# Preparing Teacher Candidates for the Present: Investigating the Value of Mindfulness-Training in Teacher Education

# 12

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### Introduction

Teaching is stressful. Diverse student abilities and exceptionalities, challenging classroom behavior, coupled with standardized testing and curricular expectations contribute to a demanding context for K-12 teachers (Hansen & Sullivan, 2003; Kyriacou, 2001). However, levels of teacher stress is not solely based on circumstances happening to teachers, distress is meditated by the complex interaction between teachers' disposition, values, skills, and coping mechanisms (Mearns & Cain, 2003; Montgomery & Rupp, 2005). Teacher distress negatively impacts the whole system of education, especially classroom culture and student learning (Jennings & Greenberg, 2009). How can Teacher Education respond to the problem of teacher stress and burnout while simultaneously preparing new professionals for excellence in teaching? This chapter investigates mindfulness and mindfulness-based training as a relevant model in Teacher Education for developing resilient and effective teachers.

Teacher Education has traditionally focused on three main areas: content knowledge, pedagogical skills, and development of disposition

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(Cochran-Smith, 2001; Darling-Hammond et al., 2005; Fullen & Hargreaves, 1992; Grant, 2008). While all three are widely seen as integral components of Teacher Education, development of disposition remains elusive. The field of Teacher Education, it seems, is still in the process of developing models of effective teacher disposition and in cultivating strategies for applying these models in practice. Generally speaking, disposition has been defined in terms of the trends or habits of mind that repeatedly affect teachers' actions and judgments within variable contexts (Borko, Liston, & Whitcomb, 2007; Johnson & Reiman, 2007; Katz & Rath, 1985). Disposition is a matter of how we, as teachers, adapt to a constantly changing set of opportunities and challenges; how we, as individuals, function within a dynamic system of interpersonal exchange. This understanding is in line with the definition articulated by The National Council for Accreditation of Teacher Education (NCATE, 2006) who identifies disposition as consisting of the professional attitudes, values, and beliefs that are active in supporting student development and when interacting with the school community at large. Needless to say, disposition is a multidimensional construct, with many different meanings in the field of Teacher Education (Johnson & Reiman, 2007; Koeppen & Davison-Jenkins, 2007; Murray, 2007).

The importance of cultivating "the person" for "the profession" is not a new area of focus in

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Teacher Education. Over the past 20 years, the published work of teacher educators such as Parker Palmer's (1998) "The Courage to Teach," Jack Miller's (1994) "The Contemplative Practitioner," and Noddings's (1992) "The Challenge to Care in Schools" have highlighted the importance of addressing the inner lives of teachers. Collectively, their research has elucidated various properties of effective teaching (e.g., integrity, presence, and caring). More recent research in the field has elucidated further characteristics of effective teacher disposition that include reflectivity, honesty, and empathy (Evans & Nicholson, 2003; Ryan & Alcock, 2002), as well as holding high expectations for students, and being lifelong learners (Major & Brock, 2003; NBPTS, 2002). Even though disposition is theoretically regarded as a central aspect in Teacher Education, we have witnessed little integration of formalized training programs that explicitly focus on developing disposition in Teacher Education.

In this chapter I present a summary of study completed as a doctoral dissertation that explores the added value of a dispositional development program in Teacher Education. The program implemented called Mindfulness-Based is Wellness Education (MBWE). The primary purpose of the study was to gain insight into the experiences of teacher candidates going through an experiential course focused on developing a mindful disposition. In the following sections, I provide a rationale for choosing mindfulness and a brief background on the implementation of mindfulness-based training in other professional preparation programs. I then introduce MBWE, the training used in this study, provide an overview of the methodology used in the study, and present five themes as the results of the study with a discussion on the relevance to Teacher Education.

# Mindfulness

Mindfulness is a cognitive-social-emotional ability that can be learned and developed. Mindfulness is an intentional way of being, calling us back into the present moment experience of our lives in contrast to running on our automatic patterns of reactivity. In a moment of mindfulness, we have heightened awareness of our body, emotions, thoughts, and surroundings, which allows us to gain a clearer understanding of our unfolding experience. Often, our behavior is triggered automatically as we react immediately to an initial emotion and/or thought. Mindfulness provides perspective for us to see more clearly and know our automatic reactions, empowering us with the ability to respond more appropriately. Mindfulness practice nurtures self-compassion and helps us in coming to know and relate to the internal dialogue we all have. The practice of mindfulness and learning to relate to our thoughts and emotions is central to mental, social, emotional, and physical health.

Mindfulness is primarily concerned with attentiveness: a waking up to the here and now of the moment. Meditation, a central formal practice in the cultivation of mindfulness, is like a dress rehearsal, tuning our brains for staying present. The guidelines of mindfulness meditation practice are simple-be present. Yet, we quickly come to realize this practice is not easy. Undertaking the practice of mindfulness includes heightening sensitivity to the busyness of our own thought patterns, and to the specific ways in which we automatically react to our unfolding experience. Within this context, the challenge is to continually bring ourselves back into present moment awareness while embodying both patience and acceptance towards our own busy minds. Non-judgment is therefore a key element in allowing us to take note of our reactions to events as they occur without being consumed by thoughts or emotions. The practice of mindfulness heightens awareness of the activity in our minds rather than seeking to change or control the contents of our minds. The opposite of controlling is allowing or letting be, which facilitates an up close and personal experience of life just as it is. Although we are coming into more direct experience with our feelings, thoughts, and bodily sensations, there is also a greater sense of spaciousness to our experience. This spaciousness offers an important perspective as to the

nature of our thoughts, unpleasant bodily sensations, or debilitating emotions coloring our experience. Practicing mindfulness is scaffolding for learning how to stay with, and process, the full experience of our lives; mindful awareness cultivates a disposition that seeks to liberate the mind from its own reactive or automatic set of behavioral responses. This tendency toward inner freedom extends beyond a seated posture into ways of being and relationships with ourselves, others, and the world.

# Mindfulness-Based Training for Human Service Professionals

In addition to the clinical studies investigating the health benefits of mindfulness training, there is growing interest in the integration of mindfulness-based training for human service professionals. Specifically, there is interest in professional preparation programs such as counseling (Schure, Christopher, & Christopher, 2008; Shapiro, Brown, & Biegel, 2007), nursing (Cohen-Katz et al., 2005), social work (Ying, 2009), dentistry (Lovas, Lovas, & Lovas, 2008), and medicine (Saunders et al., 2007; Shapiro, Astin, Bishop, & Cordova, 2005). Complementing the stress reduction benefits, those studies reveal the professional value of mindfulness training, such as the development of presence in the practitioner. Within such studies, the ability to attend fully to and connect with the client is what Siegel (2007) refers to as attunement, which is essential in the process of developing a therapeutic relationship. The patient's healing is thus directly responsive to the cultivation of therapists' disposition of mindfulness.

Such findings are certainly relevant to the teaching profession, if for no other reason, because teachers' effectiveness is so clearly dependent upon their ability to connect and develop healthy relationships with their students (Hamre & Pianta, 2001; Jennings & Greenberg, 2009; Zins, Weissberg, Wang, & Walberg, 2004). Many Teacher Education programs highlight the importance of classroom climate and teacher-student relationships, often covering a descriptive

analysis and approach to these topics. However, few programs provide specific opportunities for developing the competencies that create healthy teacher-student relationships (LeBlanc & Gallavan, 2009; Riley, 2011; Schwartz, 2008). Drawing on existing literature, we can expect mindfulness to enhance teacher presence and in turn positive teacher-student relationships. The current study seeks to uncover additional benefits of mindfulness training in Teacher Education. The next section introduces, MBWE, the program used in this study.

## Mindfulness-Based Wellness Education

MBWE was first offered in Teacher Education at the Ontario Institute for Studies in Education of the University of Toronto (OISE/UT) in 2006. The program was developed by Dr. Corey Mackenzie, Dr. Patricia Poulin, and myself in response to the growing problem of teacher stress and burnout as a method for cultivating resiliency in future teachers. MBWE blended the popular Mindfulness-Based Stress Reduction (MBSR) program with a model of wellness promotion (Soloway, 2005; Soloway, Poulin, & Mackenzie, 2010). This 9-week program was run in the context of an elective course entitled "Stress and Burnout: Teacher and Student Applications."

MBWE uses a "wellness wheel" (Fig. 12.1) to explore mindfulness through various dimensions of one's experience. During each week of the course, different dimension of wellness are explored. Each week, teacher candidates are invited to maintain a daily formal mindfulness practice, such as mindful sitting or yoga, and more informal practices that address bringing mindfulness to activities such as listening, speaking, socializing, or engaging with nature. Teacher candidates are also asked to choose a practice that supports the dimension of wellness they are focusing on that week, such as healthy eating or spending quality time with friends and family. For example, during the first week of the course, teacher candidates explore their physical wellness through physical exercise and through



Fig. 12.1 Wellness wheel

mindfulness practices such as mindful eating and the body scan.

Teacher candidates are given a CD with mindfulness practices that are each 20 min long, a wellness workbook, and a course reader at the beginning of the course. Teacher candidates are encouraged to work up to maintaining a 20-min formal mindfulness practice three times a week, and completing a shorter mindfulness practice on other days in order to maintain a regular daily practice. The overall trajectory of the MBWE curriculum begins with a primary focus on personal development and gradually builds into a more integrated consideration of one's professional capacities as a teacher.

In the first 2 years of offering the MBWE course, two studies with teacher candidates enrolled in MBWE demonstrated that active participants exhibited significantly greater increases in mindfulness, life satisfaction, and teaching self-efficacy when compared to a control group (Poulin, 2009; Poulin, Mackenzie, Soloway, & Karaoylas, 2008). In addition to the positive statistical results, teacher candidates also shared their feedback that provoked further investigation. The following quotation from one teacher candidate, for example, elaborates in her own words how they experienced the MBWE program:

I honestly think that the MBWE program should be a requirement for every teacher candidate at OISE/UT because there are so many things that I learned about how to deal with the challenges in the classroom that I never learned from the other classes. It was all about developing myself as a teacher, as a person first, and then teaching second. That is so important because it really affects how you teach and it effects the classroom environment.

These types of responses to MBWE inspired me to further identify the broader personal and professional benefits teacher candidates were experiencing.

# Methodology: Action Research Design

Being in the unique position as instructor of the "Stress and Burnout" class at OISE/UT, I used this opportunity as the context for my doctoral dissertation. The primary research question was intended to uncover the benefits teacher candidates were experiencing by participating in MBWE as part of Teacher Education, which is presented in this chapter. The secondary research question was focused on learning about teacher candidates' experiences in order to improve the program. To answer these questions, I employed an action research design over three consecutive semesters. MBWE runs as a one-semester course. Using an action research design, I applied a grounded theory approach in creating my research questions, in choosing participants, in directing the inquiry, and when interpreting the data. Over three consecutive semesters, I interviewed a total of 23 teacher candidates who took the MBWE program. I chose to interview participants at the completion of the academic school year hoping to gain information on the impact of the course over teacher candidates' entire year (i.e., including the second practicum experience). Further, teacher candidates filled out mid-course and end-of-course feedback forms (anonymously) about the program. Feedback from teacher candidates' experiences in the first round of data collection was used to inform the teaching

of the subsequent MBWE program sessions and, in turn, change the later experiences of teacher candidates taking the program (Fig. 12.2).

Teacher candidates self-selected to enroll in the Stress and Burnout class. The description of the course that teacher candidates had access to prior to selecting the course did not include any mention of mindfulness practice. By signing up for Stress and Burnout, teacher candidates identified themselves as being interested in the topic of stress, and/or looking for strategies in reducing their stress and stress of their future students. The sample in this study consisted of teacher candidates who participated in the Stress and Burnout class (MBWE program) during three consecutive semesters. I chose a diverse sample to interview. Criteria of diversity were based on the teaching level of teacher candidates (primary/junior, junior/intermediate, intermediate/senior), gender, ethnicity, and age.

I conducted interviews with participants that lasted between one and one-and-a-half hours. Interviews were semi-structured to allow for new themes and questions to emerge while ensuring coverage of a specific topic (Punch, 2009). Interviews were analyzed using multilevels of coding in following a grounded theory approach: (1) open coding, (2) theoretical coding, and (3) selective coding (Charmaz, 2006). At each level of coding, a new set of themes emerged. The first rounds of coding were done inductively and the final stages were done deductively—focusing on particular points of complexity and interest (Glaser, 1978).

#### Findings

This study demonstrated five central themes from data: (1) Reflective Practice, (2) Teacher Identity, (3) Social and Emotional Competence and Wellbeing on Practicum, (4) Learning to Fail— Learning to Teach, and (5) Engagement in Teacher Education. In what follows, I will briefly outline essential features of each main theme.

#### **Reflective Practice**

The practice of reflection is regarded as an important aspect of teacher education (Grimmet & Erickson, 1988; Loughran, 2006; LaBoskey, 1994). Yet, despite its popularity within the realm of theory, best practices and processes for cultivating a reflective practitioner remain unclear (Hatton & Smith, 1995; Korthagen, 2004; Zeichner, 2009). Reflection can be understood as a dialectical process whereby one suspends immediate judgments and preconceptions to

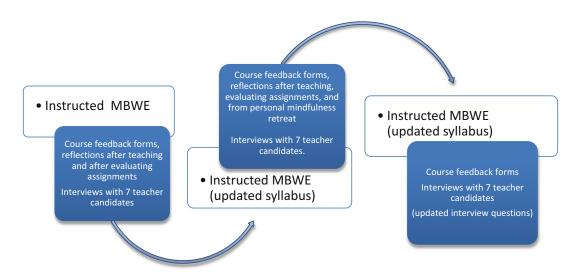


Fig. 12.2 Iterative process of teaching and researching mindfulness-based wellness education

allow for a more careful consideration of one's actions and decisions (Dewey, 1933). This emphasis on reflection within action was popularized in the 1980s by Donald Schön (1983, 1987) in his seminal works on professional practice: "The Reflective Practitioner" and "Educating the Reflective Practitioner." In those texts, Schon distinguished between reflection-on-action and reflection-in-action. Reflection-on-action looks back on what occurred in practice in order to improve on future endeavors. By contrast, reflection-in-action implies awareness and modification while in the very midst of the practice itself. Schön (1983) argued that reflection-inaction offers us a much needed alternative for adaptive problem solving. Rather than relying on technical knowledge from fixed sources (i.e., solving problems based on existing theory), reflection-in-action relies on the identification and assimilation of feedback while in the midst of practice. Here, reflection shapes the unfolding of action.

Reflection-in-action refers to the process of heightening awareness while in the midst of the action itself, as opposed to thinking back about the practice after it occurs. Mindfulness practice involves modifying one's awareness on a continual moment-by-moment basis. Whereas most reflection in Teacher Education is conducted as reflection-on-action, the practice of mindfulness meditation contributes to the skills of reflectionin-action. For example, in a simple sitting meditation, one learns to recognize the speed and frequency with which our thoughts begin to wander. The practice thus involves becoming aware of how the mind has wandered, taking note where the mind has gone, and then returning oneself to the chosen focus. Again, this exercise serves as a key insight and reminder about the nature of the mind and how quickly we can lose track of its intended focus and intention. Developing mindfulness is thus the practice of maintaining awareness of the continuing unfolding of moments.

The novel experience of learning mindfulness is a practice of reflection-in-action: a learning process in regulating attention to stay present from moment-to-moment. Below, a teacher candidate described her experience of reflection-in-action:

The biggest thing that mindfulness helped me with was my reflection. Not just reflecting after a class, it was a conscious reflection while I was actually doing things. I would find that I was able to stop in certain places of a lesson, and actually right at that moment, make a conscious decision to reflect—I was more aware of what was going on, instead of waiting till the end when everything was finished...throughout my life I always thought that I was a pretty reflective person, but than came to realize that I would wait much too long, and I would miss a lot of opportunity to make better right at that time.

Learning how to drop back into the present is the first step of reflection-in-action because it provides the necessary perspective from which to reflect. Often, teachers are simply caught up in the busyness of teaching in the classroom setting, and thus neglect their own moment-to-moment awareness of how the class is unfolding. Below, a teacher candidate describes the application of reflection-in-action in her class:

By staying in the moment I was also able to adapt on the spot and change the lesson to meet the needs of the students and go with the flow of how the lesson was moving along. I was also able to ask good follow up questions to the students and provide good answers on the spot.

Training in mindfulness supported teacher candidates in cultivating the skills and abilities to revisit present moment awareness during key moments in the classroom, enabling them to choose a best course of next action.

The skills learned from reflection-on-action do not necessarily translate into skills for reflection-in-action. Providing authentic opportunities for teacher candidates to practice reflectionin-action only occur during practice teaching opportunities in Teacher Education, and those experiences are typically filled with high levels of stress and anxiety which makes bringing awareness in the moment of teaching very challenging. Highlighting the value of mindfulness training in the development of reflective practitioners is an important finding for Teacher Education. Whereas a pedagogy of reflection in Teacher Education remains ambiguous, the pairing of mindfulness practice and reflection offers new strategies for promoting insight into developing reflective practitioners.

#### **Teacher Identity**

Developing teacher identity is a common learning objective in Teacher Education (Danielewicz, 2001; Kosnick & Beck, 2009; Rodgers & Scott, 2008). Though teacher identity has been conceptualized in various ways, the literature frequently defines identity in Teacher Education using both personal and professional dimensions (Beijaard, Meijer, & Verloop, 2004; Stenberg, 2010). Usually considered under the rubric of personal identity are the various attitudes, beliefs, and values that inform one's pedagogical practice. It is generally accepted that varying degrees of selfawareness in this respect will inevitably contribute to the decisions and interactions that are made in the classroom (Connelly & Clandinin, 1999; Korthagen, 2004). By comparison, professional identity refers more specifically to teachers' perceptions of their own roles as a teacher. This includes all matters of authority and responsibilities, philosophy of teaching, and teaching practice that are all heavily influenced by continued experience in the classroom and self-concept (Tillema, 2000; Warin, Maddock, Pell, & Hargreaves, 2006). Considered together, teacher identity encompasses the changing perceptions teachers hold for themselves outside of the classroom, in the classroom, and in the wider school community.

Participating in MBWE includes engaging in mindfulness practices and completing weekly reflections on various dimensions of wellness that contribute to teacher candidates selfknowledge. In turn, teacher candidates gain insight into more deeply held personal values and beliefs. Korthagen (2004) highlights the importance of creating opportunities for clarifying values and beliefs as an integral part to personal and professional identity development. Samantha, a teacher candidate, described her personal engagement in MBWE:

And that's why I want to make it a lifestyle and not just a thing to do... I took this [MBWE] on as something that I needed rather than something I would put into a classroom. It was something I wanted to teach myself and then live the teaching.

Florence, another teacher candidate, came into Teacher Education after already having trained and worked as a nurse. Being a health care professional, she was already introduced to the stresses of working in the field. Florence had no background with mindfulness or yoga prior to beginning MBWE. By the completion of the course, Florence became an advocate for mindfulness training as part of professional preparation. Florence described her experience of grappling with deep issues—not simply working at a superficial level—an essential part of core change:

Equity and social justice was our major focus in school. I think other courses in Teacher Education did a good job making us aware of the injustices and yes there was a big focus on change and what you can do to change, but I don't think a lot of people are necessarily strong enough to do that and I didn't find any other course focused on building that strength. Strength to deal with situations. The idea of strength-you have to know who you are and know your identity and know how to deal with situations that will be very uncomfortable for you.... Exploring the many aspects of myself through the course opened my eyes to a lot of challenges I had with my own values and beliefs and my own identity. I thought I was strong and knew what I wanted, what I valued, and what I could contribute into a classroom. Digging into myself, I realized there were major gaps that I needed to work on.

Clarifying values and beliefs in one's life is an ongoing process in human development. This theme highlights the intensive process of grappling with personal values and beliefs that is facilitated when engaging mindfully with one's life. Whereas other courses in Teacher Education call awareness to issues of social justice and serve to heighten awareness of biases as they may relate to being in the classroom and teaching, MBWE directs focus within teacher candidates' personal lives to see how they are enacting their values and beliefs and to help them recognize the disconnect between their actions and values.

In addition to supporting personal dimensions of identity development, MBWE also encouraged teacher candidates to contemplate their identity in the classroom. Teaching identity includes how one believes he or she is being perceived, and how one perceives oneself in the classroom and in the profession. For example, MBWE focuses on mindful teaching, which is discussed and practiced as ways of staying present in the classroom amidst all the busyness. Tania, a teacher candidate, spoke about how she wants to be seen in the classroom:

MBWE is the course that pops up in my brain whenever I am thinking about planning a lesson, or just how I want to approach my role as a teacher. I want to be that kind, patient and welcoming teacher, and this class [MBWE] helped me to start cultivating that.

The quote below from Deborah, a teacher candidate, distinguishes between the idea of mindful teaching and the skills necessary for enacting mindful teaching that are practiced in MBWE:

The course taught a lot about the kind of teacher I want to be. It taught me a lot about how I wanted to set up my classroom, how I want to be seen...I think the strengths of this program is that it says, yes you might want to be a mindful teacher but do you know how to be a mindful teacher, you want to be a thoughtful teacher but do you know how to be a thoughtful teacher.

This theme makes an important link to teaching practice, as teacher candidates found the MBWE program valuable in developing their professional identity. MBWE provides opportunity for teacher candidates to move beyond fanciful wishes of whom they would like to be in the classroom and to learn the skills for enacting mindfulness in the classroom. Teacher candidates developing their personal and professional identity is part of the process of adult development, and plays a significant role in how teacher candidates see themselves in the classroom. Teaching plays a critical role in the development of healthy children and adolescents, and thus it seems only natural that we apply high standards of consideration to the development of their educators.

# Social and Emotional Competence and Well-Being on Practicum

Over the past decade, research on social and emotional learning continues to demonstrate the importance to healthy child and adolescent development as well as academic outcomes (Greenberg et al., 2003; Zins et al., 2004). Jennings and Greenberg (2009) reconceived social and emotional competence (SEC) within the sphere of teacher development. Accordingly, teacher SEC and well-being are characterized using the existing framework of social and emotional learning, including five central competencies: self-awareness, social awareness, responsible decision-making, self-management, and relationship management (Jennings & Greenberg, 2009; Zins et al., 2004). Jennings and Greenberg's (2009) model of "the pro-social classroom" explains the effects of teacher SEC and well-being in connection to improving the teacher-student relationship, improving classroom management, and enabling social and emotional learning for students. Hong (2010) similarly argues that emotional intelligence is one key aspect of teacher identity that contributes to the long-term sustainability of teachers. In the following quotation, Hong (2010) articulates the gap between Teacher Education and the emotional realities of teaching:

This lack of systematic efforts to provide preservice teachers with a realistic understanding of teachers' emotional experiences and developmental stages raises one of the most important issues in teacher education programs. Bridging the gap between theory and practice is critical in this situation, because the gap between the educational theories pre-service teachers learn in college and the demanding reality in-service teachers learn in the classroom and in the broader school context can make them feel lost. (p. 1540)

Offering mindfulness-based learning in Teacher Education is an opportunity to begin bridging the gap between theory and realities of teaching. Beginner's mind is a principle introduced in MBWE reminding teacher candidates to notice their automatic social or emotional patterns of behavior in the classroom. In contrast to getting stuck in our typical perceptions, constructs, and labels, beginner's mind invites us to see each moment unfolding with fresh eyes (Kabat-Zinn, 1990). Shunryu Suzuki (2003), in his book "Zen Mind, Beginner's Mind," says, "In the beginner's mind there are many possibilities, but in the expert's there are few (p. 21)." Fresh eyes in a classroom are more open to seeing without existing judgment. A teacher's practice of beginner's mind can be applied in multiple ways in teaching and learning. Below, Tom, a teacher candidate discusses the benefits of integrating this principle into his teaching practice on practicum:

Daily I try to keep in mind two of the foundations of mindfulness practice, beginner's mind and letting go. I keep reminding myself that "no moment is the same as any other." As a teacher it is important for me to start every day with "fresh eyes" rather than seeing the reflection of my own thoughts about the students and my co-workers. By neglecting preconceived notions, I am giving every student the chance to grow.

Beginner's mind is a principle that brought teacher candidates "back into the present" in the classroom, opening up new spaces of social and emotional awareness within themselves and for developing connection with students.

Teacher social and emotional competence and well-being are relatively new constructs within Teacher Education; however, their value has long been implicitly understood in relation to teacherstudent relationship and classroom management. Teacher candidates shared that MBWE cultivated skills and competencies that could be accessed while teaching on practicum. Teacher candidates reported that taking time to slow down and practice mindful teaching contributed to positive interactions with their students, which in turn diminished classroom management issues and enhanced their overall teaching experience. Infusing mindfulness-based practices in Teacher Education provided teacher candidates the opportunity to develop the daily competencies required to be successful in the classroom.

#### Learning to Fail: Learning to Teach

The paradigm of constructivism constitutes both a theory of knowledge and a theory of education. Constructivism describes knowledge as being actively constructed by the individual and his or her assimilation of new experiences with the past (Richardson, 2003). A constructivist approach shifts the focus of teaching from the teacher to the student. Whereas the teacher-centered approach has traditionally favored passive transmission of information within a lecture-style format, the constructivist model challenges teachers to find more innovative scenarios centered on the students' experience of learning. A problem in Teacher Education is that constructivist learning theory is often taught using a teacher-centered approach. Mindfulness is often taught from a constructivist approach where the learner gains knowledge through their direct experience with the practice. For example, a primary step in learning mindfulness is becoming more aware of when we are no longer present. This theme highlights the experience of teacher candidates constructing new insight into teaching when given the opportunity to "fail" learning mindfulness.

In going through the MBWE program, many teacher candidates spoke about their experience of learning mindfulness. Indeed, learning to practice mindfulness is not easy. Especially for new practitioners, the task of "quieting the mind" represents a new and uncomfortable set of problems. Chief amongst these is the demand for a renewed relationship to failure. In typical learning situations, the experience of failure falls under the category of "final results." In the MBWE program, teacher candidates were taught to become mindful of their experience of failure as it occurred specifically within practice. For example, one of the common misperceptions about mindfulness practice is that the practitioner is trying to "blank" one's mind. As a result, when thoughts enter the mind or when one gets lost in one's preoccupations, the new practitioner will often see themselves as having failed. In mindfulness practice however, one comes to accept that the mind will continually wander away from the chosen point of focus. The challenge is to realize that the mind has wandered and to bring it back to the chosen focus without condemning oneself for not having achieved unwavering attention. In other words, it is the process of "failing" that enables learning, a circular pattern that happens over and over again in mindfulness practice.

In MBWE, what is important is how teacher candidates relate to their failures. Embodying the attitude of acceptance, patience, and nonjudgment towards themselves positively influenced their teaching practice. Next, Rosa described her experience learning and grappling with mindfulness practice:

Attempting and sometimes feeling like I failed at mindfulness practice, gave me insight to a different perspective on learning, and the experiences of feeling inadequate when immediate understanding does not always occur. I feel like this experience helped me to better understand students who might not 'get it' the first time around, and the importance of being patient with them and the pace at which they are learning.

The process of failing is a humbling process and provides insight into the process of learning. We often fail many times, especially when undertaking the practice of learning something new. Providing teacher candidates with the experience of failure and learning to relate constructively to this experience plays a formative role in teacher candidates' resiliency and vision of teaching. The following quotation from a teacher candidate describes her relationship of learning mindfulness to her emerging vision of teaching.

As a student in MBWE, having never meditated nor done much yoga in the past, the subject matter in this course was almost entirely new to me. Through the experience of learning something entirely new, I gained great insight regarding the actual process of learning. Most importantly, I feel that the practice of having an open heart, being non-judgmental and a beginner's mind is crucial for learning. In learning anything new, not just mindfulness practice, keeping an open mind helps to better internalize and engage in the material, while being non-judgmental about the self-learning process and the subject matter, makes for fewer obstacles towards the goal of new knowledge and skill acquisition. Knowing this, I hope to teach these ideas to my future students, so that they may be more open to the process of learning science and biology.

Mindfulness training can be understood as a pedagogical strategy in Teacher Education to create genuine opportunity for teacher candidates to grapple with learning a new challenging skill. Teacher candidates also gained insight into the emotional dimension of failure and learned how to navigate challenging emotions and related thoughts. Developing a more direct relationship with the emotional landscape of failure enabled teacher candidates to stay present in their experience, to be resilient in their process of learning, and to develop a more empathetic response to their students' learning process. Learning to fail is an important experience for teacher candidates when learning to teach.

#### **Engagement in Teacher Education**

Within the literature, student engagement is broadly distinguished into three categories: behavioral, emotional, and cognitive (Finn, 1993; Klem & Connell, 2004; Marks, 2000; Reeve, Jang, Carrell, Jeon, & Barch, 2004). Klem and Connell (2004) explain each of these components:

Behavioural engagement includes time students spent on their work, intensity of concentration and effort, tendency to stay on task and propensity to initiate action when given the opportunity. Emotional components of engagement include heightened levels of positive emotion during the completion of an activity, demonstrated by enthusiasm, optimism, curiosity and interest. Cognitive components of engagement include students' understanding of why they are doing what they're doing and its importance. (p. 262)

Kuh et al. (2007) assert that these various dimensions of engagement are inextricably linked to certain structural or institutional factors that dictate schedules, curriculum, opportunity for collaboration with peers, resources, and the overall support that is offered within the student experience. It is significant that these factors are seen not only to affect the students' involvement in the course—i.e., the nuts and bolts of their being in the classroom—but more importantly, their active engagement with course content and materials both inside and out of class. This theme articulates the value of mindfulness for teacher candidate Engagement in Teacher Education.

Mindfulness practice supported teacher candidates in staying emotionally engaged in their Teacher Education program. More specifically, the process of paying attention heightened awareness of negative ruminations that teacher candidates get caught up during their experience in Teacher Education. Rumination refers to having persistent thoughts occurring; over-analyzing that becomes worrying or brooding. Rumination contributes to stress and in turn mental health issues, which are increasing in incidence within higher education (Cairns, Massfeller, & Deeth, 2010; Guthman, 2010). One common rumination that negatively impacted teacher candidates' engagement was a critique of their Teacher Education experience. Many teacher candidates criticize their training as being too theoretical and not practical enough as illustrated by Deborah below:

Especially in January when I started this class (MBWE) there was an extreme type of negativity going on in all the classrooms and I had it as well. There was a lot of frustration regarding what we were getting out of this education. Like you did practicum and that was so much to take in at once. I was saying I don't know why I am here because I didn't feel I was getting the lesson planning training or things like that. A lot of the classroom discussion was around what we wanted to get out of the program and there was a lot of tension in classes and a lot of negativity... I just tried to commit to being present and let go of the frustration. In terms of sitting and listening to a lecture, instead of thinking about other things.

Further, many teacher candidates drifted toward potential job prospects at the halfway mark of the program as school districts started their hiring process. Challenging emotions and wandering thoughts often disengage learners cognitively, emotionally, and behaviorally. Heightening self-awareness and coping skills supported teacher candidates in learning to let go of unhelpful ruminations that disengage them from their learning and help them reinvest in their learning process.

For many, bringing awareness to their ruminating tendencies is an important step in helping teacher candidates let go of them and return to a place of presence. The quotation below by Rosa, a teacher candidate, describes her experience of mindfulness supporting their engagement through this process:

MBWE also enhanced my experience of other courses I have been taking in Teacher Education. Reflecting on my school experience, I largely had a mentality in which I just wanted school to be over ... something resonated with me from mindfulness practice and as a result I have applied awareness to my schooling. Because of mindfulness practices I have learned to be aware of my present education experience and enjoy the process of my schooling.

In addition to the content of the MBWE being relevant to professional preparation, mindfulness supports students in their process of learning in all courses; mindfulness can be understood as an enabling factor for engagement in higher education.

Teacher candidates also spoke about the prevalence of group work in their courses and consequently, of the need to develop positive working relationships with their peers. MBWE was seen to support teacher candidates in reducing relational stresses that accompany working in a group of diverse voices and opinions. More specifically, teacher candidates talked about the practice of acceptance and non-judgment with others during activities in other classes. In the following quotation, Florence talks about regulating her own behavior when interacting in her other classes.

In the class where we talk about very controversial issues, acceptance played a bit part. In the past when listening to someone I would jump on something when I didn't agree with it, and I learned to listen and not judge immediately. As well, not to judge them afterwards based on a opinion that they had. Before, I would judge a person based on a thought.

Engaging in mindfulness practice, teacher candidates were supported in their personal and collegial relationships, and encouraged with regards to their participation in other courses. Overall, teacher candidates felt their experience in MBWE enabled them to cognitively, behaviorally, and emotionally engage in their teacher education program.

# **Future Directions**

This chapter provides an overview of a qualitative action research dissertation conducted over two years in Teacher Education. Since the study of mindfulness training in Teacher Education is a relatively new area of research, a grounded theory approach was used to unearth new areas for further study. The five main themes found in this study, Reflection-in-action, Teacher Identity, Social and Emotional Competence and Well-Being on Practicum, Learning to Fail-Learning to Teach, and Engagement in Teacher Education, are not meant to be generalized to all teacher candidates going through mindfulness training programs, or even the MBWE program. These themes are considered to be central foci for future research topics in the relatively new study of Mindfulness in Education. Continuing to investigate these themes qualitatively and quantitatively will enhance clarity in the relationships between mindfulness training, teacher education, and educational impact. Considering mindfulness is still a relatively new concept and practice in the field of education, continued research translating the purpose and value of mindfulness into recognizable constructs and priorities of Teacher Education is necessary.

This study investigated an elective course on mindful well-being focusing primarily on personal development, with a secondary focus of professional application. Another approach would be to look at a mindfulness-based program for teachers that is solely focused on professional development, for example, preparing teachers to teach mindfulness in their future classrooms. Another model for preparing teacher candidates is through mindful teacher education. Mindful teacher education would include teacher educators going through their own training in mindfulness, and learning to infuse mindfulness into their other teacher education classes. Comparing teacher candidates experiences in all three models may offer insight into the type of mindfulnessbased training that are most effective and feasible in Teacher Education.

Curiously, teacher educators have years of experience in the K-12 classroom yet very little

training in teaching adults. One underlying assumption in Teacher Education maintains that experience teaching in the K-12 classroom is sufficient for preparing teacher candidates. This assumption can be problematic for two reasons. First, teacher educators typically have experience teaching children and adolescents whereas teacher candidates are adult learners. Second, developing adult disposition is not an area many K-12 teachers would be knowledgeable in or have experience facilitating, and yet dispositional development is a core element of Teacher Education. Developing disposition in professional preparation raises concerns because it blends the lines between personal and professional. Faculties of Education, for example, typically focus on content knowledge and professional practice, not the inner life of the student. Personal development is regarded theoretically as a critical element in Teacher Education however not as closely followed in practice. Teacher Education would benefit from specialists, i.e., mindfulnessbased educators. who can co-facilitate mindfulness-based training with teacher candidates, as well as teacher educators undergoing training in mindfulness.

# Conclusion

When we think back to the most influential teachers we have had in our lives, are they the ones who had the greatest knowledge in their field or the ones with engaging lesson plans? More often it is the presence of a teacher that ignites student interest and then able to utilize knowledge and pedagogical strategies to further learning in the classroom. This exploratory study found that mindfulness training in the context of Teacher Education provided practical learning opportunities for teacher candidates to develop the skills, knowledge, and dispositional goals of Teacher Education. The real world of teaching transcends fixed and clearly defined ways of being in the classroom because no two students are the same. Teacher education is not trying to create a mold of an expert teacher, but rather lead new teachers on a path with the skills and awareness to continue to develop as a person and as a professional. Whereas teacher education is most often based on preparing teacher candidates for the future, mindfulness training is a key new insight for preparing teachers for the present—the place where all the complexities of teaching and living unfold.

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