Teachers’ Integration of Mindfulness Practices in the Classroom

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Abstract

This qualitative research project investigates the different ways teachers are bringing mindfulness into their classrooms and the impacts they observe on students’ mental health and academic success. To collect data, I conducted three semi-structured interviews with educators who had personal mindfulness practices and who implemented mindfulness practices into their pedagogy. After analyzing my data in light of existing literature, five themes emerged: 1) reasons for introducing mindfulness into the classroom, 2) how teachers are implementing mindfulness in the classroom, 3) benefits of implementation, 4) challenges to implementation, and 5) considerations for widespread support of mindfulness in schooling. My findings were consistent with the literature in demonstrating the positive impacts of mindfulness training on mental health, self-regulatory abilities, and academic success. Findings also revealed the effectiveness to which mindfulness can be employed as a teaching strategy: important implications for curriculum makers and holistic educational reform. Recommendations are made for how teachers can implement feasible mindfulness programs in their classrooms and for how policymakers can integrate foundations of mindfulness into the school system at large.

Keywords: mindfulness, mental health, emotional well-being, social-emotional learning, self-regulation, holistic education, school-based mindfulness, teaching strategy
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Chapter 1: Introduction to the Research

1.0 Research Context

As teachers, concern for our students extends beyond the realm of academics. Commitment to our students also involves a concern for their well-being. In an increasingly outcome-based world, there is so much focus on the end-result of education that the “process” of school is often overlooked. The classroom, in addition to being a place of academia, is also a place of emotional growth, social learning, and community building. Research shows the positive correlation between emotional well-being and academic success (Rempel, 2012), which underscores the important role of teachers in facilitating this dynamic. Excessive stress damages the developing brain, increasing children’s vulnerability to lifelong behaviour, learning, and mental health problems (Meiklejohn et al., 2012). Today, stress felt by students is occurring at unprecedented levels, which can lead to anxiety, depression, and low-self-esteem, all of which have been shown to negatively impact academic performance (Rempel, 2012). That being said, it is not surprising that fifteen to twenty percent of youth struggle with a mental health problem (Ontario Ministry of Education, 2013). While the Ontario Ministry of Education (2013) has listed mental health as a top priority, current strategies and policies do not adequately address and support students’ mental health needs and emotional well-being.

Mindfulness-Based Stress Reduction (MBSR) is a program that was developed by Doctor John Kabat-Zinn (1979) as a means to counter psychological stress by teaching moment-to-moment awareness in everyday life through: 1) breathing meditation – concentrating on the sensation of breathing and remaining open to bodily sensations,
thought processes, and emotions, 2) the body-scan exercise – drawing awareness to
different parts of the body), and 3) mindful stretching – stretching and yoga (Felver,
Doerner, Jones, Kaye, & Merrell, 2013). Ample research and studies have come to
demonstrate the psychological benefits of mindfulness programs (all of which incorporate
or adapt MBSR) on stress, well-being, and brain function (Meiklejohn et al., 2012). Until
recently, this research had been largely restricted to adult populations.

In the field of education, we are now beginning to learn about the potential of
mindfulness training for youth as a tool to support mental health and enhance academic
performance. Recent studies have found that providing primary aged students (grades 1
to 3) with opportunities to engage in sitting, moving, and body-scanning meditations
along with relaxation exercises can reduce the experience of test anxiety, strengthen
social skills, and enhance selective attention (Napoli, Krech, & Holley, 2005). In a study
on MBSR practices conducted with older children (ages 11 to 13), students reported
feeling calmer and less reactive, and showed enhanced experiences of emotional well-
being and improved sleep (Wall, 2005). Research from similar studies on mindfulness
intervention programs for children report improvements in attention, academic
performance, optimism, social competence, and executive functions capacity, and show
reductions in anxiety levels and behavioural difficulties (Semple, Lee, Rosa, & Miller,
2009; Flook et al., 2010; Schonert-Reichl & Lawlor, 2010).

High levels of stress have a negative impact on learning. When a child
experiences stress, areas of the brain responsible for learning are shut down in order to
conserve energy to fight or flee the potentially threatening situation (Shanker, 2014). In
these instances, students’ capacity to self-regulate – to recover from stress and calm the mind – are vital.

Mindfulness training targets areas of the brain responsible for self-regulation and executive functioning, including: planning, memory, sustained attention, problem solving, reasoning, response inhibition, mental flexibility, multi-tasking, task initiation, and action monitoring (Meiklejohn et al., 2012). As a result of targeting these specific areas, mindfulness training optimizes brain functioning by improving self-regulation and executive functioning. Furthermore, a self-regulating classroom creates an environment that helps students emotionally connect with themselves, with others, and with the world around them (Shanker, 2014). When students are trained in mindfulness, improvements in self-regulation and the cultivation of emotional skills allow them to manage stress more efficiently and mitigate internal crises more resiliently.

School-based mindfulness programs have been found to enhance students’ emotional well-being and accelerate their academic performance (Rempel, 2013; Weare, 2013; Meiklejohn et al., 2012). Employing mindfulness in the classroom can create an environment in which students are not only better equipped to cope but to thrive in the face of emotional problems, in the present and future (Rempel, 2012).

1.1 Research Problem

As we address the increased stress levels felt by students, it is important to prepare teachers with a range of instructional tools to be responsive to students’ mental health needs. While existing research has demonstrated the mental health and academic benefits of mindfulness training for students, the education system to date is not taking this research or potential seriously. Although students’ mental health is now a stated
priority in Canada, teachers feel unprepared to support these needs (Meiklejohn, 2012). It is time to give the research on mindfulness in education the attention it deserves and to prepare teachers for enacting this form of pedagogy in order to support students’ mental health and academic needs.

1.2 Research Purpose

In light of this problem, the goal of my research is to learn how teachers incorporate mindfulness training into the classroom and to learn from them what outcomes they observe for students’ mental health, emotional well-being, and academic success, in order to share best practices with the education community.

1.3 Research Question

- How is a sample of school teachers incorporating mindfulness practices into their classroom teaching and what impacts do they observe for students’ emotional well-being and academic success?

1.3.1 Subsidiary Questions

- What reasons did teachers have for introducing mindfulness into the classroom?
- What mindfulness practices are teachers using in the classroom?
- How are these teachers incorporating mindfulness practices across curricular subject areas?
- What are some of the challenges that teachers face in the course of incorporating mindfulness training in their teaching?
- What are some important considerations for widespread support of mindfulness in schooling?
1.4 Reflexive Positioning Statement

As someone who experienced a lack of support with emotional problems in high school, and who experienced the mental health benefits of mindfulness in later years, I developed a strong interest in learning how I can support my students by providing them with the necessary tools and skills for dealing with emotional problems.

I turned to mindfulness, in the form of meditation and yoga, as a way to address my mental health problems. I assumed these practices would act as mere coping mechanisms; however, I slowly began to see the benefits of mindfulness in almost every aspect of my life. By practicing moment-to-moment awareness, I developed metacognitive skills that allowed me to view my thoughts as separate from myself (e.g. feeling lousy does not mean that I am lousy). Through meditation, I learned to use my breath as a tool for self-regulation. Through yoga, I learned to continuously return my focus to my breath, body, and sensory experiences, which translated into heightened focus and more disciplined concentration in my studies at university. Through cultivating mindfulness skills, I began to approach schoolwork from a place of positive motivation and reinforcement. As a result, my stress levels went down, and I became curious about learning as opposed to apprehensive about it. In addition, I found it easier to articulate my thoughts and ideas with clarity, which showed in my essay writing and improved grades. While I used to be petrified of class presentations; now, by returning my attention to my breath at the onset of stress, I feel a sense of being grounded, which allows me to get through the stressful situation in a calm and confident manner. In summation, mindfulness practices have helped drastically with my overall emotional well-being and success in school.
The potential of mindfulness training on the developing brain is immense. I believe that we should be building a foundation of mindfulness in young students whose earlier stages of brain development make them more receptive to mindfulness training. This way, by reinforcing the neural pathways responsible for self-regulation and executive functioning as they are beginning to develop, mindfulness becomes a deeply embedded and masterful skill.

1.5 Preview of the Whole

To respond to the research questions I conducted a qualitative research study by using purposeful sampling to interview three teachers about their strategies for implementing mindfulness in the classroom. In chapter 2, I review the literature in the areas of mindfulness in mainstream science and mindfulness in education. In chapter 3, I elaborate on the research design chosen for this study. In chapter 4, I report my research findings and identify themes in my data. In chapter 5, I discuss these findings and their significance in light of existing literature, before I highlight the implications for my own teaching practice and for the education community at large.
Chapter 2: Literature Review

2.0 Introduction

This literature review sheds light on research and theory that demonstrates why and how the implementation of mindfulness training in schools can be used as a tool to support students’ mental health, emotional well-being, and academic success (Rempel, 2012). In this chapter I provide background information on mindfulness before reviewing the literature on mindfulness in mainstream science, the developmental implications of mindfulness training for young people, educational theories that intersect with mindfulness, and current school-based mindfulness program efficacy.

2.1 A Few Words on Mindfulness

Before delving into mindfulness-based school intervention, it is important to establish what mindfulness is and where it comes from. Mindfulness is bringing awareness to the present moment in a non-judgmental way, “the self-regulation of attention so that it is maintained on immediate experience…an orientation that is characterized by curiosity, openness, and acceptance” (Bishop, 2004, p. 232). Cultivating mindfulness involves sustaining metacognitive forms of awareness, “being aware of the inner process involved in doing, feeling and thinking and being aware of the thoughts and feelings as they arise in the mind and body” (Weare, 2013, p. 35). Essential components of mindfulness that you will find across most definitions are 1) moment-to-moment awareness, 2) sustained attention, and 3) nonjudgmental orientation towards one’s experiences. All components require self-regulation and emotional skills.

The notion of mindfulness originates in ancient Buddhist philosophy, which attributes human suffering to the way we respond to our experiences and become our
emotions (Purser & Milillo, 2015). The goal of Buddhism is the cessation of this suffering – achieved by freeing the mind of unhealthy attachments we make to our thoughts (Purser & Milillo, 2015). This process allows the practitioner to recognize the duality of experience and emotion: the idea that we are not our thoughts.

Many of us can attest to the feeling that our minds are going a mile a minute: dwelling on past events, worrying about future outcomes, and continuously multi-tasking (often absent-mindedly). Amidst this chaos, we are often left feeling consumed and overwhelmed by our thoughts – losing sight of what is in front of us: the present moment. The ability to focus attention on immediate experience helps counter constant rumination, and the ability to respond to emotions non-judgmentally helps separate experience from emotion. The practice of mindfulness or “mindfulness meditation” can include controlled breathing, body-scans, and yoga, amongst other practices (Agency for Healthcare Research and Quality, 2014). White (2009) spoke to the efficacy of yoga in children:

At times of relaxation and calm, the breath was slow and even. Because the breath and the mind are intricately related, it was believed that deliberately controlling and slowing the breath would slow and calm the mind. (p. 278)

The mind-body connection that is facilitated during mindfulness meditation is used as a tool to help ground the practitioner in momentary experience and to heighten awareness of thoughts and feelings as they arise (Weare, 2013).

2.2 Mindfulness in Mainstream Science

Over the past few decades, the integration of mindfulness into neuroscience and psychology has been met with some scrutiny, as spiritual connotations and “self-help” labels have led many critics to view mindfulness as a hoax (Tremonti, 2014). With mounting evidence and a number of publications linking mindfulness practices to health
and emotional well-being, however, the scientific implications of mindfulness are becoming harder and harder to ignore (Rempel, 2012; Weare, 2013; Meiklejohn et al., 2012).

Leading the effort to integrate mindfulness into mainstream science has been Kabat-Zinn and his development of the MBSR program. MBSR is an eight-week group intervention that teaches mindfulness in everyday life through mindfulness breathing, the body-scan exercise, and yoga (Felver et al., 2013). Kabat-Zinn’s research draws on cognitive therapy and Eastern meditative tradition to demonstrate how mindful thinking taps into our capacity to suppress mental habits that lead to despair (Kabat-Zinn, 2007). By practicing awareness through MBSR, Kabat-Zinn’s research shows how replacing habits of rumination with resiliency can free the self from the mental trap of negative thinking (Kabat-Zinn, 2007).

In January of 2014, a systematic review published by Johns Hopkins University addressed the efficacy of meditation programs for psychological stress and emotional well-being. The review drew on 17,801 citations, included 41 trials with 2,993 participants and concluded that “meditation programs, in particular mindfulness programs, reduce multiple negative dimensions of psychological stress” (Agency for Healthcare Research and Quality, 2014, p. 8). Mindfulness meditation facilitates the mind’s capacity to affect bodily function and symptoms (Agency for Healthcare Research and Quality, 2014); intentional focus has the effect of steadying the mind (Kabat-Zinn, 2007).
2.3 Mindfulness and Youth: Developmental Implications

Only recently has the integration of mindfulness into schools been explored as an aid for students’ health and emotional well-being (Meiklejohn et al., 2012). Students today are experiencing increasingly high levels of stress (Rempel, 2012). This stress can result in anxiety, depression, low self-esteem, and other emotional-behavioural problems that disrupt thinking, hinder learning, and negatively influence school performance (Rempel, 2012). This correlation is best explained from a developmental standpoint.

The ability to calmly navigate through times of stress requires self-regulation. In high stress situations, the reptilian brain (the part of the brain that controls heart rate, breathing, body temperature, and balance) is activated (Shanker, 2014). This internal alarm system triggers the fight or flight response, shutting down various functions of the brain, including areas of the prefrontal cortex used for learning and self-regulation, in order to maximize energy needed for fighting or fleeing (Shanker, 2014); explaining why stress impairs a student’s ability to learn. It also explains why optimal self-regulation is essential for learning, as it allows students to make changes to his or her arousal level in order to match the energy level needed to deal calmly and efficiently with the task at hand (Shanker, 2013). The evolution of the reptilian brain has actually become counterproductive to daily functioning: humans are reacting disproportionately to stress, mistaking non-threatening situations for threatening ones. The fight or flight response is productive when the ensuing rush of the stress hormone cortisol helps you perform a task (e.g. running away from a bear to survive). It is not productive, on the other hand, when the reaction to stress hinders you from performing a task (e.g. test anxiety leading to poor performance).
Mindfulness targets self-regulatory abilities that are used to respond to stress in a calm and efficient manner. Mindfulness meditation, the act of intentionally focusing on stimuli, has a steadying effect on the mind and has proven to be an effective form of stress management (Kabat-Zinn, 2007). Many schools have taken steps to create a nonthreatening classroom environment such as “right to pass,” an option that gives students the right to pass if they do not wish to share a response. These types of interventions act as a safety net within classroom boundaries but do not adequately prepare students for real world situations and challenges that require resiliency.

The acquisition of executive functions needed to self-regulate (including response inhibition, emotional control, sustained attention, task initiation, and mental flexibility) occurs throughout childhood and early adolescence with the growth and development of the prefrontal lobe: the emotional control center of the brain (Dawson & Guare, 2004). Furthermore, researchers at the National Institute of Mental Health suggest that the neural connections formed in the frontal lobe that support self-regulation have a “use it or lose it” complex: connections are reinforced when they are practiced and lost when they are not exercised (Dawson & Guare, 2004). Practicing the use of executive functions is not only important for learning self-regulatory skills, but also vital for the development of brain structures that support, reinforce, and maintains these skills (Dawson & Guare, 2004). Teachers and schools have an immense amount of influence on the development, reinforcement, and nurturing of executive functions that allow for self-regulation. The implementation of mindfulness training at the beginning stages of self-regulatory development can significantly impact the effectiveness with which a child can self-regulate.
As stated earlier, the negative correlations between stress and academic performance re-emphasize a teacher’s responsibility to students’ social, emotional, and behavioural development (Rempel, 2012). Developmental factors, combined with the amount of time students spend at school, make the classroom an ideal site for mindfulness training. Every child possesses the capacity for self-regulation, somewhat like an internal barometer. Programs designed to improve self-regulation tap into this innate ability and can help familiarize students with an internal coping mechanism they might not know they have. Mindfulness programs work to strengthen self-regulatory abilities by equipping students with the tools they need to meet challenges with resiliency (Meiklejohn et al., 2012).

2.4 Constructivist Reform: Theoretical Underpinnings

Education theory has seen a major shift over the past few decades from a linear approach to curriculum instruction towards a multifaceted view of the education experience as a whole – emphasizing the development of the child and the social context of learning (Dewey, 1938; Miller, 1990; Miller, 2010). Instrumental to this shift in paradigm were constructivist theorists Jean Piaget and John Dewey. A constructivist approach to education sees the acquisition of knowledge as occurring through experience, valuing inquiry-based learning over rote memorization and other traditional forms of instruction.

Jean Piaget made an important distinction between the processes of learning and developing. Piaget defined development as the general mechanisms of action and thought; and learning as the acquisition of specific skills and facts (Furth & Wachs, 1974). Piaget said, “learning can only take place on condition that the child has general
mechanisms to which he can assimilate the information contained in learning” (Furth & Wachs, 1974, p. 13). In other words, thinking precedes learning; a fact means nothing if the student cannot make sense of that fact.

John Dewey was also instrumental in the constructivism movement. He believed that traditional education was too concerned with delivering preordained knowledge and that it should focus on the actual learning experiences of students, which involves continuity and interaction between the learner and what is learned (Dewey, 1938). Dewey’s experiential approach to education fosters high levels of learning by using students’ interests, previous knowledge, and connections to their own world of meaning (Miller, 2010). Dewey postulated that “an ounce of experience is better than a ton of theory simply because it is only in experience that any theory has vital and verifiable significance” (Miller, 1990, p. 99). Students need context in which to situate their learning – a process that comes about through lived experience.

An important element of constructivist education theory is that learning is grounded in experience; humans generate knowledge and meaning from an interaction between their experiences and their ideas (Miller, 1990). Constructivist theory has been widely accepted and applied to pedagogical frameworks – encouraging curriculum study that is relevant to students’ lives (authentic learning), open-ended (facilitating inquiry), and uses scaffolding (building knowledge on prior experiences).

In more recent years, education theorists Ron Miller (1990) and John Miller (2010) have modeled frameworks after early constructivist theory that use the practice of mindfulness as a key component of learning. Ron Miller drew on Dewey’s work to create a holistic education model that focuses on nurturing whole child development of
the mind, body, and heart (Soloway, 2011). Central to holistic education, as expressed by Miller (1990), is Dewey’s view on experiential learning:

All living organisms, including persons, are intimately related to their environment. Behaviour, habits, desires, needs, and thoughts do not occur in isolation but always involve an interaction (or “transaction”) between an organism and its surrounding physical and social conditions. (p. 100)

Holistic education seeks to reinforce this disposition of interdependence between the “outer world of manifest phenomena and the inner world of lived experience” (Miller, 2010, p. 29). In order to reinforce this disposition, holistic models of education employ contemplative exercises such as mindfulness meditation as vital processes for human development (Soloway, 2011).

John Miller put forth a similar model, whole child education, which involves a three-step approach to teaching: 1) a transmission stage – the transmission of facts, skills, and values to students, 2) a transaction stage – involving inquiry learning, problem solving, and skillful thinking, and 3) a transformation stage – the view that everything is interconnected (Miller, 2010). The transformation stage facilitates “a message of interconnectedness between the student and curriculum, teacher and student, and between students; guiding a personal inquiry into Self” (Soloway, 2011, p. 47). Transformative teaching focuses on the physical and cognitive dimensions of experience (Miller & Seller, 1985), and aims to impart wisdom, compassion, and a sense of purpose in one’s life (Miller, 2010). Employing transformative teaching nurtures self-inquisition in students by teaching them to relate to their thoughts (Soloway, 2011).

Transformative teaching sees experience as organic; the barrier between the learner and subject disappears and the learner becomes what he or she is studying or observing (Miller, 2010). Transcending these barriers allows students to truly embody
what they are learning. It is well documented that experiential learning facilitates deeper learning and positively impacts academic competence and student persistence (Coker & Porter, 2015). When students make personal connections between the learned material and their own lives, deeper learning is achieved. What if we can nurture this habit of connection in our students without the use of specific prompts? This is where mindfulness and constructivist pedagogy intersect, suggesting a wealth of potential for mindfulness implementation into the broader school context. Experiential learning takes advantage of the learning opportunity that is naturally embedded in experience. When students are cognizant of their inner thought processes during learning, which mindfulness facilitates, they can make connections between their inner and outer worlds: automatically facilitating deeper learning. If experience is an internal grounding point for learning, mindfulness is a vehicle that drives experiential learning. When students can internally situate their learning by employing mindfulness techniques, they become more acute experiential learners. Speaking to the educational implications of mindfulness in light of Kabat-Zinn’s research, Napoli et al. (2005) explains:

In order for children to learn in the classroom, they must be able to focus their attention. Mindfulness – one technique for focusing our attention – allows us to perceive multiple perspectives on a situation, recognize the novelty of current information, become aware of the context of the information, and better understand the information through the creation of new categories. (p. 106)

Mindfulness is especially well-suited to holistic models of education: grounding learning in personal experience, enhancing the education experience, and excelling academic performance (Soloway, 2011). Not only does mindfulness intervention have promise for mental health and academic performance, but for whole-scale educational reform.
In an experiment conducted at the University of Maryland, students were instructed to direct a cartoon image of a mouse out of a maze (Friedman & Förster, 2001). Participants were given one of two versions of the maze. The mazes themselves were the same, but the first version had a picture of cheese at the end of the maze, and the second version had a picture of an owl at the end of the maze (waiting to eat the mouse). After students finished the maze, they completed a creativity assessment pertaining to their thinking and methodology for directing the mouse out of the maze. Students who completed the first, “approach-oriented” version scored fifty percent higher on the creativity assessment than students who completed the second, “avoidance-oriented” version. Evidence from the experiment suggests that avoidance narrows focus and hinders creative thinking (Friedman & Förster, 2001). Speaking to the findings of this experiment, Kabat-Zinn (2007) noted:

If we can infuse our attention to our bodily experience with the approach qualities of interest, curiosity, warmth and goodwill, then not only will we be in greater touch with sensations and feelings in each moment, we also will be directly countering any effects of aversion and avoidance that may be present. (p. 112)

This experiment demonstrates the impact of mindfulness on creativity. When students approach experiential learning from a place of curiosity and non-judgment, negative dimensions of stress that impede academic performance are negated and creativity is induced. Furthermore, fostering creativity in our students is becoming increasingly important given the rapidly changing nature of the twenty-first century and the implications of this flux on the job market. The skill of creativity transcends this uncertainty. Furthermore, as technical skills continue to lose their relevancy in many trades, creativity skills are becoming increasingly desirable in the current and future workforce.
For these reasons, nurturing creativity in our students must be a priority for educators, something that can be achieved through mindfulness training. Studies show that in classrooms where mindfulness is a key practice in students’ learning experience, students are able to “transfer material learned to new and novel situations, are more creative, and think independently” (Napoli et al., 2005).

2.5 School-Based Mindfulness Program Efficacy

Research shows that mindfulness-based programs and practices can improve students’ attention, reduce their stress, and strengthen their social skills (Rempel, 2012). Mindfulness programs support students’ health and emotional well-being by facilitating self-regulation and nurturing emotional skills. Furthermore, fostering mindfulness in youth has the ability to act as a preventative tool for behavioural challenges and mental health issues that students may come to face throughout their lives, such as anxiety, depression, and behavioural problems (Rempel, 2012).

School-based mindfulness programs have taken many shapes and forms. Some programs have been included in various subject areas, most commonly physical education. The Attention Academy Program – designed to improve attention, foster non-judgment, and facilitate experiential awareness – incorporates mindfulness training into the physical education curriculum through breath work, body-scan, movement, and sensorimotor awareness activities (Napoli et al., 2005). Participants in a comprehensive study of the program were five to eight year old students with high anxiety. Post-treatment findings revealed improvements in test-anxiety, behavioural problems, social skills and selective attention (Napoli et al., 2005).
Mindfulness programs have also been integrated into pre-existing frameworks, as has been the case with social-emotional learning (SEL) curricula. SEL is a widely used model in schools that promotes competencies similar to those targeted in mindfulness training: self-regulation, self-awareness, and emotional-regulation. Integrated programs have not been specifically studied, but evidence suggests that mindfulness intervention can compliment and enhance the teaching of social and emotional skills (Weare, 2013).

Mindfulness is also being brought into schools in the form of stand-alone programs. A school-wide ten week Mindfulness Education curriculum was implemented for middle school students (grades 4 to 7) in Western Canada. The program consisted of weekly training sessions on mindful practices, aiming to enhance children’s self-awareness, focused attention, self-regulation, and stress reduction through seated meditation, attentive listening (to a single sound, usually a bell or chime), and mindfulness breathing exercises (Schonert & Lawlor, 2010). Pre and post intervention results showed increases in optimism, positive emotions, and social-emotional competency in participants (Schonert & Lawlor, 2010).

School-based mindfulness programs can be universal (for non-specific populations) or targeted (for specific populations). “MindUP” is a universal program designed by the Hawn Foundation that combines mindfulness with SEL. The program helps children develop traits associated with well-being by teaching social, emotional, attentional, and self-regulation strategies (Weare, 2013). A study of MindUP implementation for nine to thirteen year olds revealed improvements in behaviour, attention, and focus (Schonert-Reichl & Hymel, 2007).
Efficacy of programs that target specific populations has not been confirmed due to limitations in sample size and methods of measurement. Findings from universal programs, however, suggest that students with internalizing disorders, externalizing behaviours, learning disabilities, problems with executive functioning, and Attention Deficit Hyperactivity Disorder could benefit from program implementation (Felver et al., 2013).

“Inner Kids” is a mindfulness-skills program developed by Susan Kaiser Greenland that uses meditation, body-scan, and games, to target executive functions and promote emotional intelligence (Flook et al., 2010). A study of program implementation for second and third grade students, revealed a significant finding: children with lower pre-course self-regulation experienced the greatest improvements in behavioural regulation, meta-cognition, and overall executive functioning (Weare, 2013). These findings suggest that mindfulness intervention can be beneficial for targeted populations. Similarly, a study assessing the outcomes of a school-based mindfulness and yoga intervention developed by Holistic Life Foundation found that mindfulness-based approaches may improve adjustment among chronically stressed and disadvantaged youth by enhancing self-regulatory capacities (rumination, intrusive thoughts, and emotional arousal). (Mendelson et al., 2010).

Ongoing research is essential in broadening the credibility and appeal of mindfulness training for youth (Meiklejohn et al., 2012). Specific recommendations include: 1) developing decisive theoretical frameworks for conceptualizing effects of mindfulness training, 2) expanding the evidence-base of mindfulness programs, 3) validating appropriate outcome measures, 4) demonstrating connections between changes
in mindfulness and desired academic outcomes, 5) addressing implementation barriers in schools, and 6) ensuring program transportability (Meiklejohn et al., 2012).

There are significant challenges that stand in the way of mindfulness integration into the classroom and broader school settings. These include: 1) religious connotations of mindfulness and parental resistance, 2) transportability and certification – determining who is qualified for teaching mindfulness and for what ages, 3) finding trained mindfulness teachers, 4) the need for continued development in the adaptation of adult mindfulness training for younger populations, 5) lack of agreement on important elements of mindfulness programs, 6) lack of agreement on ways to measure the effectiveness of mindfulness programs, 7) motivating schools to embrace programs, 8) frequent changes in schools’ education policies – budgeting, priorities, and decision makers, 9) the need for funding, and 10) scheduling – finding suitable times within school curricula and appropriate spaces for mindfulness training (Meiklejohn et al., 2012). It is important to also note that many mindfulness-based teacher training programs are expensive and time-consuming and are therefore not feasible for many schools and teachers.

2.6 Conclusion

In chapter 2, I have reviewed the existing literature on mindfulness related to my research questions. I began with background information on the origins of mindfulness, including a discussion of Kabat-Zinn’s pioneering MBSR program. Then, I reviewed the existing literature on mindfulness in mainstream science, which included a discussion of the legitimate medical implications of mindfulness. Next, I examined the literature on mindfulness training in youth, and highlighted important developmental implications of
mindfulness training. After that, I explained how mindfulness intersects with pedagogic theory. Finally, I summarized research on school-based mindfulness programs showing program efficacy.

Further research must be conducted in order to document program efficacy and validate implementation. One aim of this study is to help fill an important gap in the research that needs to be addressed: the lack of evidence that mindfulness-based education programs result in improved academic achievement (Meiklejohn et al., 2012). As a result of the high-stakes accountability context our school systems operate under (Meiklejohn et al., 2012), the academic implications of mindfulness will be instrumental in motivating policy change. My research will help fill this gap by investigating how a sample of school teachers are incorporating mindfulness training into their classrooms and by sharing the outcomes they observe with the education community.
Chapter 3: Research Methodology

3.0 Introduction

In this chapter, I describe the research methodology used to conduct this study and provide the rationale behind important methodological decisions. I begin by reviewing the general approach, procedures, and instruments of data collection. Next, I expand more specifically on participant sampling and recruitment. Then, I explain data analysis procedures and review the ethical considerations relevant to my study. Lastly, I outline a range of methodological strengths as well as limitations for this study.

3.1 Research Approach and Procedures

This study was conducted using a qualitative research approach. This approach was the best fit for my study because it allowed me to gain insight into the use of mindfulness in a pedagogical setting by incorporating: 1) participants’ lived experiences, 2) my own reflexive positioning, and 3) existing research and literature – into a comprehensive interpretation of the phenomenon. The interplay of these three factors clarified the impact of mindfulness training on students’ mental health and academic performance, the purpose of my study. I conducted my research by collecting data through semi-structured interviews, extrapolating meaning from this data, and reconciling my findings with existing literature – enabling me to construct knowledge and come to informed conclusions about the benefits of using mindfulness in the classroom. This study serves as a contribution to existing literature and a call for educational reform. Furthermore, the process of qualitative research helped build my repertoire as a teacher researcher, which in turn, will continuously transform and deepen my teaching practice.
3.2 Instruments of Data Collection

The primary instrument for data collection used in this study was the semi-structured interview protocol. Semi-structured interviews provided the opportunity to collect valuable data based on participants’ experience integrating mindfulness into the classroom. Keeping my questions structured (see Appendix B) but open-ended helped guide the general direction of my study, while at the same time, providing me with the freedom to probe deeper if unexpected or unforeseen information surfaced (Creswell, 2007). Interviews were recorded on a voice recorder. I coded the transcripts based on themes found in the literature review and the participants’ responses pertinent to my research questions. The findings will be discussed in chapter 4.

3.3 Participants

In this section, I review the sampling criteria I established for participant recruitment and the range of avenues used for recruitment. I have also included a section wherein I will introduce each of the participants.

3.3.1 Sampling Criteria

The participants were selected based on the following criteria:

- Teachers have a personal or professional connection with mindfulness (to ensure commitment to mindfulness and belief in its usefulness for emotional well-being)
- Teachers apply mindfulness training in some shape or form in the classroom (these are the practices I am trying to analyze and learn from)
- Teachers have a minimum of two years teaching experience (to increase chances of participants having observed benefits of mindfulness practice for their students)
3.3.2 Sampling Procedures

Recruiting participants was done through attending professional development conferences and speaker seminars specific to mindfulness in education. I am fortunate enough to be immersed in a community of teacher colleagues and mentor teachers at the Ontario Institute for Studies in Education (OISE), and I therefore took advantage of my existing contacts and networks to recruit participants. Given the scope of the study, purposive and convenience sampling was used to ensure that all participants had experience with using mindfulness in a classroom setting and could therefore purposefully advise on the research problem and contribute to the understanding of mindfulness in education (Creswell, 2007). I also relied on opportunistic sampling and word-of-mouth – through my network of students, professors, and teachers, inside and outside of OISE – to locate exemplary teachers using mindfulness in the classroom. I contacted possible candidates for my research study through email, social media, and the phone, including educational leaders in the school board, scholars of mindfulness education at OISE, and organizational directors of mindfulness-based education programs across Canada. I set up interviews at a location and time of participants’ convenience. Participants have been assigned pseudonyms for reasons of confidentiality.

3.3.3 Participant Biographies

Jade is a second year high school teacher currently teaching grades 9, 11, and 12 in English. Her school body is approximately 1000 students, and is made up of predominantly Caucasian students who come from middle-upper class families.

Tina is a high school Geography, Philosophy, and Social Studies teacher. She has been teaching at the same school for fifteen years. The school population is
approximately 1250, and students come from a variety of different cultural and socioeconomic backgrounds.

Sharon is a former elementary school teacher for grades one to seven. The school in which she spent the most time teaching (10 years) was in an urban school setting. The student body was predominantly African American and Latino, and from low socioeconomic backgrounds. Sharon is now a teacher educator and researcher.

3.4 Data Analysis

I used my research questions as an interpretive tool to guide the data analysis process: transcribing interviews and codifying this data categorically and thematically. A qualitative research approach allowed me to extract meaning from my data, weaving participants’ lived experiences and observations with literature on mindfulness in the classroom in order to come to informed conclusions. By organizing my data into categories of information, I was able to justify the results of my findings: codes were based on evidence that was visible in my data (Creswell, 2007). Respective categories and themes were then synthesized based on intersecting themes from my data and existing literature. Organizing my data thematically allowed me to code based on the presence and absence of themes in addition to the relations between underlying concepts I came across in my research (Lee & Fielding, 2004). Lastly, I derived meaning from my research and indicated emerging trends in light of existing literature.

3.5 Ethical Review Procedures

To ensure there were no risks to participation in this study, careful attention and adherence to ethical review procedures were followed. Participants were asked to sign a consent letter (Appendix A) giving their consent to be interviewed and audio-recorded. A
copy of this letter was given to the participant and I retained the original copy as part of my records for this study. For confidentiality purposes, pseudonyms were used to mask the identity of each participant. Participants were notified of their right to withdraw from participation at any stage of the study. Participants were provided with the opportunity to review interview transcripts and re-state or retract their statements before I began my data analysis. Interview transcripts will be stored on my laptop (password protected) for the duration of five years. After this period, the information will be destroyed. Participants were made aware of my supervisor’s role in reviewing the data.

3.6 Methodological Limitations and Strengths

As a result of ethical parameters of my research, the scope and scale of this study were limited. I did not have the opportunity to interview students or engage in classroom observation. This made it difficult to accept with certainty the statements made by my participants pertaining to the effects of mindfulness training on the emotional well-being and academic performance of their students. The limited number of teachers I interviewed made it difficult to make generalizations about the impact of mindfulness intervention in the classroom on students’ mental health and academic performance. Furthermore, the impact I did learn about was based solely on teachers’ perceptions and observations, adding to the difficulty of generalizing findings pertinent to mindfulness in education.

There were, however, important methodological strengths of this study that helped me grow as a teacher researcher and future educator. Interviewing teachers resulted in more meaningful accounts of lived experience, specific to their work with mindfulness in the classroom, than a survey would have allowed for. In addition to my
own reflection, my hope was that interviews would elicit reflection in participants on their own teaching practice, illustrating another strength of my methodology.

3.7 Conclusion

In this chapter I have provided a brief summary of the methodological decisions to use a qualitative research approach with semi-structured interviews. I discussed the means of participant recruitment and outlined participant sampling criteria. I also provided reasons for the data analysis chosen for this study. Finally, I explained the ethical review procedures this study followed. In chapter 4, I will discuss my research findings: reconciling my data and the literature to address my research questions.
Chapter 4: Research Findings and Discussion

4.0 Introduction

In this chapter I report on and discuss the findings of my investigation into how a sample of elementary and high school teachers incorporate mindfulness training into their classroom teaching and discuss the impacts they observe for students’ emotional well-being and academic success. After carefully reviewing, coding, and analyzing my data, I synthesized five main themes: 1) reasons for introducing mindfulness into the classroom, 2) how teachers are implementing mindfulness in the classroom, 3) benefits of implementation, 4) challenges to implementation, and 5) considerations for widespread support of mindfulness in schooling. In chapter 4, I describe each of my themes, integrate participants’ voices into the discussion, and analyze the significance of my findings in light of existing literature on mindfulness and holistic models of teaching.

4.1 Theme 1: Reasons for introducing mindfulness into the classroom

Participants introduced mindfulness into their classrooms in order to support students in developing mindfulness skills. Participants had a personal connection to mindfulness prior to classroom implementation and were all mindfulness practitioners themselves. The main factors that influenced the decision to use mindfulness in their classrooms were: 1) finding ways to address the rise in stress levels in students, and 2) a commitment to social-emotional learning (in addition to academic learning).

4.1.1 Personal connection to mindfulness

All of my participants had personal connections to mindfulness and now have personal practices. Jade became interested in mindfulness after working with a professional learning team on a district-wide mindfulness initiative, which was part of her
teacher certification requirements. Tina and Sharon became interested in mindfulness after being diagnosed with a chronic illness and have been practicing it ever since. Tina spoke about her illness and how it was exacerbated by stress. It became imperative that she reduce her stress levels, which she achieved through mindfulness. Sharon described her failed efforts to cope with her illness before turning to mindfulness, “I had tried therapy and medications…all kinds of things that just weren’t working, and things started to shift in terms of my overall well-being when I started mindfulness practices.” All of my participants decided to integrate mindfulness practices into their classroom teaching because of the personal benefits they saw from their own practices, especially with regard to well-being and stress management.

4.1.2 The rise in student stress levels

The persistence and pervasiveness of stress felt by children and adolescents today is a pressing concerns for educators (Rempel, 2012). This holds true regardless of age level or socioeconomic background. Sharon discussed the traumatic home lives of her elementary students, many of whom had incarcerated parents. Jade touched on some of the stresses students tended to feel in high school in terms of balancing the school day with homework and extra curricular activities. She mentioned multiple times the pressure of college applications and the anxiety that follows. Similarly, Tina spoke to the mental psyches of her high school students when she said, “They’re too overloaded and as a result, they’re overstressed, they have so much anxiety, there’s so much depression…it’s horrific…I had six kids on suicide watch last year.” These statements speak to the long-term effects of stress on students such as anxiety, depression, and low
self-esteem, which can lead to suicidal ideation (Ontario Ministry of Education, 2013). They also highlight the prevalence of mental health problems in schools today.

All three participants implemented mindfulness into their classrooms because of its potential to improve emotional well-being and cognition and as a way to help their students cope with stress. In Sharon’s interview, she discussed the research on mindfulness and pedagogy – including her own research, in particular how students’ cognition and thinking is shut down during times of stress. We now know that when we experience stress, areas of the prefrontal cortex that are responsible for learning and self-regulation shut down in order to preserve energy for the fight or flight response (Shanker, 2014). Sharon believed that mindfulness helped students access higher order thinking, improved self-regulation, allowed them to learn more, and enabled them to be more articulate.

All participants spoke to the chaotic nature of schools and classrooms, and listed this reality as an important reason why mindfulness is so relevant to the school setting. Tina articulated:

If we can get [students] to come back into their bodies, come back into this space, and come back into this time, we can minimize a lot of those abstentious factors that are giving them so much anxiety and so much stress and that’s why I think [mindfulness] is relevant in every school.

Mindfulness helps to ground the student in the present moment amidst chaos around them (Kabat-Zinn, 2007), and therefore using mindfulness in the classroom can help to minimize factors that are giving students stress and anxiety. In discussing her reasons for implementing mindfulness in her classroom, Jade mentioned that while students cannot necessarily change the school-related tasks they are confronted with, what they can change are the ways in which they respond to these tasks. These considerations align
with the research showing that mindfulness is an effective form of stress management (Kabat-Zinn, 2007) in that it targets self-regulatory abilities (through intentional focus on a stimulus) that allow us to respond to stress calmly and efficiently.

4.1.3 Social-emotional learning and holistic teaching

In the high-stakes accountability context in which our school systems have operated under for so long, social-emotional learning has taken a back seat to “academic learning.” Fortunately, things are changing. With mounting research showing that persistent stress can lead to emotional-behavioural problems which ultimately disrupt thinking, hinder learning, and negatively influence school performance (Rempel, 2010), it has become increasingly evident that emotional well-being is a precursor to academic performance. Sharon spoke to the correlation between emotional well-being in kids and academic learning. All participants shared the common goal in their mindfulness implementation of creating a safe classroom environment where students can manage their stress, learn with more efficiency, and gain agency. When students are better able to modulate stress (an important component of self-regulation), their learning is enhanced because they can actively change their arousal levels in order to match the energy level needed to deal calmly and efficiently with the task in front of them (Shanker, 2013).

Tina attributed a lot of the stress felt by students in today’s society to expectations (which she believes are too high and too numerous). She also mentioned how students “never stop thinking, they never stop being plugged in, they never stop,” as contributing factors. Sharon and Tina both mentioned how students are often overwhelmed with thoughts of the past and worries of the future, and they highlighted the importance of bringing them back into their bodies and into the space around them. This can be
achieved by tapping into present experience and by controlling their attention. As discussed in the literature review, the mind-body connection facilitated through mindfulness training can help to ground the practitioner in momentary experience and to heighten awareness of thoughts and feelings as they arise (Weare, 2013). This process involves directing attention to an anchor, typically but not exclusively the breath. Participants employed various mindfulness techniques that used different anchors. This will be discussed further in section 4.2.2.

Tina emphasized, “We have to teach students to be humans, and not just cogs in a system.” This involves nurturing our students as human beings as well as academic learners. Miller’s whole child education model caters to this commitment to social-emotional learning because it prioritizes the nurturing of self-inquisition: teaching students to relate to their own thoughts (Miller, 2010). Heightening awareness, a core practice of mindfulness, allows students to focus on the physical and cognitive dimensions of experience (Miller & Seller, 1985), which has repercussions for mental health and academic performance (this will be discussed in theme 2).

4.2 Theme 2: How teachers are implementing mindfulness into the classroom

Participants discussed three important beginning steps to implementation: 1) using a gentle approach – have participation be optional and low-pressure, 2) starting with baby steps to build momentum gradually, and 3) being explicit in communicating the goals of mindfulness training. Participants shared the various mindfulness practices they used in their classrooms.
4.2.1 Introducing mindfulness into the classroom

All participants expressed the importance of using a “gentle approach” when introducing mindfulness into the classroom by making student participation optional and low pressure. A gentle approach achieves two things. First, it makes mindfulness practice non-intrusive. This approach can help avoid a common concern discussed by all participants: the fear of stepping on parents’ toes – since mindfulness training nurtures whole child development and can therefore be interpreted by parents as the teacher trying to raise their children. Second, it avoids attaching high expectations to mindfulness practice, which can set students up for failure. Jade and Tina both reiterated how difficult it is to center your focus for sustained periods of time, thoughts they shared with their students upon initial implementation. They encouraged their students to not get frustrated if their minds wandered (which happened) because this was natural, and they reminded their students that it requires a lot of practice to improve.

Tina felt that asking students to sit and meditate was asking too much, which is why a gradual approach to implementation was so important. It was embedded in Tina’s program that “if your mind wanders, that’s okay, just try to bring it back.” Jade told her students that mindfulness practice was “meant to be challenging” and that “you’re not just going to be able to not think about anything or stress about anything.” Sharon would explain to her students that practicing mindfulness is like “strengthening a muscle that will help improve your capacity to direct your focus and attention,” it takes time. Jade and Tina showed vulnerability in sharing with their students how hard it was for them to practice mindfulness, especially initially. Tina would tell her students, “I have a hard time getting a few seconds of absolute silence after practicing for years.” Tina said that
showing this vulnerability brought her students a sense of trust, relief, and motivation to persevere. In addition, a gentle approach to implementation is important because it facilitates the social-emotional learning that mindfulness training imparts on the individual: responding to our emotions non-judgmentally (Bishop, 2004).

Participants also expressed the importance of being explicit in discussing the reasons for implementing mindfulness into the classroom. Jade discussed the importance of explaining the benefits of mindfulness to her students so they can understand why they are practicing. She used the metaphor of being on the balcony of your mind, viewing the way you are feeling from a distance, and in a productive and accepting way. This analogy helps put into practice the intent of mindfulness to separate experience from emotion (Weare, 2013). Sharon explained to her students that by practicing mindfulness “you are strengthening those neural pathways that help you focus, attend, and be less reactive.” Sharon spoke about the current MindUP curriculum (see section 2.5) and how useful it would have been had it existed when she was teaching, in particular the watch dog and wise owl analogy that explains the science of self-regulation in a way that is more accessible to young children.

Tina repeatedly mentioned that you have to start with “baby steps” and that it is important to be patient. She expressed, “You can’t just do [mindfulness] right off the bat,” it takes time for students to trust you and to become familiar with mindfulness methods.

4.2.2 Teachers used a variety of mindfulness practices

Participants employed a number of different mindfulness practices in their classrooms and used various anchors to help their students facilitate the mind-body
connection. Sharon, who was working with predominantly elementary school students, implemented mindful listening, mindful breathing, singing bowl meditation (students focus on the vibration of a handle going around the rim of a bowl – using this noise as an anchor) and loving kindness meditation (students send love and kindness to themselves or to others). She found it particularly helpful with the younger students to have them bring a favourite object to class and she would instruct them to put the object on their bellies and to notice it rise and fall. This was helpful for younger students, since breathing meditation can be too abstract and metacognitive at that age.

Sharon would do mindfulness with her students at least three times a day, once in the morning to calm down her students’ nervous systems (many of her students were coming from very chaotic homes), after recess to help them transition back into work mode, before tests, at the end of the day to help them find peace before leaving the classroom space, and randomly when she felt her class could use a peaceful moment.

Jade used body-scans, breathing exercises, rhythmic breathing, mindful walking, and mindful drawing. Jade used scripts for many of her mindfulness practices whereas Sharon developed her own core student practices. Jade tried to implement mindfulness once a week, and this way, she could dedicate more than just a few minutes to the practice. She implemented mindfulness at the beginning of class, before or after tests, and sporadically when she felt like the class could benefit from it. Tina used a bell (using the sound of the bell as an anchor to focus on) at the beginning of all of her classes to get her students to “stop,” “come back into their bodies,” and “back into the space,” and at the end of every class, to help them transition out of the classroom.
Tina used mindful eating, mindful walking, meditations, and visualizations – including “elevator rides,” a relaxation exercise where students were mentally transported out of the classroom and into a different space (e.g. to the beach). In addition to having set times for mindfulness, Tina also used mindfulness in her classroom when she or her students felt they “needed it,” such as before tests, when her students were having difficulty focusing, and in the midst of behavioural problems.

4.2.3 Infusing mindfulness practices into classroom instruction

Sharon and Jade implemented mindfulness as a standalone practice, whereas Tina infused mindfulness into classroom instruction and curricula in order to engage deeper learning. Part of this included using visualizations to introduce topics. For example, when her students were studying overpopulation in her Social Studies class, she led them through a simulation of what overpopulation feels like (the heat, the noise, the panic, etc.). Another example would be her mindful eating assignment when her students studied food in her World Issues class. For this assignment, students would learn about the origin of a food and then get to try the food (bringing moment-to-moment awareness to the way it tastes). In her Environmental Studies class, Tina liked to get her students outside as much as possible so they could connect with the world around them. In one of her assignments, students would find a space to sit and write a stream of consciousness (describing how they felt in relation to that space).

Tina used mindfulness as a key teaching practice for experiential learning in her classroom. She believed that having awareness of your senses, emotions, and the space around you (facilitated by mindfulness practice), helped her students connect personally with subject matter and enhanced their learning experiences. This mindset aligns with
Miller’s holistic education model that uses contemplative exercises such as mindfulness as a process for human development and learning (Soloway, 2011); reinforcing the disposition between the outer world of phenomena and inner world of experience (Miller, 1990). In Tina’s classroom, mindfulness was an ongoing practice that was deeply embedded in her classroom instruction and academic curricula. This differed from Sharon and Tina’s classroom, where mindfulness was implemented as a standalone practice.

4.3 Theme 3: Benefits of practicing mindfulness in the classroom

Participants spoke about the benefits they observed in their students after mindfulness implementation in terms of emotional well-being, self-regulation, and academic performance. They also spoke about the benefits of mindfulness when it comes to classroom management.

4.3.1 Mental health, self-regulation, and emotional skills

All three participants expressed that mindfulness implementation impacted students’ mental health and their ability to manage stress. Jade noticed anecdotally a decrease in stress levels and increase in attention in her students. She also commented that students developed a more resilient attitude towards coursework and school expectations after they started practicing mindfulness. In post-implementation surveys her students indicated that they felt refreshed and appreciated the reset. They also recognized the power of just a few minutes of mindfulness to help them relax, re-center, and transition from one task to another. These responses are similar to those of a MBSR study for children where participants reported enhanced experiences of well-being and relaxation (Napoli et al., 2005).
Sharon noticed positive impacts of mindfulness across the board. Her students were better able to articulate, regulate their behaviour, and focus their attention. The changes in articulation can be explained by improvements in self-regulation, allowing students to deal more calmly and efficiently with the task in front of them (Shanker, 2013). She noticed their stress and anxiety levels were lowered, both anecdotally and through student feedback. Students expressed how much they had on their minds and how mindfulness helped them feel more peaceful and calm. These findings are in sync with the research showing that mindfulness can improve anxiety levels, behavioural problems, social skills, and selective attention (Napoli et al., 2005). Students also indicated that they felt “less angry” after mindfulness practice. These comments parallel the outcomes of a mindfulness intervention program for chronically stressed and disadvantaged youth discussed in the literature review that showed improvements in students’ ability to self-regulate rumination, intrusive thoughts, and emotional arousal (Mendelson et al., 2010).

Tina found it hard to judge the overall changes in the student body’s mental health, but she said that she knows students are happier in her space (which she said is less stressful than other classrooms). Tina had a lot of students with depression and anxiety who would seek her out because they knew “what her classroom had to offer,” referring to a peaceful space, and because she had “worked with them enough,” referring to the relaxation strategies of mindfulness. She shared, “A student last year who ended up being hospitalized for clinical depression said to me: I feel better even when I’m just with you just because I can relax.” Similarly, she had another student who said to her, “Sometimes I just think about you telling me how beautiful my breath is...and that allows
me to keep breathing.” These comments speak to the calming effects of mindfulness as researched by Kabat-Zinn (2009), specifically how intentional focus (using the anchor of the breath for example) has a steadying effect on the mind. It also reinforces the call for fostering mindfulness in youth because of its ability to act as a preventative tool and a coping mechanism for mental health issues, such as anxiety and depression, that students may come to face later in their lives (Rempel, 2012).

4.3.2 Academic performance

While Jade and Sharon felt that mindfulness practice impacted their students’ overall academic performance, they did not have quantitative data to measure this. These remarks mirror the research saying that lower stress levels translate into better performance for students. For instance, research has demonstrated the negative correlation between stress and academic performance (Rempel, 2012). Mindfulness program have shown to counter this correlation: improving academic performance in students (Semple et al., 2009; Flook et al., 2010; Schonert-Reichl & Lawlor, 2010).

Tina, on the other hand, noticed significant and measurable differences in academic performance post-implementation. She stated, “Students’ marks went up between fifteen and twenty percent when I started doing visualizations.” She attributed this to the deeper learning facilitated by visualization, because “it’s easier to talk about it when [students] can relate to [content] in that kind of intuitive sense…so it gives them a much better understanding of the subject matter because it’s deeper and it’s more personal.” Tina’s view is in line with Dewey’s theory on experiential learning: behaviours, habits, and thoughts involve an interaction between an individual and its surrounding physical and social conditions and not in isolation (Miller, 1990).
increase in student grades after implementation would suggest that mindfulness practices used in Tina’s classroom helped reinforce the disposition of interdependence between inner and outer worlds (Soloway, 2011), thus facilitating experiential learning and deepening understanding.

Furthermore, Tina expressed the importance of fostering self-awareness through mindfulness practices if students are to make the most of visualizations. When students can relate to their thoughts, they are better able to ground learning in personal experience (Soloway, 2011). This is why mindfulness practice is so well-suited to holistic models of education (Soloway, 2011). Since experience is an internal grounding point for learning and mindfulness strengthens this natural disposition; mindfulness practices enhance the learning experiences of students.

Tina also attributed the increase in academic performance to students’ ability to think after mindfulness practices, specifically how students are better able to make neurological connections when their brains are relaxed. This phenomena is supported by the research that has shown how stress weakens or shuts down prefrontal function; disabling the mind from thinking, learning, and reasoning (Shanker, 2014).

One of Jade’s reasons for implementation was to make her students more open-minded and give them positive perspectives. While Jade did not speak to the impact of mindfulness on creativity, Tina did. Her students said they found the visualizations incredibly helpful because it opened them up to other ideas. The correlation of mindfulness and creative thinking has been demonstrated by the research of Friedman and Förster (2001): approaching tasks from a place of open-mindedness and non-judgment nurtures creativity.
4.3.3 Student enthusiasm

All three participants noted that student reception of mindfulness training was extremely positive. Jade expressed that she had been nervous to initially implement mindfulness out of worry her students would not “buy into it”. She was surprised when the opposite happened, and eventually, her students were asking for it. Similarly, Tina’s students would come up in front of the class during stressful times and ring the bell, evidence that mindfulness fosters self-regulatory abilities (Meiklejohn et al., 2012). She even had to start including the bell practice on her lesson plans for supply teachers because the students would always ask for it. Referring to her elevator rides, Tina shared, “I do them before every test…they clamor for them, they have me called into some of their math classes to do them before tests,” which shows that mindfulness can be an effective stress-reduction skill for students (Rempel, 2012) and beneficial for academic performance (Semple et al., 2009; Flook et al., 2010; Schonert-Reichl & Lawlor, 2010).

Tina’s students would repeatedly express to her that the mindfulness skills they were learning in her class were strategies they “need” and that they will “use in the future”. The desire for strategies taught through mindfulness emphasize the importance and urgency of addressing the mental health needs of students. It also suggests, again, that mindfulness can be an effective preventative tool for mental health issues (Rempel, 2012). All three participants intended the mindfulness skills they were teaching to be transferred over to their students’ daily lives and futures. Sharon spoke about this transfer of ownership, which she would facilitate by asking students to be in charge of picking the times of the day when they thought the class could use a peaceful moment. She noted that on days when stress levels were high, students “often would pick the exact
times and moments I would have picked,” more evidence that mindfulness practice helped students strengthen their emotional regulation. This transfer of responsibility is proof that mindfulness prompting (from teacher-directed to student-run) can help equip students with coping mechanisms they can then utilize (independent of classroom instruction) for emotional problems they may face in their futures (Rempel, 2012).

4.3.4 Classroom management

An unanticipated finding that came out of my research was the benefit and potential of mindfulness for classroom management. Participants expressed two trains of thought with regard to this theme.

First, when teachers practice mindfulness themselves, they are likely to be more mindful, thoughtful in their responses, and less reactive (expressed by Sharon). This frame of mind is more conducive to a whole child approach to education. Furthermore, having an individual practice gave participants the opportunity to collect themselves in times of stress and helped to avoid burnout. Tina shared, “I think if I didn’t use mindfulness I don’t know if I could do this job on a daily basis…my personal practice centers me and keeps me sane.” Tina also mentioned that by doing mindfulness with her students, she would practice simultaneously, which gave her the opportunity to compose herself and do a mental scan of her to-do list. This helped Tina remember announcements, upcoming due dates, and so on, that she would otherwise have forgotten had she not taken a moment to “center herself” and “think.”

Second, mindfulness is a tool that can be used to help students individually center themselves and collectively regroup when the classroom becomes too chaotic or too lethargic (expressed by Jade and Tina). This is especially true when it comes to
transitions, which have the tendency to disrupt focus. Tina discussed the necessity of using mindfulness with one particularly difficult class (behaviour wise), when she said, “if I don’t do a [mindful] walk with my grade nine applied class in the afternoon, I will fight them all period. But if I do a walk, come in and have a bell, I get a good half hour of work out of them.” Mindfulness in the classroom can function as a non-punitive strategy for classroom management, making the argument for school-based implementation all the more compelling, as it benefits students, teachers, and the classroom environment as a whole.

4.4 Theme 4: The challenges of employing mindfulness in the classroom

All participants spoke about some of the challenges of and barriers to implementing mindfulness in their classrooms. These included: 1) religious and spiritual connotations associated with mindfulness, 2) initial student reactions, 3) teachers’ unwillingness to show vulnerability – which is required to teach mindfulness, 4) lack of immediate results, and 5) lack of time in teachers’ schedules.

4.4.1 Religious connotations

All participants expressed that religious connotations associated with mindfulness act as a barrier to school-based implementation. This barrier is one of the main reasons for parental resistance (Meiklejohn et al., 2012), as mindfulness intervention can be misinterpreted as religious intervention. While aspects of mindfulness come from Buddhist philosophy (Purser & Milillo, 2015), the fostering of social-emotional skills such as self-awareness do not translate into spiritualism. These skills are being taught with the intention of nurturing self-regulatory abilities, not religious indoctrination. To avoid this predicament, all participants stated the importance of framing mindfulness in
secular terms and being transparent in how mindfulness training is helping to improve self-regulation and cognition. Tina explained to her students that by teaching mindfulness she was “teaching awareness not religion.” The benefit of this transparency is that explicitly stating the goals of mindfulness practice in secular term helps offset the spiritual connotations associated with mindfulness.

4.4.2 Initial student reaction of silliness

Another common challenge discussed by all participants was initial reactions of students to mindfulness. This can be summed up as general “silliness,” especially with younger students, and feelings of embarrassment, more common with older students (who can be self-conscious about trying something new). However, participants noted that this behaviour was expected and happens regardless of age, subject matter, and time of day.

Tina noted that her most difficult class, “were the most resistant to it…and also the most needy for it.” Sharon expressed similar sentiments when she said it was often the kids who resist it the most that need it the most. These comments shed light on the findings of the Inner Kids program study which revealed that children with lower pre-course self-regulation experienced the greatest improvements in behavioural regulation, meta-cognition, and overall executive functioning (Weare, 2013). These findings emphasize the potential of mindfulness intervention as being especially beneficial for targeted populations with regard to mental health, behaviour, and cognition.

4.4.3 Showing vulnerability in front of students

Teachers are always modeling behaviour for their students, and this holds true for all instruction, including mindfulness. In order to teach mindfulness, teachers must
subject themselves to vulnerability because they are modeling mindful thinking. When you relate to your thoughts, you are opening yourself up to insecurities because you become cognizant of all thoughts and feelings, including negative ones. This is a challenging task for teachers, many of whom see the power balance between student and teacher as a dichotomy. All participants mentioned how important it is for teachers to overcome this barrier. Tina spoke about the importance of being honest and “human” with her students, when she said, “It seems like they’ll respect you more if you’re strong and you’re overbearing and that those are the teachers who get the respect but it’s not…it’s the ones that they can trust, it’s the ones that they feel are honest with them, and it’s the ones that open themselves up.”

4.4.4 Lack of immediate results

Another barrier and deterrent to widespread school implementation discussed by all participants is the lack of immediate results and benefits of mindfulness training. Tina talked about the importance of persevering and trusting that the benefits will come. She suggested not giving up until you try it for a year. Sharon’s advice was also to “stick with it.” Because of the lack of immediate results, which is especially pertinent in the results-driven world of education, further research must be conducted in order to verify the long-term impacts, which will serve as validation for current implementation (Meiklejohn et al., 2012).

4.4.5 Lack of time in busy teacher schedules

The challenge to implementation discussed most frequently and intensely was the lack of time. Teachers are extremely busy and constantly juggling responsibilities. Covering curriculum expectations and other mandatory requirements is challenging
enough as it is, making additional commitments difficult to manage. Jade discussed how
overwhelmed she felt as a beginning teacher, and admitted that she was not as good about
sticking to her weekly mindfulness plan as she would have liked to be. Sharon, who is
also a teacher educator, expressed that teachers often say they do not have time to add a
mindfulness program to their schedules. Tina discussed how sometimes it would be
easier to just tell her students to sit down and be quiet instead of using mindfulness, but
she knows this can be a symptom of exhaustion and she knows that she, her students, and
her classroom atmosphere will all benefit from mindfulness, which keeps her motivated.

4.5 Theme 5: Considerations for widespread support of mindfulness in schooling

Participants shared insight into important considerations for widespread support
of mindfulness in schools. These included spreading general awareness of what
mindfulness is and what it can do for students, the importance of having a personal
practice before implementation (which decreases the need for extensive teacher training
programs), and the dedication to a long-term commitment.

4.5.1 General awareness and administrative support

As discussed in the literature review, mindfulness awareness is growing, largely
in response to the surge in research linking mindfulness to health and emotional well-
being (Rempel, 2012; Weare, 2013; Meiklejohn et al., 2012). All participants spoke
about this growing interest, especially with the recent push in the education system
towards better support for student mental health (Ontario Ministry of Education, 2013).
Jade discussed the importance of inviting staff, parents, and students to talk about
mindfulness so that people are informed of the benefits.
As a result of Tina’s implementation and the success that followed (her students were noticeably reaping the benefits), her school committed to a school-wide mindfulness initiative. The entire school partook in five minutes of mindfulness daily over the public address system. Tina discussed the importance of having administrators who are supportive and willing to take risks. She believes, “If we can get more openness [to mindfulness] at the top, it will trickle down.”

4.5.2 Importance of having a personal mindfulness practice prior to teaching

The literature tells us that mindfulness is more effective when taught by someone who can model and embody the qualities mindfulness develops, especially in their everyday interactions with children (Weare, 2013). Tina articulated the importance of having her own personal practice because it centers her, keeps her sane, and allows her to manage her own stress before helping her students do the same. Sharon believes that having your own mindfulness practice makes implementation more organic and more feasible for two reasons. First, by having your own practice, you can “authentically bring [mindfulness] into your classroom” and “model” the skills you are trying to teach. Second, it allows you to implement mindfulness at greater ease, in whatever way is convenient for you and your students because of your deeper understanding. The result of having your own practice is that teachers learn to use mindfulness in more manageable ways. Sharon also mentioned, “If you have your own practice you bring your practice in what ever way makes sense to you and whatever way makes sense to the student population you’re working with.” Jade was adamant about implementing mindfulness in “small chunks” because it allows for flexibility and prevents the teacher from feeling
overwhelmed with a strict, time-consuming program. She added that even small chunks of mindfulness make a “big difference” in her classroom and with her students. 

Sharon felt quite strongly about how fancy and expensive teacher training programs act as a barrier to widespread implementation, and she did not think they were necessary. The literature also lists the transportability and certification of mindfulness programs (who can teach mindfulness and to what grades) as a significant barrier to implementation. Sharon suggested you “think about your program as bringing in a piece of your own mindfulness practice into your class without adding onto your roll as teacher.”

4.5.3 Long-term commitment

As discussed in theme 3, all participants expressed the importance of having a long-term commitment when it comes to mindfulness practice because the benefits are not instantaneous. Participants also mentioned that luckily, since supporting students’ mental health is becoming a mandated priority within our school systems (Ontario Ministry of Education, 2013), the public, parents, and administrators are becoming more open to and enthusiastic about practices such as mindfulness that cater to this new policy. Tina discussed how we are starting to see this shift in focus on mental health within curricula itself. For example, in the Canadian and World Studies curriculum, “There is now the idea of teaching citizenship, of teaching humanity, and of teaching people to be good people,” in which mindfulness fits seamlessly. The model of holistic teaching emphasizing wisdom, social-emotional skills such as compassion, and sense of purpose in one’s life (Miller, 2010), can act as the gateway to weaving mindfulness into
curriculum instruction, thereby supporting student mental health, enhancing the learning experience, and accelerating academic performance without adding on to teachers’ roles.

4.6 Conclusion

In chapter 4, I have reported my findings on why and how a sample of elementary and high school teachers use mindfulness in their classrooms and discussed the impacts they observed on students’ emotional well-being and academic success. I highlighted the main barriers to implementation touched upon by participants, and included their recommendations for widespread support of mindfulness in schools. My research findings were largely congruent with the literature on mindfulness as an effective form of stress management, a tool for emotional well-being, and a vehicle for academic success, for students. The successes of mindfulness implementation in the classroom that were revealed in my findings make a strong case for the widespread integration of mindfulness into a holistic approach to pedagogy, with implications for teachers, students, and curricula. These implications will be discussed in chapter 5.
Chapter 5: Implications

5.0 Introduction

This qualitative research study demonstrates the extent to which mindfulness can be employed as an effective coping mechanism for mental health problems, a strategy for improving self-regulation, and a vehicle for academic performance. I collected data by conducting three semi-structured interviews with teachers who used mindfulness in their classrooms to learn about the different ways teachers are bringing mindfulness into the classroom and the impacts they observed on students’ emotional well-being and academic success. I analyzed my data by coding interview transcripts, synthesizing overlapping themes in light of existing literature, and discussed the implications of my findings. These implications are relevant to the education community, my personal teaching practice, and the research community at large. In this chapter, I will review the key findings from my data, indicate the broad and narrow implications of these findings, offer recommendations for the integration of mindfulness into schooling, and suggest areas for further research that are necessary in order to make this integration feasible and effective.

5.1 Overview of key findings and their significance

Participants identified the following reasons for introducing mindfulness into the classroom: a personal connection to mindfulness, a personal practice of mindfulness, a desire to address the rise in stress levels in their students, and a commitment to social-emotional learning and holistic teaching. When first introducing mindfulness into their classrooms, participants emphasized the importance of having a gentle approach (seeing mindfulness as optional and non-intrusive), creating a simple program (so that
implementation is feasible), and of being transparent (using explicit and secular language when communicating program goals). Transparency allowed students, parents, and the greater school community to have a clear understanding of what mindfulness practice targeted. Implementation took on many forms, and was age-dependent. Common practices included body-scans, breathing exercises, mindful listening, mindful walking, mindful drawing, mindful eating, visualizations, and meditations (bell, singing bowls, and love and kindness meditation). Participants implemented mindfulness routinely, at random, and as needed.

The benefits that participants observed in their students after mindfulness implementation were widespread. These included improvements in overall mental health: emotional well-being, stress management, self-regulation, self-awareness, and relaxation; and improvements in academic performance: clarity of thought, better articulation, deeper understanding, enhanced creativity, and higher grades. Self-assessments and general enthusiasm from their students further cement the success of participants’ mindfulness programs. All participants experienced an unintended benefit of their mindfulness programs and personal practices: classroom management.

Despite the successes of participants’ mindfulness programs, there were challenges that acted as barriers to implementation along the way. These included: the religious connotations associated with mindfulness, initial student reaction of silliness and embarrassment, teachers not wanting to show vulnerability, the lack of immediate results after mindfulness training, and the significant time commitment involved. Participants also addressed important considerations for the widespread support of mindfulness in schooling. These discussions centered on spreading awareness of what
mindfulness is and how it can help the practitioner in their daily life, the importance of teachers developing their own mindfulness practices before bringing it into their classrooms, and long-term commitment to mindfulness programs in order for student benefits to be realized.

5.2 Implications

The present study has important implications for the education community, the research community, and for educational reform as a whole. In this section, I will address the broad implications of this study, and then discuss specific implications for my own teaching practice. All implications point towards the desirability of a holistic approach to teaching that incorporates mindfulness into education policy, teacher training, and every day pedagogy, with the aims of better meeting the emotional, physical, and academic needs of students.

5.2.1 Broad: The educational research community

The findings of my research should serve as a call to action for policymakers to prioritize student mental health to a greater extent than what is currently being practiced. Strides in Ontario policy have been made regarding student mental health, such as the publications of mental health resource guides, changes to the Health and Physical Education curriculum, and greater emphasis on mental health in teacher training programs. Teacher tools and strategies for achieving mental health goals put forth by new policy, however, are lacking. Mindfulness is one strategy that can be used to improve mental health and enhance academic performance (Rempel, 2012). The higher academic achievement that occurs as a result of mindfulness practice is a result of improved mental health (Weare, 2013), and a byproduct of experiential learning;
mindfulness grounds learning in personal experience which facilitates deeper understanding (Soloway, 2011). The academic ramifications of mindfulness have large-scale implications for curriculum makers, who should acknowledge this potential and put it into practice.

5.2.2 Narrow: My professional identity and practice

I chose to research mindfulness in the classroom because as someone who has experienced the benefits of mindfulness for my mental health and academic success, I wanted to explore the potential of using mindfulness in schools to help other students meet these same ends. Had I been equipped with mindfulness skills at an earlier age, I believe that I would have been better able to navigate the mental health problems that I experienced in adolescence that plagued my happiness, health, and success in school. I was unsure as to how applicable, well-suited, and effective mindfulness could be in the school setting, and I was curious about the extent to which mindfulness could be used as a tool for combatting mental health problems in students. The existing literature combined with my research findings supports this, as evidenced by the teacher-observed and student-reported benefits of mindfulness. Prior to my research, I anticipated that an improvement in mental health would be an outcome of mindfulness training for students, which would then translate into improved academic performance. Excitingly, this study has highlighted other areas in the school setting where mindfulness could be beneficial that I did not foresee. These include mindfulness as a form of classroom management, teaching strategy, and a curriculum driver.

This study has greatly informed my professional practice, and more broadly, my philosophy of education towards a more holistic model of education. The prevalence of
MINDFULNESS IN THE CLASSROOM

mental health problems experienced by students and the direct correlation between mental health and academic performance (made apparent throughout my research) has catalyzed this pedagogical shift. A holistic approach that nurtures whole child development is necessary if we are to respond to the needs of our students and attend to our responsibilities as teachers (which spans beyond the realm of academics). The unseen academic potential and curricular implications of mindfulness have cemented my commitment to holistic education, in particular, to a more transformative mode of teaching. Transformative teaching facilitates “a message of interconnectedness between the student and curriculum, teacher and student, and between students; guiding a personal inquiry into Self” (Soloway, 2011, p. 47).

Mindfulness is a key practice of transformative teaching because it creates a space in which interconnectedness and self-inquisition can be internalized: inquiry into the self by teaching students to relate to their thoughts; interconnectedness between students and curriculum by prompting students to make connections between their inner and outer worlds (which translates into deeper learning); interconnectedness between students by nurturing emotions skills; and interconnectedness between student and teacher by fostering nurturing relationships (made easier through positive classroom management). For these reasons, I see mindfulness as a core component of my own teaching practice as well as the teaching practices of all educators committed to holistic teaching.

5.3 Recommendations

As a result of the mental health and academic benefits for students, the asset of classroom management for teachers, and the curricular implications for policy makers,
the following recommendations should be considered in order to integrate mindfulness into schooling:

5.3.1 Ministries of education, teacher education, and professional development:

- Include mindfulness practices in mental health policies as a viable strategy for promoting emotional well-being
- Do not require mindfulness certification as a prerequisite to teaching mindfulness in the classroom, as is stagnates mindfulness implementation in the classroom and is not necessary for successful programs
- Make mindfulness training accessible to interested teachers to help them develop their own practice before bringing mindfulness into their classrooms
- Include mindfulness training in teacher training programs to help teacher candidates to:
  - Develop personal practices
  - Implement mindfulness into the classroom
  - Learn how to infuse mindfulness into instruction

5.3.2 Teachers:

- Develop your own mindfulness practice before bringing it into the classroom
- Create your own classroom mindfulness program that works for you and your students
  - Use a gentle approach (non-intrusive and optional)
  - Implement a simple program (feasible with schedule)
  - Be transparent (explicit goals using secular language)
  - Access resources:
- Access online resources (e.g. Mindfulness Activities and Teaching Resources: http://www.mindfulteachers.org/p/free-resources-and-lesson-plans.html)

- Acquire mindfulness curricula, scripts, and books (e.g. Learning to Breathe: A Mindfulness Curriculum for Adolescents to Cultivate Emotion Regulation, Attention, and Performance (Broderick, 2013), Planting Seeds: Practicing Mindfulness with Children (Hanh, 2007), Little Monkey Calms Down (Dahl, 2014), Fly like a Butterfly: Yoga for Children (Khalsa, 1999), The Hawn Foundation MindUP curriculum:
  http://thehawnfoundation.org/mindup/

- View films on mindfulness (e.g. Just Breathe (2015), Planting Seeds of Mindfulness (2007), Room to Breathe (2007))

- Download mindfulness apps (e.g. Smiling Mind:

- Consult mindfulness organizations (e.g. The Mindful Edge, Mindfulness Without Borders, The Garrison Institute)

5.3.3 School boards, policy makers, and administrators:

- Consider school-wide mindfulness initiatives (for example, two minutes of mindfulness over the public address system)

- Spread awareness of mindfulness
  - What it is
  - What the benefits are to student mental health and academic success
o How it can be used in the classroom

• Embrace holistic education as a standard

5.3.4. Curriculum makers:

• Infuse mindfulness into curricula (with a focus on experiential learning)
• Make curricula expectations compatible with holistic education, transformative teaching, and experiential learning
• More fully integrate mindfulness into the Health and Physical Education curriculum (healthy living and living skills; strategy for mental health and emotional well-being; practices that use mindfulness meditation such as yoga; prevention of drug abuse)

5.4 Areas for further research

Further research is necessary in order for mindfulness in education to be actualized and implemented effectively. In this section I will outline recommendations for areas requiring further research. First, more quantitative research must be conducted to better understand the connection between mindfulness and academic performance. The impact of mindfulness practice on academic success needs to be well understood, demonstrated, and documented, if policy makers are to consider whole-scale reform that incorporates mindfulness into instruction and curricula.

Second, more specific and congruent research must be conducted on mindfulness in relation to child development. This will help policy makers determine the ideal age at which to begin implementation and it will allow for the creation of age appropriate programs that are based on stages of development in order to maximize program effectiveness. This effort will entail collaboration between the medical research
community and the educational research community. Third, researchers should hone in on the potential of using mindfulness with specific populations (in addition to non-specific populations) to observe any differences in outcomes. Existing literature and my research findings reveal that mindfulness may be most beneficial for students with behavioural, intellectual, and emotional problems, and therefore, further research into this potential is recommended. Pending results, an argument can be made for integrating mindfulness into special education settings to a greater extent than with general populations. Fourth and finally, more longitudinal studies must be conducted in order to measure the long-term benefits and outcomes of mindfulness training for youth in order to assess the effectiveness of mindfulness as a preventative measure and coping mechanism for mental health problems.

5.5 Conclusion

Mental health problems among students in the 21st century are rampant and on the rise (Rempel, 2012). As a result, student emotional well-being, capacity to self-regulate, and academic success (all intricately connected) are being impaired. The correlation between emotional well-being and academic success emphasizes the need for educators to prioritize student mental health. While the promotion of mental health has become more of a focus for Ontario school boards as well as for many school boards around the world, a discrepancy exists between what is being asked of teachers and what is actually being practiced. Tangible and feasible mental health strategies must be made known to enable teachers to effectively meet student needs.

Existing research and participants’ experiences confirm the significant positive impact of mindfulness training on mental health, self-regulation, and academic success;
findings that have major implications for ministries of education, teachers, and policymakers. This study demonstrates how mindfulness is a crucial strategy for fostering mental health, and illustrates how it can be effectively employed to meet emotional, developmental, and academic needs of students. Furthermore, findings suggest that mindfulness practices can serve as a mode of teacher instruction, learning strategy, and curriculum driver. The positive impact of mindfulness on students’ mental health and academic performance, combined with its effectiveness as a teaching strategy, suggest that mindfulness be a key component of whole-scale reform towards a holistic model of education.
References


Appendix A: Letter of Consent for Interview

Date: ___________________

Dear ________________,

I am a graduate student at OISE, University of Toronto, and am currently enrolled as a Master of Teaching candidate. I am studying how teachers are integrating mindfulness into the classroom and the outcomes they observe for students for the purposes of investigating an educational topic as a major assignment for our program. I think that your knowledge and experience will provide insights into this topic.

I am writing a report on this study as a requirement of the Master of Teaching Program. My course instructor who is providing support for the process this year is Dr. Angela MacDonald-Vemic. The purpose of this requirement is to allow us to become familiar with a variety of ways to do research. My data collection consists of a 45-60 minute interview that will be audio-recorded. I would be grateful if you would allow me to interview you at a place and time convenient to you.

The contents of this interview will be used for my assignment, which will include a final paper, as well as informal presentations to my classmates and/or potentially at a conference or publication. I will not use your name or anything else that might identify you in my written work, oral presentations, or publications. This information remains confidential. The only people who will have access to my assignment work will be my research supervisor and my course instructor. You are free to change your mind at any time, and to withdraw even after you have consented to participate. You may decline to answer any specific questions. I will destroy the audio recording after the paper has been presented and/or published which may take up to five years after the data has been collected. There are no known risks or benefits to you for assisting in the project, and I will share with you a copy of my notes to ensure accuracy.

Please sign the attached form, if you agree to be interviewed. The second copy is for your records. Thank you very much for your help.

Sincerely,

Researcher name: Charlotte Ashe
Phone number: 647 621 4191
Email: charlotte.ashe@mail.utoronto.ca

Course Instructors Name: Dr. Angela MacDonald-Vemic, Rodney Handelsman
Contact Info: angela.macdonald@utoronto.ca, rodney.handelsman@utoronto.ca
Consent Form

I acknowledge that the topic of this interview has been explained to me and that any questions that I have asked have been answered to my satisfaction. I understand that I can withdraw at any time without penalty.

I have read the letter provided to me by Charlotte Ashe and agree to participate in an interview for the purposes described. I agree to have the interview audio-recorded.

Signature: __________________________________________

Name (printed): _____________________________________

Date: ______________________
Appendix B: Interview Questions

Date:
Start Time: End Time:
Location:
Participant Name:

Introduction

The purpose of my research is to learn how teachers incorporate mindfulness training into the elementary classroom and to learn from them what outcomes they observe for students’ mental health, well-being, and academic success, in order to share best practices with the education community. I would like to thank you for your participation in this study and remind you that your responses will be kept confidential and that you have the right to withdraw at any time. Please do not hesitate to pass on a question you do not feel comfortable answering. The interview consists of 17 questions and should last approximately 30-45 minutes. Do you have any questions for me before we begin?

Background Information

1. To begin, can you please tell me more about what grades and subjects you currently teach/taught? What other grades and subjects have you previously taught?
2. Can you tell me about the school you currently teach in/taught at? (size, demographics, program priorities, student interests, etc.). How long did you/have you taught/teach at this school?
3. As you know, I am interested in learning how teachers implement mindfulness in their classroom teaching. To begin, can you tell me how you became interested in mindfulness? For how long have you been practicing mindfulness? (e.g. personal, professional, educational experiences, etc.)
4. When did you begin integrating your interest in mindfulness into your classroom teaching?

Beliefs/Values (Why?)

1. What does mindfulness mean to you? What are some of the core practices you consider to be mindfulness practices?
2. In your view, why is mindfulness practice relevant to schooling?
   i. Why do you teach mindfulness practice?
ii. What do you believe are some of the benefits of mindfulness practice for students? What do you believe students can gain/have gained from mindfulness training in the classroom?

iii. And for teachers?

3. In your view, why is mindfulness practice in education not more common than it is? What do you believe are some of the perceptions and/or misconceptions that people hold about the meaning and tradition of mindfulness practice that have prevented it from being more widely practices in schools and classrooms?

4. What are some important considerations for integrating mindfulness into the classroom? (e.g. student demographics, communication with parents, etc.)

Teacher Practices (What/How?)

1. How do you/did you introduce mindfulness practice to students? What steps did you take to familiarize students with mindfulness?

2. Where in the curriculum do you locate mindfulness practice? (probe re: subject areas, policy priorities regarding students’ mental health and emotional well-being)

3. Do you/did you tend to integrate mindfulness practice at particular times or moments of the day? Which and why?

4. Are mindfulness practices something that you integrate/integrated into all of your teaching or more in the context of particular subject areas or times of year? (e.g. health period, EQAO prep, tests, times of increased stress, etc.). Are/were these practices stand-alone or do you implement them across other curricula? (e.g. gym class, yoga, in creative writing, brainstorming?)

5. What mindfulness practices do you/did you most commonly integrate into your teaching and why?

6. How do you/did you incorporate mindfulness in your classroom teaching? Can you give me a specific example of how you integrate/integrated mindfulness practice into your teaching?
   a. What practice did you integrate and why?
   b. What were your learning goals?
   c. How did your students respond to this practice? What outcomes did you observe from them? (e.g. impact on student well-being, self-regulation, emotional skills, academic performance etc.)

Influencing Factors (Who?)

7. Have you faced/did you face any obstacles or challenges with using mindfulness in the classroom? If yes, what challenges did you confront/have you confronted
and how did you respond? If no, why do you think that is? (e.g. internal factors – time, external factors – pressure, parents, resistance, etc.)

8. What kind of feedback did you have/have you had from people outside the classroom (staff, parents, etc.) regarding your practice of using mindfulness in the classroom?

9. What factors and resources support you in your teaching of mindfulness? (e.g. school climate, admin, particular books or audio meditations, professional development, sharing resources with colleagues, etc.)

Next Steps

10. What advice would you give to a beginning teacher who is committed to integrating mindfulness into their teaching?

11. What recommendations do you have for how the school system more broadly could further support the integration of mindfulness into schooling?

Thank you for your time and participation.