program and its ability to reach different people in their various personal needs. Teachers commented on the curriculum's ability to bring awareness to the senses; to offer concrete tools for various life circumstances; to provide self-regulating skills;

to offer the ocean theme as a vehicle to better understand mindfulness; and to provide the Daily Dives for their soothing effects and program continuity. The following passages offer exemplars of teachers' statements.

- The content was just right at their level. They were able to, like you said, identify with the animals and just really latch onto I think the senses like the mindful listening and the mindful hearing and then realizing that our whole life is lived through our senses. That just means that being mindful impacts everything about who we are. There's not anything that we don't do mindfully. I think that that's what they realized at the end is that is there anything that you don't mindfully do? No. I can apply this all the time.
- I think one of the most powerful parts of what you told us, for me at least . . . I forget what class it was . . . but you said you always have your breath wherever you go, so I thought that was interesting because any time that you're feeling angry or stressed, you have your breath to come back to, and so, I've even used that myself. I don't know about my students necessarily, but I thought that was powerful. . . . I would say a few aspects of it, the animal connection, I think, is one of them we already talked about, but also just the movement piece.
- I think the thing I've noticed with this group that they need the most is just the ability to just settle down. Sometimes it's great to run around and be wild and crazy, but there's other times that there's a message you need to hear or you need to have a quiet moment. I think that the parts that helped them with focusing their thoughts and calming their body, I think that's what they needed the most. Those were the parts I appreciated the most. Then I also appreciated the other ones, too, because it's important to think about the way you treat people and other people's reactions and emotions. I think that's what they really needed.
- I do think the ocean aspect was very helpful with the animals, the different things. Some kids in here just absolutely love dolphins, and when that came up, it was like you could see them, "Oh yeah, I get it," so I think that was a really good thing. The bell . . . .
- I loved the gong or the bell. I loved how that was in the Daily Dives, too and for some reason, that was just like this beautiful sound . . . then definitely the sitting and the breathing. I think they were all great.
- I like the heartfelt part. The whole thing was great. It's hard to pick one specific example, but I'm hoping—I was going to ask you if we keep the Daily Dives and if we can still keep doing that aspect.

Final teacher comments included an appreciation for how the program offered children an opportunity to immediately integrate and benefit from the various practices taught throughout the program, while offering tools for development of Self and self-esteem. The following passages represent the final interview comments.

- I appreciated it because I felt like the students could instantly use it. Any time a child can instantly connect with something then they're more likely to engage with it more. I already told you but I thought that the length of time was perfect. I felt that they really loved the interaction, the visuals, and the videos. They loved to come up and ring the bell. I just felt like it was an opportunity where they all felt successful no matter what. Any time you can do that, that's just awesome. I have nothing but positive things to say about it.
- The other thing, too that, just as a teacher, I think probably my number one goal is to create a safe environment because I don't think that any learning will go on if you don't feel completely safe. We work hard on that the beginning of the year. To me that was gratifying in a sense to know that we had a student that could sit on the ground and no one even blinked. Other students said things that was maybe unusual to them and they just . . . . It was really great to see that they could just 100% be themselves and not worry about what someone else was going to think.
- I appreciate your time. I think it was a benefit to the classroom. Thank you. I really liked the animal connections. I think that for anyone, especially a group in Santa Barbara that lives by the ocean, it's something that's so real to them. Yeah, I appreciate it. We'll keep using the language in our classroom.

**Teachers' experience of mindfulness training.** In response to the question, "How did the curriculum personally benefit you, if at all?" 100% of the teachers expressed appreciation for the curriculum supporting them in and out of class. In general, teachers expressed appreciation for the program to offer them an opportunity to step back, relax from a frantic teaching pace, and take a break. Other ways the program personally benefited the teachers in class included that it gave them a moment to rejuvenate, helped cultivate patience, and fostered acceptance. The program also positively influenced teachers in their personal lives. Perceived benefits were marked by its helping to relieve stress, providing a gentle reminder of balanced living, and helping to cultivate greater awareness. The following statements mark comments that depict how teachers were personally influenced by the program.

- Just that I enjoyed it on a personal level. I enjoyed it on a level of being a teacher and felt it was very accessible and something that I could use instantly.
- I feel like, for me, it affected me . . . .
- As a teacher that's the number one thing that we don't get (quiet time). You're going, going, going. There's always the next thing to do. That's exhausting for sure . . . I was able to relax and I definitely felt after you left like just a deep level of calm. As far as teaching went, I got a break from that kind of frantic pace and it was just more

- . . . I totally used it in my personal life. Just in various moments like I'm running late in the car and just like, oh yes, it does not matter at all if I'm 4 minutes later than I planned. I just have to just accept it and just move on and I for sure practice that myself.
- I guess I didn't consider it all any implication on myself. Just the opportunity for myself to sit here and have all these gentle reminders of a better way to live.
  - I feel like it has affected me in all different ways, in the classroom, but also at home. As I said before, the part that you said about you have your breath anywhere you go, so if I'm ever feeling stressed at home for whatever reason, I can just stop and take a moment to just take a few breaths, because I think sometimes I must not breathe deeply enough, not get enough oxygen, and sometimes in the classroom. I'll feel like I'm a little bit stressed and I start feeling tension in my shoulders for whatever reason, and if I stop myself and take a deep breath in the classroom, I think it really helps me to have more patience.
  - I found the act of concentrating on something real that you can see, that you can imagine, that was new to me. I'd never done that. I thought that was really helpful. A lot of the lessons that you are teaching, I've had some exposure to in different ways in the past, but I felt like the visual of whatever it was in the ocean, letting that be our teacher, for me, that was new and really helpful, and, I think especially great for the kids, because it's so hard for them to think abstractly at this age and they're much more literal. I thought that was beneficial for me. I found myself, sometimes in my life in a stressful situation, like picturing some of the videos and trying to channel that energy.
  - It was nice for me to take a step back, participate, let you run the show, and I could actually do it with you. I know, and I enjoyed that, because we definitely need more mindfulness this year with ourselves.

**Teachers' awareness of mindfulness program value.** In response to the questions, "Do you feel that Embodied-Mindfulness, such as is taught in the innerU curriculum could be beneficial as a regular practice in classrooms, on a regular basis, and why?" 100% of teachers agreed that it would help with overall school functioning (SF). Perceived areas of improvement included: developing awareness, resiliency and focus, offer a vehicle for easier class transitions, and support children who come from difficult home environments. SF benefits were marked by 4 of the 5 teachers with statements such as those that follow:

- I think it's beneficial because it just creates a mind frame that allows you to tackle perhaps harder and more challenging things throughout the day. Even if we're doing something really difficult in math then we just have an awareness like this is hard and that's okay so I'm going to work a little harder and move on from there. I think ideally it would only be beneficial.

- Yes, definitely. I feel like in all ways, it benefits the students and the teachers and everyone involved, and it really doesn't take up that much time in your day and the time that you're spending to do that probably makes up for time later on when students aren't being focused, so even if you're just doing your Daily Dive for 1 or 2 minutes, that really helps to center the students and let them focus on what they're supposed to be doing in class. I'm sure it benefits time in general later on.
- I feel like it makes it easier to transition or to listen to the next instruction. I like the way that you did it.
- Being tired. Then oftentimes when they go home, it's not just a relaxing day at home. Sometimes their school day is the most [calm] part of their day because when they go home, they might go home to chaos. . . . Of course, yes. You should come all year long. Yeah. I would say the program was just too short.
- I think by far it can benefit every classroom.

The teacher interviews provided reference to the perceived class experience as a result of regular engagement in Embodied-Mindfulness-based practice. Figure 31 depicts the emergent themes, subthemes, and essential qualities that arose from the thematic content analysis of the teacher interviews.

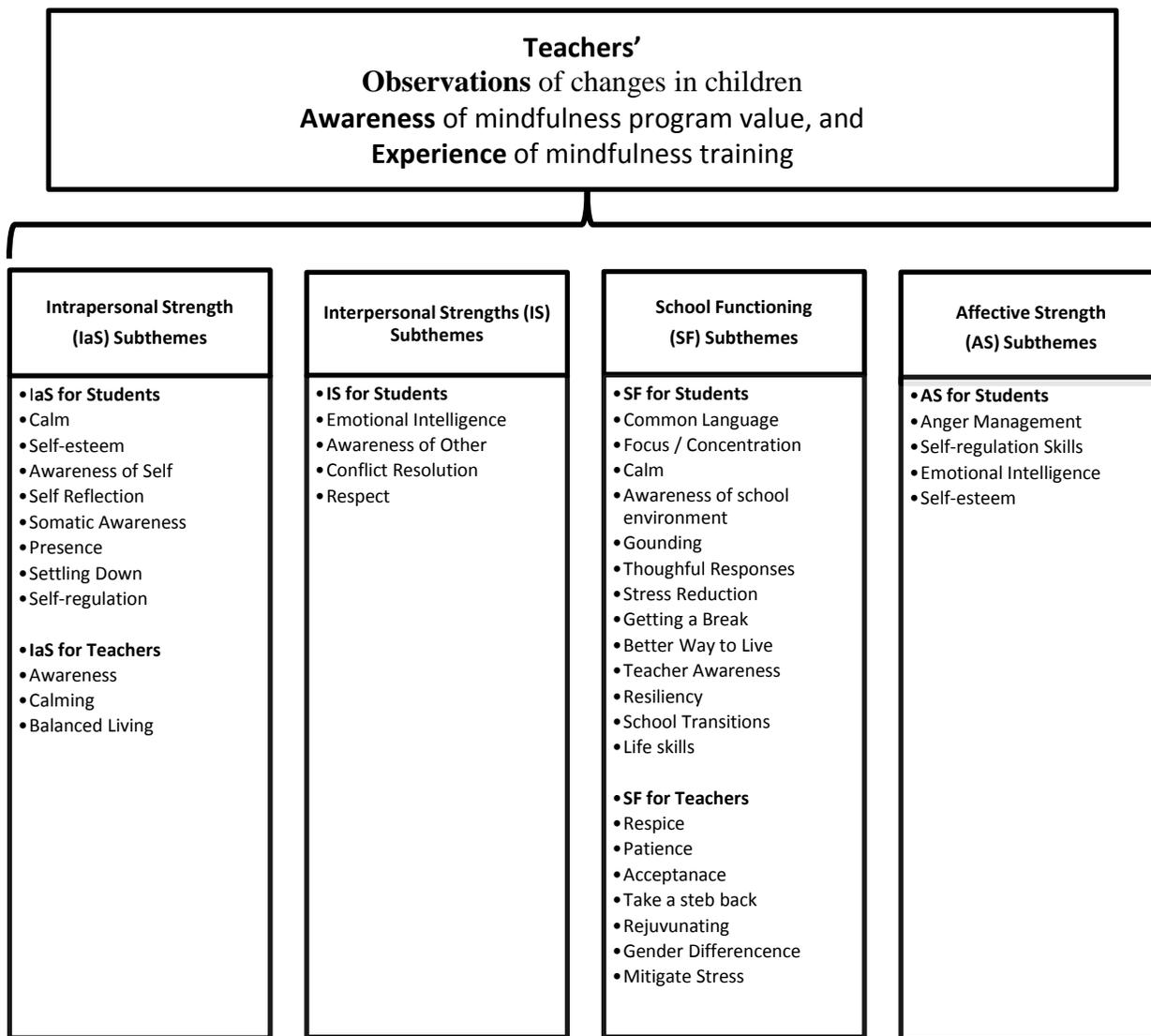


Figure 31. Depicts the themes, subthemes, and qualities extracted from the teachers' interviews.

### Summary of Interviews

Qualitative students' and teachers' interview analysis was enlightening, rich, and meaningful in that it offered insight into deeper overarching themes, subthemes, and patterns that were not explicitly prevalent in student journals. The overarching themes included Perceptions, Observations, Awareness, and Experiences. The process allowed for gaining a better understanding of the intricacies and depths of qualitative research and its capacity to uncover the complexity of students' embodied experiences, ideologies, and perspectives with regards to

mindfulness, as well as their teachers' observations. A greater appreciation on behalf of the researcher was also gained in better understanding qualitative research and its capacity to hold a more fluid, personal, and respectful container in which both the researcher and the participants are invited to be transformed by their respective experiences. The qualitative dimension seemed to be essential in researching the subtle and personally sensitive emotions often associated with the intrapersonal, interpersonal, and transpersonal dynamics that emerge in the process of contemplative practices. In addition, it became clear how qualitative research opens portals into the unseen, the transpersonal, and phenomena that cannot be behaviorally observed or quantitatively measured, and which are often only uncovered through only the richness of personal interviewing.

**Children's interviews.** In addition to uncovering meaningful mindfulness themes and better understanding the children's appreciation for mindfulness practices, the children's interview process allowed participants to be touched in a deeper way by their experience through reflection. It was deeply moving to witness the awakening that unfolded during the interview process itself. This was a true gift. Interviews were also instrumental in better understanding the impact of mindfulness in children. It is important to note that 100% of the students interviewed appreciated the eco or nature centric approach of the program, reported having positive outcomes as a result of practicing mindfulness, and felt that mindfulness should be taught in schools. It is also noted that students seemed to have a slight preference for moving and healthfulness practices over other forms of practices.

**Teachers' interviews.** Although all teachers felt that the innerU Embodied-Mindfulness program was beneficial overall, teachers initially had difficulty observing general class changes as a result of the program's implementation. Despite this initial difficulty, further exploration

revealed that teachers observed individual and class benefits that mostly revolved around school functioning (SF) concerns with 100% of teachers expressing noticeable changes in school functioning (SF) as a result of the mindfulness program. Such SF benefits included the following: the introduction of a common language that contributed to easier class transitions, helped to improve individual and class awareness, offered a means to solicit thoughtful responses, supported focusing and attentionality skills, and favored a more peaceful class environment. In addition to observing improvements in class functioning, teachers also noted the program's ability to influence IaS, which impacted them in class as well as in their personal lives. These IaS in teachers included an opportunity for teachers to have a time to pause and ground themselves in the midst of a very busy teaching schedule, and in turn cultivate patience in class. Teachers felt that the program provided them a stress management and stress reduction vehicle, helped them heighten their own self-awareness, and offered them a reminder to cultivate healthy living practices.

It was noted by teachers that the program supported students with developing Interpersonal Strengths (IS) such as with emotional intelligence development, awareness and respect, and conflict resolution skills. Teachers also pointed to the benefits of mindfulness in supporting student academic resiliency. It was noted that certain students were better able to cope with more challenging academic tasks as a result of mindfulness practices. Other teacher observations included the students' capacity to bring greater awareness to class environments, improved capacity to self-regulate and manage anger, cultivate self-esteem, and foster somatic awareness.

Several areas of inquiry revealed unanimity in teachers' responses. These include observable gender differences, the value of a nature centric approach to teaching mindfulness,

and the inclusion of mindfulness in schools as a regular practice. Gender differences were observed by all teachers, and it was revealed that boys were more uncomfortable practicing mindfulness, less focused, and more agitated, while girls were observed to be more compliant, engaged, and participatory in the program. Another area where teachers were unanimous in their responses was with regard to how the innerU Embodied-Mindfulness program presented its curriculum. All teachers pointed to the benefits of using a nature centric approach to teaching mindfulness. Benefits of using animals as mindfulness teachers included providing concrete examples of mindfulness that might often be too abstract for primary school children, helping to cultivate an interaction and connection to nature and our ocean environments, offering powerful visualizations for students to retain, engaging students' curiosity and sense of exploration, and cultivating a primal state of calmness often associated with one's relationship with nature itself. One teacher summed it up by stating, "The connection between those animals really brought it to life for them." Finally, teachers unanimously agreed that the inclusion of a mindfulness-based curriculum would generally benefit school environments.

### **Integrative Summary and Discussion**

This Explanatory Mixed-Method study was conducted to evaluate the effects of a mindfulness curriculum that featured embodied mindfulness practices in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, and affective strengths of primary school children ages 9-12. It also served to elicit a better understanding of the influences of mindfulness-based training in fostering a sense of wellbeing and happiness within the context of primary school settings. It is important to re-iterate the value of an explanatory mixed method design in that it serves to use a qualitative strand to explain initial quantitative results (Creswell, 2011). According to the quantitative data presented, no

significant differences were found between the intervention group and the control group for both the student and the teacher Behavioral and Emotional Rating Scales (BERS-2; Epstein, 2004).

The qualitative measures (visual journals, and interviews with exemplar students and all teachers) were not designed to compare the study and control groups. In contrast, this dimension of the study presented markedly positive outcomes, pointing to students' wellbeing trends as a result of implementing the mindfulness program in the three California primary schools. Given that the control group also engaged in an enrichment activity (i.e., quiet reading), it is possible that the selected scales were not designed to measure differences in dimensions of wellbeing uniquely characterized by mindfulness practices. Had the researcher had chosen to use a mindfulness scale (e.g., MASS-C, Lawlor, Schonert-Reichl, Gadermann, & Zumbo, 2014), it may potentially have served as a more accurate instrument for the purpose of this research.

Another potential reason for the discrepancy between the quantitative and qualitative outcomes may be attributed to the short duration of the study. A longitudinal design might have resulted in increased differences between the study and control groups, as the skills, strengths, and attributes the teachers and participating children identified would have the chance to build and manifest more consistently. It may be argued that strength-based behavioral outcomes require longer periods of integration than the 2 month designated period of the study. Further research would be required to validate this argument.

Despite the above mentioned overall yielding of discrepant results, further exploration of the BERS-2 Student Scale was conducted to isolate potential subscale changes, which resulted in a significant interaction in Family Functioning (FS)  $F(1, 182) = 7.601, p = 0.006$ . This was revealed between intervention and time, indicating intervention effect on family involvement. This might be explained by the nature of the intervention, which encouraged students to practice

mindfulness at home with their family members, while children in the control group were not instructed to extend their enrichment activity to the home environment. Such findings were also supported by student interviews with 90% of students expressing an increase in family involvement. Family involvement was marked by (a) sharing their newly acquired mindfulness skill with family members, (b) engaging in mindfulness practices with family members, and/or (c) incorporating learned constructs with the home environment.

BERS-2 Teacher assessments of Interpersonal (IS) and School Functioning (SF) subscales also presented congruency with teacher interview findings. A significant four-way interaction among time, gender, school, and intervention group was identified within the BERS-2 Teacher School Functioning (SF) subscale  $F(1, 180) = 5.1222, p = 0.007$ . As has been anticipated, teacher interviews also pointed to a similar finding with 100% of the teachers demonstrating a greater concern for school functioning over other dimensions of wellbeing. In contrast to the BERS-2 SF subscale, which concerned itself with the child's ability to complete school task, maintain attention, and evaluate academic performances, teachers were not able to observe similar changes in the classroom. Teachers' school functioning concerns resolved around (a) ease of class transitions, (b) improvement of individual and class awareness and thoughtful responses, enhanced attention skills, and (c) the cultivation of a more peaceful class environment. School functioning was also marked by the teachers' ability to be more relaxed, grounded, accepting, and patient in class. It is proposed that the qualitative findings act here to augment the BERS-2 Teacher Scale SF findings to include aspects of school functioning that were not covered in the BESR-2 measure. By the same token, the richness of findings derived from the qualitative dimension of the study unexpectedly reversed the prominence of this

method, resulting in the quantitative findings becoming less informative than did the qualitative outcomes.

In further exploring school differences found in the BERS-2 Teacher Scale, Schools 1 and 2 presented no significant improvement in score, while School 3 scores significantly improved  $F(1, 45) = 5.251, p = 0.027$  over the control group. This significance was primarily driven by a gender difference in females who in the intervention group improved significantly  $F(1, 24) = 8.042, p = 0.009$  over boys. This is congruent with other mindfulness studies indicating gender differences (Samuelson, Carmody, Kabat-Zinn, & Bratt, 2007; Semple, 2010). This finding was also supported by the qualitative interview findings, which observed that the girls of all schools and classes participated more readily and engaged consistently in the mindfulness practices in comparison to the boys. Because only one school presented such a trend, gender bias on the part of the teachers (all female) was eliminated as probable cause of this trend. This being said, developmental considerations might have also accounted for this discrepancy in results. School 2 was represented by upper-grades students (5th and 6th grade), often more developmentally mature in comparison to 4th grade students. This gap could potentially be compounded by gender differences also prevalent at these ages (Craine, 2011). Such differences also support a gender difference in academic performances, where girls are in general more successful in school than are boys (Weis, Heikamp, & Trommsdorff, 2013).

Finally, after analyzing all BERS-2 student and teacher subscales, it was deemed important to identify pretreatment differences. Within the BERS-2 Student Scale, data indicated a noticeable pretreatment difference in schools and genders, exhibited by significantly lower pretreatment scores. It is suggested that these differences could be driving some of the BERS-2 Student Scale results (or lack thereof), detailed above. To account for these pretreatment

variances it was deemed appropriate to control for pretreatment differences. BERS-2 scales were reexamined while covarying for pre-intervention LSS and HS scores. A significant correlation was identified in BERS-2 Student Scores  $F(1, 169) = 4.332, p = 0.039$ . Such a finding may also be supported by similar trends in children's visual journals and interviews, where significant changes in interpersonal, intrapersonal, affective strength, school functioning, and family involvement characteristics were identified by students and, to some extent, by teachers. This analysis was repeated for the BERS-2 Teachers Score, revealing no effect in results, as had been anticipated.

The Student's Life Satisfaction Scale (SLSS; Huebner et al., 2003) presented an overall trend among time, gender, school, and intervention,  $F(1, 164) = 2.833, p = 0.062$ . Further inquiry indicated a significant interaction between time and intervention within school 2,  $F(1, 68) = 7.599, p = 0.007$  but not within schools 1 and 3. Upon further examination, this change was marked by the intervention group's improving significantly within school 2 males. These results also point toward gender differences, although the finding is not congruent with the above mentioned trends. In reviewing the data, this researcher found that females improved in LLS score in all schools in comparison to a slight decrease in LSS scores with boys from schools 1 and 3 and an increase in score with boys of school 2.

It is notable that 64.9% of the students from school 1 and 79.8% of the students from school 3 were from socioeconomically disadvantaged families. Students from socioeconomically disadvantaged families represented only 41.4% of the students of the school 2 population. Such a gap in economic status might have contributed to incongruent LSS results. Because socioeconomic data were not collected at the time of survey and correlated to each individual child, it was not possible to isolate for this variable in this current study. This noted,

improvements in student life satisfaction were also supported by student interviews. Although no interview directly inquired about the students' overall life satisfaction as a result of mindfulness, all students interviewed reported experiencing noticeable changes in their lives that contributed to an overall sense of life satisfaction. Comments included mention of improvements in family functioning, academic performance, self-esteem, happiness, resiliency, and friendships to name a few. Finally, the Children's Happiness Scale (Morgan, 2012) showed no intervention influence despite noticeable changes in affect within the student journals and interviews. Evidence of trends towards feeling happier as a result of the mindfulness program included statements such as: feeling better about oneself, happier with friends, and feeling thankful and happier overall. Such discrepancy of results may also be explained by the scale's sensitivity, or by its lack thereof.

Despite the inherent challenges in reconciling apparently conflicting findings from both quantitative and qualitative dimensions of this study, student visual journals collected throughout the intervention offered insight into the hidden embodied phenomenon of wellbeing experienced by children. The creative expression segment of this study not only provided the children with a visual tool that acted as a bridge into their inner world, it also offered students an opportunity to witness noticeable, yet subtle intrapersonal changes as a result of practicing mindfulness. Without the inclusion of such a measure, subtle intrapersonal changes would have otherwise been omitted from traditional quantitative research methods. In the context of this study, although the Children's Happiness Scale demonstrated no significant change over time, student journals pointed to a noticeable trend toward happiness with a mean of 19.7 % of student journals indicating a weekly movement toward happiness after mindfulness. This number rose to 60% when heartfulness classes were taught. It might be argued that this intrapersonal expression

of happiness may be more in line with **intrinsic** constructs of happiness found in traditional Buddhist principles, where is described as a goal of practice “the realization of a state of wellbeing that is not contingent on the presence of pleasurable stimuli, either external or internal” (Wallace, 2006).

The data from each of the three research segments conducted in this research may be organized in a three-tier model. This model, represented by Figure 32, is composed of (a) conscious and explicit expressions of wellbeing that are easily identifiable via quantitative measures, (b) conscious and reflective expressions and manifestations of wellbeing as informed by interviews, and (c) unconscious and more subtle somatic influences and expressions of wellbeing that were identified via journaling. It is important to note that student interviews offered the broadest manifestation of wellbeing through the students’ capacity to relate to all five domains of wellbeing as identified by strength-base attributes such as Intrapersonal (IaS), Interpersonal (IS), School Functioning (SF), Affect Strengths (AS), and Family Involvement (FI).

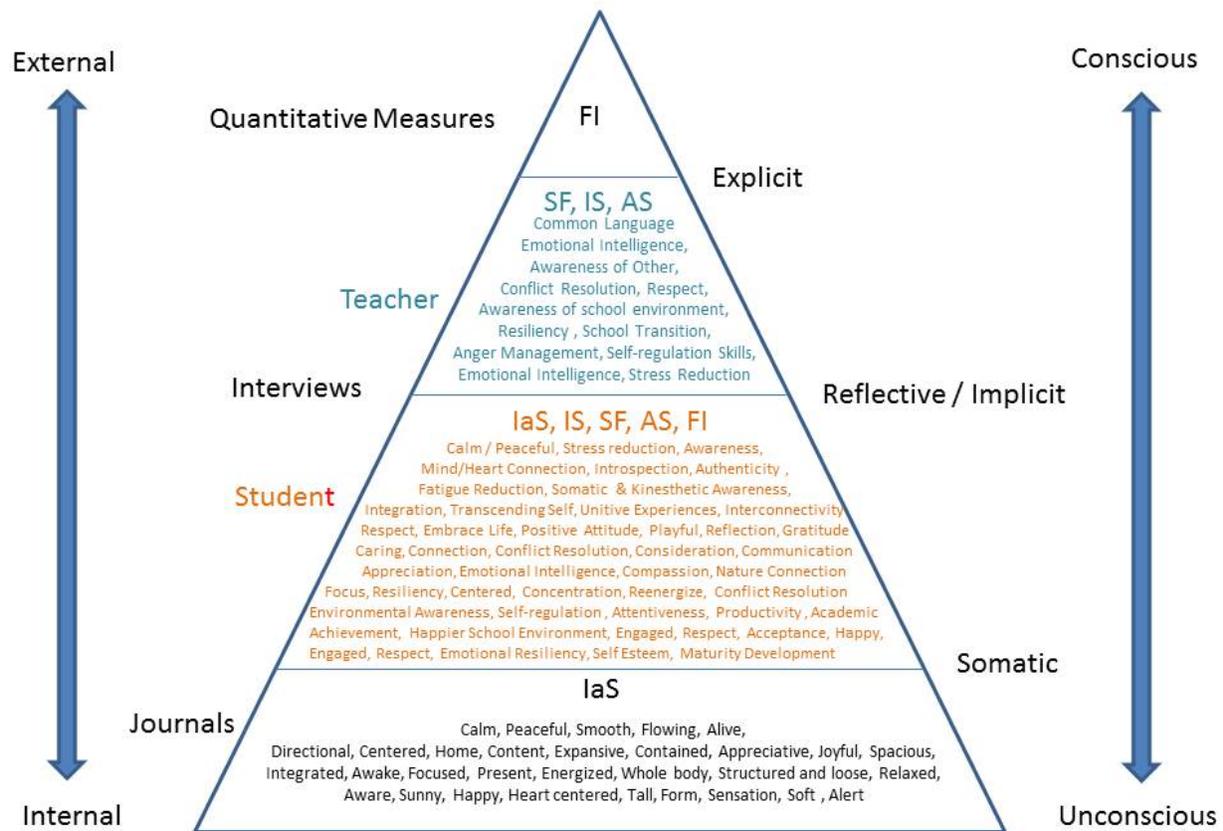


Figure 32. Overall findings comparison.

Qualitative measures offered a rich understanding of the inner dynamics associated with states of wellbeing while more explicit dimensions seemed to be reflected through observable states of existence, meaning that they are represented through the manifestation of action and observation. Somatic unconscious states seemed to reveal baseline states of existence that inform and permeate both implicit and explicit dimensions and expressions of being.

In reviewing emergent common themes that flourished from all three qualitative measures used in this research, the following chart (Figure 33) represents commonalities between two or three of the qualitative measures, whether they be student interviews, teacher interviews, or student journals. Words marked in orange represent qualities common to all 3

measures (student interview, teacher interviews, and journals), while words in blue represent qualities common to only 2 measures, and words in green represent qualities found in only 1 measure. Qualities common to both student interviews and journals are marked with two asterisks \*\*.

Intrapersonal Strength (IaS) Subthemes	Interpersonal Strengths (IS) Subthemes	Family Involvement (FI) Subthemes	School Functioning (SF) Subthemes	Affective Strength (AS) Subthemes
<ul style="list-style-type: none"> <li>• Awareness **</li> <li>• Calm / Peaceful **</li> <li>• Integration**</li> <li>• Mind/Heart **</li> <li>• Unitive Experiences**</li> <li>• Self-awareness **</li> <li>• Somatic Exploration **</li> <li>• Interconnectivity **</li> <li>• Kinesthetic Awareness</li> <li>• Reflection</li> <li>• Connection</li> <li>• Respect</li> <li>• Embrace Life</li> <li>• Positive Attitude</li> <li>• Playful</li> <li>• Authenticity</li> <li>• Introspection</li> <li>• Stress reduction</li> <li>• Transcending Self</li> <li>• Fatigue Reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Respect</li> <li>• Awareness of Others</li> <li>• Emotional Intelligence</li> <li>• Conflict Resolution</li> <li>• Gratitude</li> <li>• Caring</li> <li>• Connection</li> <li>• Consideration</li> <li>• Communication</li> <li>• Acceptance</li> <li>• Appreciation</li> <li>• Compassion</li> <li>• Consciousness</li> <li>• Peace on Earth</li> <li>• Nature Connection</li> <li>• Respect (Others and Environment)</li> <li>• Altruistic Behavior</li> <li>• Discovery</li> <li>• Generosity</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding</li> <li>• Communication</li> <li>• Sharing</li> </ul>	<ul style="list-style-type: none"> <li>• Focus**</li> <li>• Resiliency</li> <li>• Reenergize</li> <li>• Environmental Awareness</li> <li>• Respite from fast paced lifestyle</li> <li>• Conflict Resolution</li> <li>• Centered</li> <li>• Concentration</li> <li>• Self-regulation</li> <li>• Attentiveness</li> <li>• Productivity</li> <li>• Academic Achievement</li> <li>• Calm School</li> <li>• Happier School Environment</li> <li>• Engaged</li> <li>• Respect</li> </ul>	<ul style="list-style-type: none"> <li>• Happiness**</li> <li>• Joyful**</li> <li>• Emotional Intelligence</li> <li>• Self Esteem</li> <li>• Self-regulation</li> <li>• Maturity Development</li> <li>• Excited</li> <li>• Emotional Resiliency</li> </ul>

Figure 33. Commonalities between qualitative findings sets.

### Strengths and Limitations with Recommendations

**Strengths.** The data gathered in this study revealed a range of findings, with differences in significance found between the qualitative and quantitative investigations aimed at evaluating the effects of mindfulness on wellbeing. In light of such mixed results, further investigation is warranted. Various strengths and limitations have been identified in this study. Among the strengths of this study are the relatively large sample size, the inclusion of a control group, and the use of both quantitative and qualitative measures to evaluate the impact on wellbeing. In addition, other strengths of the research include the use of data points that accounted for the students' nonverbal experiential state. It is important to note that this inclusion also offered a

data set that was gathered during the intervention rather than solely relying on pre and postdata gathering sets that may be skewed in various ways. Inclusion of nonverbal expression, however, allowed for the exploration of both conscious and subconscious levels of the human experience and the recollection of experience as presented in children's "before" and "after" drawings.

**Limitations.** This study also had several limitations. Although internal validity was maximized through a careful research design, operational definitions, and measured variables, the complexity of the research model involving multiple schools and teachers might have hindered internal validity. In addition to potential internal validity concerns, another limitation of the study was that despite efforts made to ensure a control group, random sampling was conducted by class versus on an individual basis, a practice that did not allow the researcher to control for variations in socioeconomic composition, gender, and ethnic diversity. This being said, the randomization of groups is more appropriate than the randomization of individuals in studies of curricular intervention (St. Pierre & Rossi, 2006). Although the researcher was aware of the limitation of class randomization and of the inability to create group cohesiveness amongst the intervention and control groups, the researcher adopted group/class randomization based on school operation considerations, as well as on the appropriateness of group randomization for mindfulness curriculum evaluation.

Further, as data were collected at pre and postintervention, students of the 4th grade level commented on the length of the test measures themselves. Students and teachers of the 4th grade level felt that the test measures were too long for this age group. Although the researcher accounted for this factor by administering the test measures separately to ensure that students would not get fatigued by them, students commented on the length of the BER-2 Student Scale length as being too long. Future studies might benefit from simplifying the research design and

administering less time consuming measures. In addition, teachers were also required to evaluate each child with a 20-item questionnaire. Although the questionnaire took on average 1.5 hours to complete (for all students in a class) at both pre and postintervention (totaling 3 hours), teachers felt burdened by this process due to existing school district curriculum demands. Future research would benefit by gathering teacher/student information by utilizing a simpler measures or by employing existing school measures.

Another limitation of the current study is that despite a relatively large sample size ensuring reliability, due to the scope of this research, the qualitative portion of this study depended on children's, teachers', and the researcher's subjective accounts to determine the program's effect on wellbeing. Due to the lack of good self-report scales for children (Semple, 2010), future studies would benefit from a longitudinal design, which will enable the implementation of measuring students' wellbeing outcomes by incorporating objective measures such as pre and postcognitive evaluations, school attendance or sick days, as well as changes in the development of nonverbal expression over time (e.g., body language and creative expression) via teachers' and school psychologists and counselors periodic records. Additionally, this study did not target measurement of the program's mindfulness features, specifically, when comparing to a control group that was also, theoretically engaged in a relaxing enrichment activity (i.e., quiet reading) that was less structured and had its intrinsic value. Further research might benefit from including a mindfulness scale such as the Child and Adolescent Mindfulness Measure (CAMM; Greco et al., 2011) or cognitive attentionality measures to ensure the effectiveness of the program in cultivating mindfulness. Additional research will be required to account for this initial research oversight.

Another noted limitation of the study is that it did not account for socioeconomic biases. Although socioeconomic data were gathered by school, these demographics were not accounted for in regard to each individual student at the time of data gathering. Due to the noticeable result differences among schools with a higher percentage of low socioeconomic background families versus schools with a lower percentage of low socioeconomic background families, future research would benefit from capturing socioeconomic demographics and exploring the effect of this factor on students' response to mindfulness education. This suggestion rests on the assumption that socioeconomics are tied to education and cultural values and that the language offered by mindfulness practices benefits from relative familiarity with the tenets of the practice, as well as from at-home reinforcement of these values. The latter might prove challenging in homes where parents have less time to interact due to the parents' long work hours, or where older siblings who are not introduced to the practice might diminish its intrapersonal and interpersonal value to their younger siblings.

Several qualitative study limitations were also observed. Qualitative analysis is inherently intuitive and subjective, especially when it comes to visual data. Inclusion of data (e.g., students' drawings, verbatim quotes from interviews) was intended to bolster the validity of the qualitative analysis, as it will remain open to readers' critique. The current study invited students to journal both mindfulness experiences (how they felt prior to mindfulness and how they felt after mindfulness) in their journals [concurrently](#) following the weekly intervention. Although the creative expression journaling revealed significant meaningful findings, future research may benefit by administering the first journal entry prior to the weekly intervention. This would require students to draw their premindfulness experience drawing prior to the intervention each week. In addition, the current study administered journaling only once a week, its frequency,

therefor, corresponding to only 50% of the mindfulness lessons taught. Further research would benefit by including data from all 16 mindfulness classes. Students were also invited to engage in this practice using school resources, which included crayons and markers. This practice increased the complexity of journal analysis as students with markers could not be evaluated for penmanship intensity—meaning the degree of pressure at which a drawing is created. Such markers are critical in helping indicate the state of being of an individual. Providing all students with similar drawing tools, such as crayons, would help normalize analysis, establishing common analysis benchmarks, and ensure internal consistency. In addition, journal analysis and coding was conducted by a single individual (i.e., the researcher), with only minimal consultation with dissertation Chair, a situation potentially resulting in researcher bias. Future research would benefit from having multiple individuals analyze the journal data, independently, and then comparing analysis outcomes. This would help mitigate potential coding biases.

Another limitation of the study was the relatively small sample size of teacher interviews, even though this sample size is appropriate for qualitative designs, as they do not aim to be explanatory or to generalize the findings to a larger group. It is also noted that teacher interviews may have resulted in gender biases, as all 5 teachers were female. Although 87% of primary school teachers are women in the USA (The World Bank, 2015), future studies may benefit by increasing interview samples and incorporating interviews from male teachers.

A final limitation of the study points to the absence of an extended follow-up assessment. It is noted that the current study did not include a 3-months follow-up to establish the efficacy of the program over time, and, so, limited the validity of the results as they pertain to long-term effect and the assessment of trait versus state. Although the initial qualitative research pointed to moderate influences over time, it may be stipulated that movements in strength-based attributes

require a longer period of time to manifest themselves explicitly. A longitudinal approach to this research may provide insight into the positive impact of mindfulness in impacting strengths based attributes and wellbeing.

## **Conclusion**

This Explanatory Mixed-Method study evaluated the efficacy of a mindfulness-based curriculum in improving strength-based attributes such as intrapersonal and interpersonal relationships, school functioning, affective strengths, and family involvement of primary school children aged 9-12, as well as elicited a better understanding of the influences of embodied mindfulness-based training in fostering a sense of wellbeing and happiness within primary schools in Goleta, California. Although the research did not initially present quantitative findings to support that embodied mindfulness improved strength-based attributes in children as measured by the BERS-2, it was deemed important to reexamine the data after identifying pretreatment data differences. To account for such discrepancies, the data were covaried for pre-intervention Life Satisfaction and Happiness scores, revealing a significant correlation in wellbeing,  $F(1, 169) = 4.332, p = 0.039$ ; which also matched results obtained from the qualitative data retrieved from the children's visual journals and interviews. Other convergent findings included teacher assessments of School Functioning (SF) subscales that presented congruency with qualitative teacher interview findings. A significant four-way interaction between time, gender, school, and intervention group was identified within the BERS-2 Teacher School Functioning (SF) subscale  $F(1, 180) = 5.1222, p = 0.007$ . No significant trends were found with regards to the Students' Life Satisfaction Scale and the Happiness Scale, a finding that contradicted qualitative findings which suggests improvements in the children's overall sense of happiness.

Although the study yielded mixed results, qualitative findings using drawing journals and interviews with students and teachers offered encouraging evidence, suggesting the positive impact of mindfulness on wellbeing in primary school settings. Qualitative findings revealed agreement between student and teacher responses, despite the limited-duration of the program, reporting a noticeable impact in students' intrapersonal and school functioning strengths through cultivating a sense of self- and social-awareness, calm, inner peace, and focus, as well as interpersonal strengths such as respect, awareness of others, emotional intelligence with others, and conflict resolution.

This researcher identified stress reduction, resiliency, compassion, focus, academic achievement, and overall respect as key benefits of mindfulness training in school. Other seminal findings point to student and teacher unanimity in their appreciation for the program's nature-centric or indigenous curriculum approach. The use of nature-centric or indigenous approaches to teaching mindfulness facilitated the learning of novel mindfulness constructs in a tangible and relatable manner, and offered students transpersonal experiences such as self-expansion, appreciation of nature, a sense of community, and an experiential understanding of interconnectivity.

The current study also contributed to solidifying the importance of incorporating nonverbal, art-based test measures to evaluate the efficacy of mindfulness education and practice in schools. The creative expression segment of this study not only provided the children with a visual tool that acted as a bridge into their inner world but also offered students an opportunity to witness noticeable, yet subtle intrapersonal changes as a result of practicing mindfulness. Without the inclusion of such a measure, subtle intrapersonal changes would have otherwise gone unnoticed. In the context of this study, although the Children's Happiness Scale

demonstrated no significant change over time, student journals pointed to a noticeable trend toward happiness, indicating a weekly movement toward happiness after mindfulness. This trend increased when heartfulness classes were taught. It might be argued that the inclusion of students' nonverbal experiential state allowed for the exploration of both conscious and subconscious levels of the human experience. This research was not only seminal in helping to better comprehend the potential impact of mindfulness on wellbeing within primary school setting, it pointed to the importance of utilizing more nuanced, nonverbal assessment measures in otherwise a verbal and cognitive research-based orientation. It also offered a glimpse into the applicability of nature centric or indigenous ways of learning within mindfulness education.

### **Future Direction**

This research represents an initial attempt to identify a correlation between embodied mindfulness and wellbeing in children. Future research might benefit in deepening the understanding of the impact of nature centric or indigenous ways of knowing in order to teach mindfulness in comparison to using traditional vehicles of teaching mindfulness to children. In particular, a question arises: does a nature-centric mindfulness curriculum help bridge cross-cultural differences in learning and applying mindfulness principles? In addition to repeating this study with the appropriate assessment measures that would adequately measure mindfulness constructs, further research would be warranted to evaluate transpersonal dimensions such as compassion, altruism, and one's connection to nature. Questions that arise from future research of this phenomenon include, primarily, How does a nature centric approach cultivate a greater awareness of social enjoyment and environmental considerations? Other potential beneficial explorations would include gaining a better understanding of the potential correlation between embodied journaling drawings and neurological or vagal functioning during the intervention. In

addition to reevaluating mindfulness research practices in schools, future studies may benefit by incorporating transformative assessment measures that not only serve the researcher but also act as a vehicle for change for participants themselves.

As research continues to grow, a need is identified in incorporating richer, more nuanced, nonverbal assessment measures in otherwise a verbal and cognitive research-based orientation. Further research is required to validate such innovative nonverbal assessment measures.

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### Appendix A: Overview of innerU Embodied-Mindfulness Program for Children

Variable	Class Agenda	Embodied Interventions	Home practice
Class 1	Introduce Mindfulness Mindful Bodies Touch (Importance of touch)	<ul style="list-style-type: none"> <li>▪ Introduce still quiet place</li> <li>▪ Blue Heron’s guide to a mindful body</li> <li>▪ Dive into Motion: Touch experiment (touching figures overhead, rubbing hands)</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Mindful body in class and Touching mindfully at home
Class2	Mindful Listening and Breathing	<ul style="list-style-type: none"> <li>▪ Review of Mindful bodies</li> <li>▪ Introduce still quiet place while listening to the sound of whales</li> <li>▪ Share experience of listening</li> <li>▪ Dive into Motion: Exploring the movement of our breath and sound of whales breathing</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Discover sounds at home and in class with mindful listening
Class 3	Anchoring Your Breath	<ul style="list-style-type: none"> <li>▪ Review of mindful listening</li> <li>▪ Introduce the breath</li> <li>▪ Anchoring attention with our breath</li> <li>▪ Explore the Orca breath</li> <li>▪ Dive into Motion: Moving like kelp forests with each breath</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Engage in anchoring your breath while doing something at home
Class 4	Heartful Thoughts	<ul style="list-style-type: none"> <li>▪ Review and deepen mindful breathing</li> <li>▪ Introduce heartful thoughts: loving kindness, focusing on the heart, good thoughts for others</li> <li>▪ Dive into Motion: heartful like a sea star: concept of resilience, star shape standing meditation</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Send good thoughts to someone who you feel may need it this week
Class 5	Sensing Your Body in Awareness	<ul style="list-style-type: none"> <li>▪ Student guides mindful body intro</li> <li>▪ Integrating breathing, listening, and sensing – breathing into various body parts</li> <li>▪ Body Dive (Scan) practice</li> <li>▪ Share experience of sensing</li> </ul>	Sensing your body while you are playing

		<ul style="list-style-type: none"> <li>▪ Dive into Motion: Swim like dolphins with your hand</li> <li>▪ Journal</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	
Class 6	The Wandering Mind & Presence	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Review sensing your body listening</li> <li>▪ Explore wandering minds - the jellies</li> <li>▪ Dive into Motion: past, present, future through body movement, the nature of our minds</li> <li>▪ Share experience of wandering thoughts</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Noticing your thoughts in the next few days at home and in school
Class 7	Mindful Seeing	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Introduce mindful seeing and Mantis Shrimp</li> <li>▪ Mindful seeing practice</li> <li>▪ Share experience of mindful seeing</li> <li>▪ Dive into Motion: Head and eye movement</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Notice what you see and discover with mindful eyes in the next few days
Class 8	Heartful Gratitude	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Review mindful seeing</li> <li>▪ Introduce gratitude and practice cultivating gratitude</li> <li>▪ Share experience of thankfulness</li> <li>▪ Dive into Motion: Standing meditation by gathering gratitude with hands to heart</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Pay attention to the things in your life that you are grateful and hold them in your heart
Class 9	Mindful Emotions	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Review gratitude practice</li> <li>▪ Introduce mindful emotions like the tides of the ocean</li> <li>▪ Exploring motion in emotion</li> <li>▪ Dive into Motion: emotion and reaction verses emotion, mindfulness, and choice</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Notice your emotions in the next few days and explore how you emotions make you react
Class 10	Heartful Motions	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Review emotions</li> </ul>	Explore how you move in

		<ul style="list-style-type: none"> <li>▪ Introduce heartful motions like the Frog fish – slow and deliberate</li> <li>▪ Dive into Motion: Sitting and standing slowly</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	your world and how it is to move mindfully
Class 11	Mindful Eating	<ul style="list-style-type: none"> <li>▪ Still quiet place for 2 minutes</li> <li>▪ Review heartful motions</li> <li>▪ Introduce mindful eating like a turtle and practice with raisin</li> <li>▪ Dive into Motion: Mindful eating with attention to the movement of eating</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Eat a meal or snack mindfully
Class 12	Heartful Playing	<ul style="list-style-type: none"> <li>▪ Still quiet place while repeating mantra Osh ...shen with inhale and exhale</li> <li>▪ Review mindful eating</li> <li>▪ Introduce heartful playing like seals (respectfully, attentively, happily)</li> <li>▪ Imagination journey – friendship</li> <li>▪ Dive into Motion: Using body to express emotions while playing</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Engage in heartful playing at recess this week
Class 13	Mindful Walking	<ul style="list-style-type: none"> <li>▪ Still quiet place while repeating mantra Osh ...shen with inhale and exhale</li> <li>▪ Review heartful playing</li> <li>▪ Introduce mindful walking like a school of fish (not bumping into each other, being aware of each other)</li> <li>▪ Dive into Motion: walking mindfully</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Walk mindfully for 5 minutes and notice what happens when you are not walking mindfully
Class 14	Heartful Generosity	<ul style="list-style-type: none"> <li>▪ Still quiet place while repeating mantra Osh ...shen with inhale and exhale</li> <li>▪ Review walking meditation</li> <li>▪ Introduce heartful generosity like dolphins (joyful and kind) – loving-kindness meditation</li> <li>▪ Dive into Motion: walking mindfully</li> <li>▪ Journaling</li> </ul>	Write down how many generous acts you do in the next few days

		<ul style="list-style-type: none"> <li>▪ Closing with 3 mindful breaths</li> </ul>	
Class 15	Mindful Living - Review	<ul style="list-style-type: none"> <li>▪ Still quiet place while repeating mantra Osh ...shen with inhale and exhale</li> <li>▪ Review Heartful generosity</li> <li>▪ Introduce mindful living (breathing, listening, looking, walking, moving)</li> <li>▪ Student lead mindfulness (Sitting or Movement form)</li> <li>▪ Journaling</li> <li>▪ Closing with 3 mindful breaths</li> </ul>	Cultivate your personal practice of mindful living this week
Class 16	Heartful Living - Review	<ul style="list-style-type: none"> <li>▪ Still quiet place while repeating mantra Osh ...shen with inhale and exhale</li> <li>▪ Review mindful living</li> <li>▪ Introduce heartful living (thoughts, gratitude, moving, playing generosity)</li> <li>▪ Dive into Motion: Mindful celebrating through dance</li> <li>▪ Handing out certificates</li> </ul>	Heartfulness is a choice, cultivate your heart until we meet again

## Appendix B: Recruitment Flyer



# Embodied-Mindfulness Research

## Want to know more?

Mindfulness School Program. I am looking for:

- *Principals who may be interested in incorporating mindfulness within their school*
- *Teachers who may be interested in incorporating mindfulness within their existing curriculum*
- *MFTIs who are currently employed by the Goleta Union School District as interns and who are interested in learning how to teach mindfulness*

Are you a primary school principal, teacher, or MFTI interested in Mindfulness?

You are invited to contact me to further discuss your interest and participation in this doctoral study designed to evaluate mindfulness within school environments. The InnerU Embodied-Mindfulness curriculum was inspired and developed based on John Kabat-Zinn's (2003) well-researched and established MBSR (mindfulness-based stress reduction) program as well as ecopsychology philosophies and child developmental considerations. No formal experience in mindfulness is required. The ideal participants simply require a genuine interest in experiencing and/or teaching and/or incorporating mindfulness within their class/school environment.



**Researcher:** Anne-Marie Charest, PhD Candidate at Sofia University, 1069 East Meadow Circle, Palo Alto, CA 94303

**For more information contact:**  
a.charest@sofia.edu or  
805.708.6363

 **Embodied-Mindfulness refers to the ability to pay attention to what is occurring in the present moment through the awareness of our senses and thoughts without judgment.**

*Photography by Richard Salas*

innerU Embodied-Mindfulness Program

## **Appendix C: Informed Consent Form – Principal and Head Psychologist**

### **innerU Embodied-Mindfulness Program Informed Consent Agreement**

Dear XXXXXX,

As a school principal or school psychologist, you are invited to approve 4rd-6th grade students and teachers for participation in a mindfulness study. The study conducted by Anne-Marie Charest, PhD student, as part of a doctoral dissertation at Sofia University will explore the value of a new secular mindfulness program called InnerU and its efficacy on wellbeing (attached brochure). The program will be taught during school hours, when students who received parental consent will have the opportunity to attend two 15-20 minutes mindfulness sessions per week, which will be supplemented by additional 5-minutes guided audio recordings introduced on the days that mindfulness sessions are not taught in person. The program will be taught for a period of 8 weeks and is expected to help students develop self-awareness, self-control, and focused attention. Total time of participation will be no more than 16 hours during the entire 8 weeks of the study. On the first day of the program, details of the program will be explained and students will be given an opportunity to ask any further questions. Benefits for participants will be: learning tools to increase calm, developing intentionality and focus, and cultivating overall wellbeing.

In addition to providing parental consent, parents will also be invited to complete an online survey before and after the program. Teachers will be asked to fill out a survey about student behavior at the beginning and end of the program. Children will also be asked to complete a confidential self-report measure prior and following the 8 weeks period designed to assess their subjective wellbeing, so that results before and after the program can be assessed from various sources (all students will complete a questionnaire, and a few students will be recommended by the facilitators to be interviewed by the researcher). Voluntary parent involvement will also be solicited to report their children's behavior and mood before and after the program via a short online survey. Please note that all participation is absolutely voluntary.

Children will not be required to do any homework as a result of this program. All assessments and processes will take place in a regular classroom setting, in the school library, or school psychologist's office. Children will not be required to participate and may choose to withdraw from the study at any time without penalty or prejudice of any kind. Children not approved to participate in the study will be assigned an alternative activity.

The results of this program will be used to help school personnel and educational policy makers better understand the impact of a mindfulness-based program on student behavior and wellbeing. Results of this study may be published, protecting all student participants' privacy. No risks to the staff and children are anticipated from participating in this program, however during the program students will reflect on their feelings and may wish to discuss them further with their teacher or one of the three school psychologists at Isla Vista School, El Camino School or Hollister School. Should a student become uncomfortable for any reason during the mindfulness sessions, he or she will be able to leave the classroom and join a quiet reading group, and will be able to reach out to a teacher or the psychologist. If you have any questions regarding student and staff contribution to this study, please contact the lead researcher Anne-Marie Charest (contact information below).

All information regarding the children's participation will be kept strictly confidential. For the purpose of study records, a pseudonym will be given to each student, and any identifying materials will be kept separate from data, either in a locked file cabinet, to which only the primary researcher and/or the lead instructor have the key, or on a password protected computer to which only the primary researcher and/or program facilitator will have the password. Also note that any transcription of materials will be conducted only after the transcriber has signed a

Transcriber Confidentiality Agreement. Please note that as a mandated reporter, abuse reporting policies will follow the obligation of CARNA as defined by Section 11165.11.

Following the study, the outcomes will be appropriately distributed to parents who wished to receive a copy as well as to you, as a school principal or psychologist. If you have any questions or concerns, you may reach me, Anne-Marie Charest, lead researcher Sofia University Student and MFTI at Isla Vista School (Telephone, email, mailing address). If you have any concerns regarding the manner in which this study has been conducted, you may contact the student's committee Chair, Dorit Netzer, PhD, [dorit.netzer@sofia.edu](mailto:dorit.netzer@sofia.edu), or the Sofia University Research Ethics Committee Chair, Fred Luskin, PhD, [Fred.luskin@sofia.edu](mailto:Fred.luskin@sofia.edu), 1069 East Meadow Circle, Palo Alto, CA 94303.

I confirm that I approve solicitation of students and staff at [school name] and that I understand that their participation is entirely voluntary and that no pressure has been applied to encourage participation. I attest that I have read and understood this form, which explains the study, and I have had any questions about this research answered to my satisfaction. A copy of this informed consent is intended for your records.

\_\_\_\_\_  
Principal's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Head Psychologist's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date

Thank you!

Anne-Marie Charest, Sofia University Doctoral Candidate

Email: \_\_\_\_\_ Tel : \_\_\_\_\_ (Confidential line)

## **Appendix D: Informed Consent Form – Classroom Teacher Participation**

### **innerU Embodied-Mindfulness Program Informed Consent Agreement**

Dear Class Teacher,

You are invited to contribute to a mindfulness study as a facilitator. Please note that assisting the primary research in the manner outlined below is absolutely voluntary. The study conducted by Anne-Marie Charest, PhD student, as part of a doctoral dissertation at Sofia University will explore the value of a new secular mindfulness program called innerU and its efficacy on wellbeing. The study consists of an 8 week program delivered during school hours, where children from 4<sup>rd</sup> to 6<sup>th</sup> grade will have the opportunity to attend two, 15-20 minute mindfulness sessions per week which will be supplemented by additional 5-minute guided audio recordings introduced on the days that mindfulness sessions are not taught in person. Your total contribution to this study will be no more than 16 hours over the entire 8 weeks of the study. On the first day of training, details of the program will be explained and you will be given an opportunity to ask any further questions.

Your contribution to this study includes the following commitment and responsibilities as a classroom teacher:

- Participate in a 1 hour mindfulness training which will be delivered prior to the beginning of the mindfulness program starting date (dates to be determined)
- Help collect informed consent forms from Friday Folders
- Observe and take notes regarding students' responses, once a week, throughout the program while students are engaged in drawing/writing journaling
- Evaluate each student in your class via an online 55 item questionnaire prior and after the mindfulness program
- Participate in one 45 minute interview with the researcher

You are not required to participate and may choose to withdraw from the study at any time without penalty or prejudice of any kind. Please note that you will receive guidance and support throughout the program training for the above mentioned responsibilities. This will ensure ease throughout the research process.

The results of this program will be used to help school personnel and educational policy makers better understand the impact of a mindfulness-based program on student behavior and wellbeing. Results of this study may be published. No risks to you are anticipated from participating in this program. Should you become uncomfortable for any reason, a Goleta Union School District psychotherapist at Isla Vista School, El Camino School, or Hollister School, will be available to provide you assistance. If you have further questions, please contact the lead researcher Anne-Marie Charest (contact information below).

Please note that all information regarding the students as well as the content of your interview participation in the study will be kept strictly confidential. For the purpose of study records, a pseudonym will be given to each student. Teachers, assistants, and other personnel will not be identified by name either. All records and any identifying materials will be kept separate from data, either in a locked file cabinet, to which only the primary researcher and/or the lead instructor have the key, or on a password protected computer to which only the primary researcher and/or program facilitator will have the password. If you are interested in obtaining a copy of the results or the outcomes of the study as a whole, please indicate this below. Please note that as a mandated reporter, abuse reporting policies will follow the obligation of CARNA as defined by Section 11165.11.

If you have any questions or concerns, you may reach me, Anne-Marie Charest, lead researcher Sofia University Student and MFTI at Isla Vista School (telephone, email, mailing address). If you have any concerns regarding the manner in which this study has been conducted, you may contact the student's committee Chair, Dorit Netzer, PhD [dorit.netzer@sofia.edu](mailto:dorit.netzer@sofia.edu), or the Sofia University Research Ethics Committee Chair, Fred Luskin, PhD, [Fred.luskin@sofia.edu](mailto:Fred.luskin@sofia.edu), 1069 East Meadow Circle, Palo Alto, CA 94303.

I confirm that my contribution to this study as facilitator is entirely voluntary and that no pressure has been applied to encourage participation. I attest that I have read and understood this form, which explains the study, and I have had any questions about this research answered to my satisfaction. A copy of this informed consent is intended for your records.

\_\_\_\_\_  
Teacher's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date

I wish to receive a copy of the study results

Thank you!

Thank you!

Anne-Marie Charest, Sofia University Doctoral Candidate

Email: \_\_\_\_\_ Tel : \_\_\_\_\_ (Confidential line)

## **Appendix E: Informed Consent Form – Student/Parent / English**

### **InnerU Embodied-Mindfulness Program Informed Consent Agreement**

Dear Parent or Legal Guardian,

Your child is invited to participate in a mindfulness study. The study conducted by Anne-Marie Charest, PhD student, as part of a doctoral dissertation at Sofia University will explore the value of a new secular mindfulness program called innerU, and its contribution to children's wellbeing (see attached brochure for a description of the program). On the first day of the program, details of the program will be explained and your child will be given an opportunity to ask any further questions.

The program will be taught during school hours, when your child will have the opportunity to attend two 15-20 minutes mindfulness sessions per week which will be supplemented by additional 5-minutes guided audio recordings introduced on the days that mindfulness sessions are not taught in person. The program will be taught for a period of 8 weeks and is expected to help students develop self-awareness, self-control, and focused attention. Total time of participation will be no more than 16 hours during the entire 8 weeks of the study.

Benefits for participants will be to: learn tools to increase calm, develop intentionality and focus, and cultivating overall wellbeing. For each child who participates, the classroom teacher will fill out a confidential survey about student behavior at the beginning and end of the program. Your child will also complete a self-report measure prior and following the 8 week period designed to assess behavior, so that results before and after the program can be assessed.

You are also invited to participate in the study. Your participation will consist of filling out a short online survey about your child's behavior prior and following the mindfulness program. Please note that your participation is absolutely voluntary. Your child may still participate, with your permission, even if you do not choose to complete the online survey.

Your child will not be required to do any additional homework as a result of this program. The program is approved by the school principal and classroom teacher, and will take place in a regular classroom setting, in the school library, or school psychologist's office. Participation in this study is not required, and participants may choose to withdraw from the study at any time without penalty or prejudice of any kind. Children choosing not to participate in the study will be assigned an alternative activity.

The results of this program will be used to help school personnel and educational policy makers better understand the impact of a mindfulness-based program on student behavior and wellbeing. Results of this study may be published, protecting all student participants' privacy.

No risks to your child are anticipated from participating in this program, however, during the program your child will reflect on their feelings and may wish to discuss them further with his/her teacher or one of the three school psychologists at Isla Vista School, El Camino School, or Hollister School. Should a child become uncomfortable for any reason during the mindfulness sessions, he or she will be able to leave the classroom and join a quiet reading group, and will be able to reach out to a teacher or the psychologist. If you have any questions or concerns about your child's participation, please contact the lead researcher Anne-Marie Charest (contact information below).

All information regarding your child's participation will be kept strictly confidential. For the purpose of study records, a pseudonym (substitute name) will be given to each child, all records will use your child's pseudonym only. Any identifying materials will be kept, separate from data, either in a locked file cabinet, to which only the primary researcher and/or the lead instructor have the key, or on a password protected computer to which only the

primary researcher and/or program facilitators will have the password. Also note that any transcription of materials will be conducted only after the transcriber has signed a Transcriber Confidentiality Agreement. Please note that as a mandated reporter, abuse reporting policies will follow the obligation of CARNA as defined by Section 11165.11.

Following the study, if you are interested in obtaining a copy of your child's individual results or the outcomes of the study as a whole, please indicate this below. If you have any questions or concerns, you may reach me, Anne-Marie Charest, lead researcher Sofia University Student and MFTI at Isla Vista School (telephone, email, mailing address). If you have any concerns regarding the manner in which this study has been conducted, you may contact the student's committee Chair, Dorit Netzer, PhD, [dorit.netzer@sofia.edu](mailto:dorit.netzer@sofia.edu), or the Sofia University Research Ethics Committee Chair, Fred Luskin, PhD, [Fred.luskin@sofia.edu](mailto:Fred.luskin@sofia.edu), 1069 East Meadow Circle, Palo Alto, CA 94303.

I give permission to my child to participate in this study, and confirm that my child's participation is entirely voluntary and that no pressure has been applied to encourage participation. I attest that I have read and understood this form, which explains the study, and I have had any questions about this research answered to my satisfaction. In addition, completing the parents' survey for this research is entirely voluntary and no pressure has been applied to encourage participation. One copy of this consent form should be returned to your child's classroom teacher, and the other is provided to you for your records.

\_\_\_\_\_  
Parental Consent Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
School Principal Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date

**I wish to participate in this study and agree to evaluate via an online survey my child's behavior prior and after the innerU mindfulness program:**

**Please provide parent email to receive a link to the survey:** \_\_\_\_\_

I wish to receive a copy of my child's results

I wish to receive a copy of the study results

Thank you!

Anne-Marie Charest, Sofia University Doctoral Candidate

Email: \_\_\_\_\_ Tel : \_\_\_\_\_ (Confidential line)

## **Appendix F: Informed Consent Form – Student / Spanish**

### **innerU Programa Cuerpo-mente en la conciencia plena Acuerdo de consentimiento informado**

Estimado padre, madre o tutor legal,

El niño es invitado a participar en un opus dei estudio. El estudio llevado a cabo por Anne-Marie Charest, estudiante de doctorado, como parte de una tesis doctoral en la Universidad de Sofía, explorar el valor de un nuevo programa llamado secular opus dei innerU, y su contribución al bienestar de los niños (ver folleto adjunto para una descripción del programa). En el primer día del programa, detalles del programa serán explicados y a su hijo se le da la oportunidad de hacerle preguntas.

El programa será impartido durante las horas de escuela, cuando su niño tendrá la oportunidad de asistir a dos 15-20 minutos mindfulness sesiones por semana que se completará con otros 5 minutos guía presenta las grabaciones de audio en los días en que mindfulness las sesiones no se enseña en persona. El programa será impartido por un período de 8 semanas y se espera que ayude a los estudiantes a desarrollar conciencia de sí mismo, auto-control, y centró su atención.

Beneficios para los participantes será el de aprender herramientas para aumentar calma, desarrollar intencionalidad y concentración y cultivar bienestar general. Para cada niño que participa, la maestra del aula tendrá que rellenar una encuesta confidencial sobre el comportamiento de los alumnos al comienzo y al final del programa. Además, su niño debe completar un informe de medida antes y después de las 8 semanas diseñado para evaluar la conducta, por lo que los resultados antes y después del programa puede evaluarse.

La también están invitados a participar en el estudio. Su participación consistirá en rellenar una breve encuesta en línea acerca del comportamiento de su niño antes y después de la retentiva programa. por favor tenga en cuenta que su participación es absolutamente voluntaria. su hijo aún puede participar, con su permiso, incluso si no optar por completar la encuesta en línea.

Su hijo no será necesario que realice alguna tarea adicional como resultado de la aplicación de este programa. El programa es aprobado por el director de la escuela y maestro de aula, y se realizará en un salón de clases regular, en la biblioteca de la escuela, oficina o psicólogo escolar. La participación en este estudio no es necesario, y los participantes podrán optar por retirarse del estudio en cualquier momento sin penalización o perjuicio de cualquier tipo.

Los resultados de este programa se utilizarán para ayudar a personal de la escuela y los encargados de la política educacional conocer mejor el impacto de un programa de mindfulness sobre comportamiento de los alumnos y el bienestar de las personas. Los resultados de este estudio pueden ser publicados, protegiendo a todos los estudiantes participantes la privacidad de los participantes.

No hay riesgos para el niño se prevé participar en este programa, sin embargo, durante el programa, su hijo se reflejan en sus sentimientos y tal vez desee examinar más detenidamente con su/la maestro o uno de los tres psicólogos escolares en Isla Vista escuela, El Camino escuela, o Hollister escuela. Si un niño se hace molesta por cualquier razón durante el mindfulness, él o ella será capaz de salir de la clase y unirse a un grupo de lectura tranquila, y que sea capaz de llegar a un maestro o el psicólogo. Si usted tiene cualquier pregunta o preocupación acerca de su participación del niño, por favor póngase en contacto con el investigador principal Anne-Marie Charest (a continuación la información de contacto).

Toda la información relativa a la participación del niño será estrictamente confidencial. Con el fin de estudiar los registros, un seudónimo (nombre sustituto); se dará a cada niño, todos los registros de su hijo uso seudónimo. cualquier identificar los materiales se mantendrán, separados de los datos, ya sea en un archivo bloqueado gabinete, a la que sólo la investigadora principal. Cualquier identificar los materiales se mantendrán, aparte de los datos, ya sea en un archivo bloqueado gabinete, a la que sólo la investigadora principal y/o el instructor tienen la llave, o en un ordenador protegido por contraseña para que sólo la investigadora principal. También se debe tener en cuenta que cualquier transcripción de materiales se llevará a cabo sólo después de que el transcriptor ha firmado un transcriptor acuerdo de confidencialidad. Por favor note que como un reportero encomendado, las políticas de reportaje de abuso seguirán la obligación de CARNA como define por el Artículo 11165.11.

Tras el estudio, si usted está interesado en obtener una copia de su hijo de los resultados individuales o en los resultados del estudio como un todo, por favor, indique a continuación. Si tiene cualquier otra pregunta o preocupación, se puede poner en contacto conmigo, Anne-Marie Charest, investigadora a cargo, estudiante en Sofia University y MFTI en la escuela Isla Vista (telephone, email, mailing address). Si tiene alguna inquietud respecto a la manera en que el estudio se ha realizado, puede ponerse en contacto con el presidente del comité de estudiantes, dorit netzer, PhD dorit.netzer@sofia.edu, o la universidad de Sofía comité de ética en investigación, Fred Luskin, PhD, fred.luskin@sofia.edu, 1069 East Meadow Circle, Palo Alto, CA 94303.

Doy permiso a mi hijo para participar en este estudio, y confirmo que mi participación del niño es totalmente voluntaria y que no exista ninguna presión se ha aplicado con el fin de fomentar la participación, damos testimonio que he leído y entendido este formulario, en el que se explica el estudio, y he tenido alguna duda acerca de esta investigación responde a mi satisfacción, además, para completar el estudio de los padres de esta investigación es totalmente voluntaria y no se ha aplicado presión a fin de fomentar la participación.

\_\_\_\_\_  
Firma del padre dando consentimiento

\_\_\_\_\_  
Fecha

\_\_\_\_\_  
Firma del director de la escuela

\_\_\_\_\_  
Fecha

\_\_\_\_\_  
Firma del facilitador del programa

\_\_\_\_\_  
Fecha

Deseo participar en este estudio y conviene en evaluar a través de una encuesta en línea comportamiento de mi niño antes y después de la innerU Mindfulness Programa:

**Sírvanse proporcionar padres correo electrónico para recibir un enlace a la encuesta:**

\_\_\_\_\_  
Quisiera recibir una copia de los resultados de mi hijo/a

\_\_\_\_\_  
Quisiera recibir una copia de los resultados del estudio

¡Gracias!

Thank you!

Anne-Marie Charest, Sofia University Doctoral Candidate

Email: \_\_\_\_\_ Tel : \_\_\_\_\_ (Confidential line)

## **Appendix G: Informed Consent Form – Student Interviews**

### **innerU Embodied-Mindfulness Program Informed Consent Agreement for Student Interviews**

Dear Parent or Legal Guardian,

Your child is already participating in a mindfulness study. The study is exploring the value of a new secular mindfulness program called innerU, and its contribution to children's wellbeing (see attached brochure for a description of the program). To further understand the impact of mindfulness, your child is invited to participate in a single 30 minute interview to share his or her experience of mindfulness.

Your child will not be required to do any additional homework as a result of this segment of the program. The program is approved by the school principal and classroom teacher, and all interviews will take place in a regular classroom setting, in the school library, or school psychologist office during the lunch period. Your child will not miss any school time. Participation in this study is not required, and participants may choose to withdraw from the study at any time without penalty or prejudice of any kind.

The results of this program will be used to help school personnel and educational policy makers better understand the impact of a mindfulness-based program on student behavior and wellbeing. Results of this study may be published, protecting all student participants' privacy.

No risks to your child are anticipated from participating in this program, however, during the program your child will reflect on their feelings and may wish to discuss them further with his/her teacher or one of the three school psychologists at Isla Vista School, El Camino School, or Hollister School. Should a child become uncomfortable for any reason during the mindfulness sessions, he or she will be able to leave the classroom and join a quiet reading group, and will be able to reach out to a teacher or the psychologist. If you have any questions or concerns about your child's participation, please contact the lead researcher Anne-Marie Charest (contact information below).

All information regarding your child's participation will be kept strictly confidential. For the purpose of study records, a pseudonym (substitute name) will be given to each child, all records and interviews will use your child's pseudonym only. Any identifying materials will be kept, separate from data, either in a locked file cabinet, to which only the primary researcher and/or the lead instructor have the key, or on a password protected computer to which only the primary researcher and/or program facilitators will have the password. Also note that any transcription of materials will be conducted only after the transcriber has signed a Transcriber Confidentiality Agreement. Please note that as a mandated reporter, abuse reporting policies will follow the obligation of CARNA as defined by Section 11165.11.

Following the study, if you are interested in obtaining a copy of your child's individual results or the outcomes of the study as a whole, please indicate this below. If you have any questions or concerns, you may reach me, Anne-Marie Charest, lead researcher Sofia University Student and MFTI at Isla Vista School (telephone, email, mailing address). If you have any concerns regarding the manner in which this study has been conducted, you may contact the student's committee Chair, Dorit Netzer, PhD, [dorit.netzer@sofia.edu](mailto:dorit.netzer@sofia.edu), or the Sofia University Research Ethics Committee Chair, Fred Luskin, PhD, [Fred.luskin@sofia.edu](mailto:Fred.luskin@sofia.edu), 1069 East Meadow Circle, Palo Alto, CA 94303.

I give permission to my child to participate in this study, and confirm that my child's participation is entirely voluntary and that no pressure has been applied to encourage participation. I attest that I have read and understood this form, which explains the study, and I have had any questions about this research answered to my satisfaction. In addition, completing the parents' survey for this research is entirely

voluntary and no pressure has been applied to encourage participation. One copy of this consent form should be returned to your child's classroom teacher, and the other is provided to you for your records.

\_\_\_\_\_  
Parental Consent Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Researcher's Signature

\_\_\_\_\_  
Date

**I wish to participate in this study and agree that my child be interviewed as part to the innerU mindfulness program:**

**Please provide parent email to receive a link to the survey:** \_\_\_\_\_

I wish to receive a copy of my child's results

I wish to receive a copy of the study results

Thank you!

Anne-Marie Charest, Sofia University Doctoral Candidate

Email: \_\_\_\_\_ Tel : \_\_\_\_\_ (Confidential line)

## Appendix H: Students' Life Satisfaction Scale

(Huebner, 1991)

Directions: We would like to know what thoughts about life you have had during the past several weeks. Think about how you spend each day and night and then think about how your life has been during most of this time. Here are some questions that ask you to indicate your satisfaction with your overall life. Circle the words next to each statement that indicate the extent to which you agree or disagree with each statement. For example, if you Strongly Agree with the statement "Life is great," you would circle those words on the following sample item; Life is great.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

It is important to know what you REALLY think, so please answer the questions the way you really think, not how you should think. This is NOT a test. There are NO right or wrong answers.

---

1. My life is going well.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

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2. My life is just right.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

---

3. I would like to change many things in my life.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

---

4. I wish I had a different kind of life.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

---

5. I have a good life.

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

6. I have what I want in life.

---

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
----------------------	------------------------	--------------------	-----------------	---------------------	-------------------

---

7. My life is better than most kids.

---

Strongly Disagree	Moderately Disagree	Mildly Disagree	Mildly Agree	Moderately Agree	Strongly Agree
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Huebner, E. S. (1991). Initial development of the Students' Life Satisfaction Scale. *School Psychology International*, 12, 231-243.

## Appendix I: Children's Happiness Scale

# Children's Happiness Scale

Office of the Children's Rights Director for England



Here are 20 things children or young people might say about themselves. Just read each of them and tick all the ones that are right about you. Leave the others blank.

Life is good for me at the moment	<input type="checkbox"/>	3.64
I am treated fairly	<input type="checkbox"/>	3.13
I know what is happening next in my life	<input type="checkbox"/>	3.15
I have big problems but am dealing with them	<input type="checkbox"/>	2.55
I am quite proud of myself	<input type="checkbox"/>	3.65
I am trying to change some things about myself	<input type="checkbox"/>	2.57
I don't have any big problems at the moment	<input type="checkbox"/>	3.22
I have lots of friends	<input type="checkbox"/>	4.01
I get confused about what is going on	<input type="checkbox"/>	2.43
I never feel safe	<input type="checkbox"/>	1.74
I often get anxious	<input type="checkbox"/>	2.32
I get lonely	<input type="checkbox"/>	1.68
People are prejudiced against me	<input type="checkbox"/>	1.77
I learn from my mistakes	<input type="checkbox"/>	3.18
I am a shy person	<input type="checkbox"/>	2.63
I get bullied	<input type="checkbox"/>	1.68
I am good at learning new things	<input type="checkbox"/>	3.70
I am getting all the help I need	<input type="checkbox"/>	3.38
I have lots of fun	<input type="checkbox"/>	4.25
I am easily depressed	<input type="checkbox"/>	1.75

**To find out your 'happiness score' on this questionnaire:**

1. Add up the numbers next to all the items you have ticked

2. Next, write how many items you ticked

3. Now divide the number you wrote against (1) by the number you have just written against (2) and write the answer in the box

**That is your happiness score for today on this questionnaire!**

## **Appendix J: Creative Expression Guidelines for Children's Journals**

### **Week One: Breathing, Touch, and Listening**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express your breath and your awareness of touch and sound before and after the session. Once you have completed your 2 drawings, write a title for each one.

### **Week Two: Sensing**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express what you were sensing before and after the session. Once you have completed your 2 drawings, write a title for each one.

### **Week Three: Wandering Mind**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express what's been on your mind before and after the session. Once you have completed your 2 drawings, write a title for each one.

### **Week Four: Seeing**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express your vision before and after the session. Once you have completed your 2 drawings, write a title for each one.

### **Week Five: Emotions**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express your emotions before and after the session. Once you have completed your 2 drawings, write a title for each one.

### **Week Six : Mindful Eating**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express how you felt before and after the mindful eating. Once you have completed your drawings, write a title for each one of your drawings.

### **Week Seven: Mindful Walking**

Choose two colors, one for how you felt before our mindfulness excersises and another one for how you feel after the mindfulness exploration. If you experience no change, choose one color. Make shapes and lines with each of the colors to express how you felt before and after the mindful walking. Once you have completed your 2 drawings, write a title for each one.

### **Week Eight: Mindful Living and Heartful Living**

Choose two colors, one for how you felt before our mindfulness program and another one for how you feel now after 8 weeks of practicing mindfulness. If you experience no change, choose one color. Make shapes and lines with each of the colors to express yourself before and after the innerU program. Once you have completed your 2 drawings, write a title for each one.

### Appendix K: Classroom Teacher Semistructured Interview

1. Have you noticed any individual or classroom changes as a result of the innerU Embodied-Mindfulness program in the last 8 weeks, if any? If so, can you please give me examples?
2. Have you noticed, if any, gender differences in practicing mindfulness? If so, how were they manifested?
3. How do you feel the innerU program impacted or not the children of your class? What are some of the most noticeable observations?
4. Have you observed any noticeable difference in class, with school work, in the yard, or at recess?
5. What dimension of the program you felt the children responded to the most?
6. How do you feel that Embodied-Mindfulness contributed to:
  - a. Intrapersonal changes (such as emotional balance, attentiveness, focusing)
  - b. Interpersonal changes (student's relationships, such as with peer and teachers)
  - c. Overall happiness (reported by the student and/or his parents/guardians)
7. What aspect of the innerU curriculum stood out for you, if any, and why? (observation of the sessions led by the MFTI and during the administering the daily audio)
8. How did the curriculum personally benefit you, if any?
9. Do you feel that Embodied-Mindfulness, such as the innerU curriculum could be beneficial as a regular practice in classrooms, on a regular basis? And Why?
10. Do you have any additional comments you'd like to share?
11. What percentage of the time did you engage in the *Daily Dives* on the days that I did not come in and teach?

### **Appendix L: Student Semistructured Interview**

1. Now that you have completed the innerU program, what thoughts do you have about it?
2. What does embodied mindfulness mean to you?
3. What did you notice inside your body when you practiced Embodied-Mindfulness?
4. When you practiced Embodied-Mindfulness, how did it make you feel in general?
5. What are the changes, if any, that you have noticed within yourself as a result of participating in the innerU Embodied-Mindfulness program?
6. Did you notice any changes in any of your classmates? If so, please tell me without using names?
7. Where in your life are you also seeing changes, if any?
  - a. With friends
  - b. At home
  - c. In class
8. What is it about the program that you really liked?
9. Do you think it may be beneficial to continue practicing Embodied-Mindfulness now that the innerU program is over? And do you feel you will continue practicing on your own?
10. Do you relate to the animals that were presented as teachers/guides of Embodied-Mindfulness?
11. What part of the program did you liked the most? And why? (Meditations, Movements Component, Creative Journaling, Videos, Questions, Content)
12. If you chose one word to describe the innerU curriculum, what would that be?
13. Do you have any additional comments you would like to share?

## **Appendix M: Transcriber Confidentiality Agreement**

### **innerU Embodied-Mindfulness Program Transcriber Confidentiality Agreement**

In regards to this Embodied-Mindfulness study conducted in California, I shall guard all materials collected for transcription in strict confidence. I shall not divulge to anyone the names or personal data from this research. I shall not discuss any content of this study with anyone except the researcher. I shall maintain confidentiality as to the material and identity of the research participants. Electronic data will be password protected and hard copies of data will be kept in a locked file.

Furthermore, I agree:

1. To maintain full confidentiality of the identification of any individual that may be involved in this research study.
2. To not reproduce any portion of any materials or associated documents unless specifically requested to do so by Anne-Marie Charest.
3. To store all study-related files, documents, and/or other materials in a safe, secure location as long as they are in my possession.
4. To return all study-related files, documents, and/or other materials to Anne-Marie Charest in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices at the end of my work.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the study-related files, documents, and/or other materials to which I will have access.

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Transcriber's Signature

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Date

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Researcher's Signature

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Date

## Appendix N: Statistician Confidentiality Agreement

### innerU Embodied-Mindfulness Program

#### Statistician Confidentiality Agreement

In regards to this Embodied-Mindfulness study conducted in California, I shall guard all materials collected for statistical analysis in strict confidence. I shall not divulge to anyone the data or personal data from this research. I shall not discuss any content or results of this study with anyone except the researcher. Although all data will be provided without participant names, I shall maintain confidentiality as to the material of the research. Electronic data will be password protected and hard copies of data will be kept in a locked file.

Furthermore, I agree:

1. To maintain full confidentiality of the identification of any individual that may be involved in this research study.
2. To not reproduce any portion of any materials or associated documents unless specifically requested to do so by Anne-Marie Charest.
3. To store all study-related files, documents, and/or other materials in a safe, secure location as long as they are in my possession.
4. To return all study-related files, documents, and/or other materials to Anne-Marie Charest in a complete and timely manner.
5. To delete all electronic files containing study-related documents from my computer hard drive and any back-up devices at the end of my work.

I am aware that I can be held legally responsible for any breach of this confidentiality agreement, and for any harm incurred by individuals if I disclose identifiable information contained in the study-related files, documents, and/or other materials to which I will have access.

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Statistician's Signature

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Date

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Researcher's Signature

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Date