The Importance of Teacher Well-being and Social and Emotional Learning:

A Literature Review Prepared for Millennium.org

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Introduction

For over a decade, developmental science research has consistently demonstrated the value of social and emotional learning (SEL) (Durlak et al., 2011; Jones & Bouffard, 2012; Schonert-Reichl & Weissberg, 2015; Taylor, Oberle, Durlak, & Weissberg, 2017). Yet a key question still remains: how can SEL be successfully implemented into the fabric of schooling (Oberle, Domitrovich, Meyers, & Weissberg, 2016)? Millennium.org is an innovation lab and middle school teacher education platform that is designing and modeling SEL-centric education. Realizing that teachers experience many competing stresses, Millennium.org created an embedded, science-based, self-organizing forum model for teacher professionals, called the Millennium Teacher Forum. The Millennium Teacher Forum includes a series of professional development meetings for middle school administrators, teachers, and counselors that are facilitated by the Millennium.org team. Specifically, the Millennium Teacher Forum uses moderated small group circles to introduce SEL-related skills, support the social and emotional needs of educators, and bolster teacher efficacy by providing teachers with a deeper knowledge of important pedagogical skills rooted in developmental science.

In the interest of creating the best practices related to the development of teacher SEL, and to support the ongoing evolution of the Millennium Teacher Forum, the Millennium.org team contracted researchers from the University of British Columbia (UBC) to conduct a literature review to support and inform their Forum's Theory of Change (TOC) based on current empirical research. This literature review assembles evidence to examine the "input" column of the TOC. Specifically, it is focused on exploring the three critical elements of the Millennium Forum TOC, identified by the Millennium.org team as "capacity building," as they relate to teacher well-being, SEL, and teacher social and emotional competencies (SEC). These elements

include 1) individual growth and self- care; 2) interpersonal connection; 3) embedded professional development (see the Millennium Forum TOC, Figure 1).

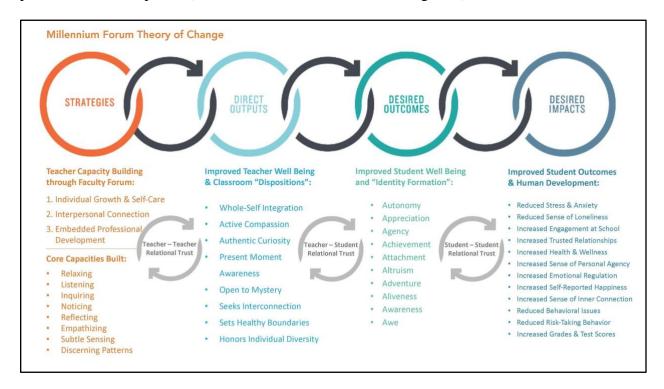


Figure 1. Millennium Forum Theory of Change

Initial examination of the Millennium Forum TOC reveals that the Millennium.org team is approaching teacher development in an innovative and creative manner, one that aims to support teacher well-being and their development of SEC through the use of multiple, integrated practices. Many of the identified capacities that the Millennium.org team aims to develop have yet to be explicitly, empirically studied in relation to the development of teachers' well-being and SEC, however, *related* research exists that supports their overall model.

Within the past decade, a growing number of researchers have begun to examine the role that teachers' SEC may play in promoting positive teacher and student outcomes. Although this field of research is still developing, studies that have been conducted suggest that professional

development efforts that focus on the development of teacher SEC may help promote teacher well-being and resilience, while also buffering the negative effects of stress and burnout that commonly plague teachers (e.g., Jennings et al., 2017; Jennings & Greenberg, 2009; Mind and Life Education Research Network [MLERN], 2012). It is proposed that the development of teacher SEC may promote well-being by providing teachers with the social and emotional skills needed to cope with the interpersonal stressors of teaching (Schonert-Reichl, 2017; Schonert-Reichl, Hanson-Peterson, & Hymel, 2015). Extant literature reveals promising findings that teacher SEC can be developed, however, researchers agree that more study is needed to understand which practices are effective in helping to foster teacher SEC (Jennings & Greenberg, 2009; Sauve & Schonert-Reichl, *in press*). Through the development, and eventual study of the Millennium Teacher Forum, the Millennium.org team hopes to add to this paucity of research by further examining potential practices and structures that may lead to development of teacher well-being and SEC.

This review was therefore conducted using a social and emotional learning lens, with special focus on teachers' own SEL and how it impacts both teachers and student outcomes. Though not exhaustive, the chosen articles do provide a summary of the most recent research in SEL and how it connects to the key ingredients of the Millennium Teacher Forum. Based on this research, some recommendations are provided for the Millennium.org team, as they continue to evolve and improve their Forum to help teachers thrive and to ensure that students excel.

This literature review begins by defining the criteria used to collect the evidence cited throughout this paper. Next, it examines what is known regarding the value of SEL in education and further explores the role that teacher SEC may play in the promotion of positive teacher and student outcomes. It then specifically examines SEL in relation to the key ingredients of the

Millennium Forum, specifically, teacher self-care and personal growth, interpersonal connection, and embedded professional development. It concludes with recommendations for the Millennium.org team as they continue to develop their TOC.

Methods

Utilizing the University of British Columbia's library database and Google Scholar, research articles were identified that relate to the critical elements of the Millennium Forum using keywords such as, "teacher social and emotional learning", "teacher competencies", "teacher well-being", "teacher-student relationships", "teacher empathy", "teacher compassion", "teacher efficacy", and "teacher mindfulness". A set of criteria were established to determine which articles would be retained for the review, to ensure the most relevant research for Millennium Forum were included. Articles were deemed eligible if they were:

- a) written in English.
- b) available online and for free through UBC's library database or Google Scholar.
- c) published between the years 2000 2018 (with some exceptions for seminal articles or when there were no articles within this time frame).
- d) empirical research published in a reputable academic journal, book, or other source.

Preference was given to peer-reviewed academic journal articles, but other academic sources such as published books or reports, were not excluded. Additionally, articles were included in the review if their content met the following selection criteria:

a) specific mention of one or more SEL skills or approaches (or components of them),
 teacher well-being, and/or teacher professional development.

- b) focus of research primarily on *teacher* SEL skills and its relation to either their own well-being or their students' well-being or success (as opposed to solely student SEL).
- relevant information related to the activity areas and key ingredients of the
 Millennium Teacher Forum.

Social and Emotional Learning and Teachers

The following section includes important definitions related to SEL that shed further light on the capacities the Millennium Forum may inherently be addressing. It provides evidence for the need to implement SEL-based practices within schools, and concludes by examining evidence related to teacher well-being and the development of SEC.

What is Social and Emotional Learning?

Social and emotional learning (SEL) is the process by which one learns and effectively applies knowledge, attitudes, and skills that can enhance personal development, establish healthy interpersonal relationships, and promote ethical and productive work (Collaborative for Academic, Social, and Emotional Learning [CASEL], 2013; Durlak et al., 2015). SEL involves explicit instruction, modeling, and practice, and is most effective when it occurs within a supportive, safe learning context, built around positive relationships (Jennings & Greenberg, 2009; Jones & Bouffard, 2012; Zins, Weissberg, Wang, & Walberg, 2004). Since the coining of the term, in 1994, by a group of educators, researchers, and child advocates at the Fetzer Institute (Durlak et al., 2015), SEL has been used as a framework for many promotion and prevention programs in education and developmental contexts (Devaney, O'Brien, Resnik, Keister, & Weissberg, 2006; Payton et al., 2000; Taylor, et al., 2017).

Until recently, the field of SEL focused primarily on the well-being and outcomes of students (Durlak et al., 2011; Schonert-Reichl & Weissberg, 2015). In the past couple of decades, however, researchers have started to turn their attention towards the influence of the teacher on student well-being and success in school (e.g., Jennings & Greenberg, 2009; Jones, Bouffard, & Weissbourd, 2013; Roeser, Eccles, & Sameroff, 2000; Roeser, Urdan, & Stephens, 2009; Schonert-Reichl, 2017). Largely, this research has examined the role of the student-teacher relationship (e.g., Hamre & Pianta, 2010; Milkie & Warner, 2011), teacher stress and burnout (e.g., Brown, Jones, LaRusso, & Aber, 2010; Greenberg, Brown, & Abenavoli, 2016; Hamre & Pianta, 2004, 2005), and effective teaching practices (e.g., Flook, Goldberg, Pinger, Bonus, & Davidson, 2013; Jennings, 2015b; Jennings et al., 2017) in relation to teacher and student outcomes. More recently, the field has begun to investigate the personal characteristics of teachers, with an interest in how teachers' SEC may influence the student-teacher relationship or impact student well-being (e.g., Greenberg et al., 2016; Jennings & Greenberg, 2009; Merritt, Wanless, Rimm-Kaufman, Cameron, & Peugh, 2012). Such research may have far-reaching implications for education, from teacher education programs to professional development and teaching practice, in part because few preservice teaching and professional development efforts have focused on the area of teacher social and emotional competence and well-being (Schonert-Reichl et al., 2015). The following sections will further examine what is currently known about teacher well-being and social and emotional competence and includes discussion regarding the potential impacts they may have on student outcomes.

The Importance of Teacher Well-being and Social and Emotional Learning

The development of teachers' well-being and social and emotional capacities is a primary goal of the Millennium Teacher Forum. Indeed, the leaders at Millennium.org have been heavily

influenced by what is currently known about teacher well-being and SEC when developing their TOC. Still, a question remains: *why focus on the development of teacher well-being and SEC?*This section provides an exploration of the theories and study findings that are prominent within the field of SEL as they relate to teacher well-being and SEC.

Although research studying teacher well-being and SEC is still in its nascent stage, researchers are recognizing that these qualities in teachers are pivotal to the student-teacher relationship, classroom culture, and students' well-being and competence (Jennings & Greenberg, 2009; Jones et al., 2013; Merritt et al., 2012; Schonert-Reichl, 2017). A seminal piece in the study of teacher well-being and SEC is Jennings' and Greenberg's (2009) article where they propose the *Prosocial Classroom Model* (see Figure 2). Through this model, Jennings and Greenberg posit that teachers who are socially and emotionally competent themselves, and are also able to maintain their own well-being, have more positive relationships with their students, can better manage their classrooms, and tend to model social and emotional learning skills for their students. Further, they suggest that high teacher SEC can actually protect against a "burnout cascade", a situation when teachers experience stress and burnout which permeates into the classroom climate, eventually being absorbed by their students (Greenberg et al., 2016; Jennings & Greenberg, 2009). Given that teacher stress and burnout are associated with negative school and student outcomes (e.g., Darling-Hammond, 2000; Greenberg et al., 2016; Jennings et al., 2017), understanding ways to improve teacher well-being and resilience seems to be of significant importance. Furthermore, as rates of teacher stress and burnout are on the rise (Borman & Dowling, 2013; Sharplin, O'Neill, & Chapman, 2011), identifying and developing support for teachers to mitigate stress and burnout are of particular relevance in today's educational climate.

The Prosocial Classroom Model

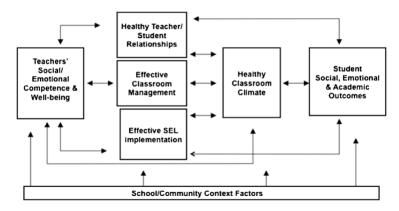


Figure 2. The Prosocial Classroom Model. From: Jennings, P. A. & Greenberg, M. T. (2009). The Prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes. *Review of Educational Research*, 79, 491–525. Reprinted with permission from SAGE Publications, Inc.

Studies that have examined the promotion of teacher SEC have found it to be related to several promising outcomes for teachers themselves, including increased levels of physical and psychological well-being, reductions in feelings of burnout, enhanced teacher efficacy, greater ability to recognize and manage emotions, and increased ability to manage teaching challenges (Jennings et al., 2017; Jennings, Frank, Snowberg, Coccia, & Greenberg, 2013; Roeser et al., 2013; Taylor et al., 2015). Teacher SEC can be described as a comprehensive set of processes, including several emotional processes (e.g., regulating emotions, empathy), interpersonal skills (e.g., understanding social cues), and cognitive processes (e.g., inhibiting impulses, managing stress) (Jones et al., 2013). Although more research is needed to fully understand exactly how teacher SEC may relate to student outcomes, growing research indicates that socially and emotionally competent teachers have an increased capacity to create positive environments for their students (Schonert-Reichl, 2017). Preliminary evidence suggests that socially and emotionally competent teachers may create such environments for their students by more

effectively managing the classroom, improving instructional skills, creating more supportive relationships with students, and by explicitly teaching SEL skills to students (Jennings, 2015b; Jennings et al., 2017). Furthermore, improvement of instruction, the ability to provide emotional support to students, and a positive classroom climate are associated with beneficial behavioral and academic outcomes for students (Bergin & Bergin, 2009; Hamre & Pianta, 2005; Oliver & Reschly, 2007). For example, a study of 178 first grade students and their teachers, by Merritt et al. (2012), found that teacher emotional support, as rated by an observer, was related to lower child aggression and better self-control. Specifically, emotional support in the teacher-student relationship explained 36% of the classroom-level variance in student aggression and 21% of the variance in self-control. Another recent study indicated that students' *perceptions* of their teachers' SEC was significantly and positively associated with students' social, emotional, and academic outcomes (e.g., empathy, positive affect, academic efficacy) and closeness in the student-teacher relationship, while also being negatively related to internalizing behaviors (i.e., anxiety) and conflict in the student-teacher relationship (Whitehead, 2013).

How does the Development of Social and Emotional Competencies Benefit Educators?

Fueled by years of research, SEL has been divided into five categories by the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2013). These categories include self-awareness, social awareness, self-management, relationship skills, and responsible decision making (see Weissberg, Durlak, Domitrovich, & Gullotta, 2015). Research on the development of the five SEL categories with populations of teachers is still emerging, but we highlight some of the more relevant and current literature below.

Self-awareness. Self-awareness refers to the ability to be aware of oneself and one's emotions and goals. It includes a realistic sense of one's strengths and limitations, and a

sufficient level of self-efficacy and optimism (CASEL, 2013). These skills are essential in the teaching profession, given that educators are faced with challenging emotional situations on a daily basis. The frequency of emotionally heightened situations require a teacher to be aware of his or her reactions in order to respond mindfully to students (Jennings, 2015b; Skinner & Beers, 2016). Specifically, teacher characteristics like mindfulness and self-compassion have been shown to be associated with an increased ability to be emotionally supportive to their students and to create more optimal classroom environments (Jennings, 2015b). Further, a sense of efficacy, and the degree to which teachers feel efficacious in doing their jobs, is related to levels of job satisfaction and lower levels of burnout (Caprara, Barbaranelli, Steca, & Malone, 2006; Skaalvik & Skaalvik, 2007; Tschannen-Moran & Woolfolk Hoy, 2007). Additionally, a teacher's sense of efficacy has been linked to the use of effective teaching strategies (Klassen & Tze, 2014) and the improvement of classroom management and feelings of well-being (Collie, Shapka, & Perry, 2012; Tschannen-Moran & Woolfolk Hoy, 2001; Tsouloupas, Carson, Matthews, Grawitch, & Barber, 2010).

Social awareness. The category of social awareness refers to abilities such as taking the perspective of others, appreciating diversity, understanding social norms, and feeling empathy and compassion towards others (CASEL, 2013). There is an intuitive appreciation that social awareness is an important skill for teachers to have and research has certainly amassed to support this notion (Jennings, 2015a; Jennings & Greenberg, 2009). For example, a teacher who shows empathy and tries to understand why a student is acting out, is more likely to come to a constructive solution rather than resorting just to punitive action (Jennings & Greenberg, 2009). This is exemplified in a study conducted by Patricia Jennings (2015a) that found that a teacher's ability to observe their thoughts, feelings, and physical sensations with a mindful state was

related to his or her ability to take students' perspectives, and therefore, respond more sensitively and with greater emotional support when needing to discipline students.

Self-management. Self-management refers to the ability to regulate emotions and behaviors, including controlling impulses, managing stress, and persevering through challenges (CASEL, 2013). Evidence suggests that teachers' lack of self-management skills, such as emotion regulation, is one of the primary reasons teachers experience burnout and subsequently leave the teaching profession (Darling-Hammond, 2001; Montgomery & Rupp, 2005; Schonert-Reichl et al., 2015). Conversely, a teacher's ability to appropriately regulate the intense emotions elicited within the classroom has been found to lead to less emotional exhaustion and more positive relationships with students (Sutton & Harper, 2009). Further, it is proposed that the development of coping skills that address the social and emotional demands of teaching can do more than ward off the effects of stress, but may potentially promote teachers' learning and resilience (Skinner & Beers, 2016). Indeed, when exploring the topics of teacher stress, coping strategies, and teacher resilience, researchers Ellen Skinner and Jeffry Beers (2016) state that, "constructive coping can transform previously stressful interactions into opportunities for learning and development, contributing to higher quality engagement in teaching and greater levels of teacher professional satisfaction and well-being" (p. 101).

Relationship skills. Relationship skills refers to one's ability to establish and maintain healthy relationships, which includes good communication, cooperation, resisting negative social pressures, and resolving conflict constructively (CASEL, 2013). It is easy to see the relevance of this category to teaching. A lot of the research focusing on teachers and students has been on the role the student-teacher relationship plays on student outcomes and well-being (Hamre & Pianta, 2010; Jennings & Greenberg, 2009; Milkie & Warner, 2011). For example, in a study by Birch

and Ladd (1997) that investigated relationships between 206 kindergarten students and their teachers, they found that high teacher ratings of closeness in the student–teacher relationship were associated with greater academic performance, liking, and engagement in school, whereas higher teacher ratings of conflict were associated with diminished school liking and cooperative participation in the classroom. Positive student-teacher relationships can serve as a buffer for students' behavioral problems, lead to positive relationships among students, and promote academic achievement (Hamre & Pianta, 2010; Milkie & Warner, 2011). Furthermore, trust between colleagues and administrative leaders has also been linked to the promotion of positive teacher outcomes, such as an increase in feelings of job satisfaction and motivation to improve professional learning (e.g., Collie, Shapka, & Perry, 2011; Davis & Wilson, 2010; Eyal & Roth, 2010; Gorozidis & Papaioannou, 2014).

Responsible decision-making. This category is a prime example of the interconnectedness of all five of the CASEL categories, as it clearly depends on, and expands upon, the other four. It involves the ability to make constructive choices about personal behavior and social interactions, which requires being able to consider ethical and safety concerns, social norms, and recognizing consequences of ones' actions on one's self and others (CASEL, 2013). One could argue that a significant part of teaching is both modeling and explicitly teaching responsible decision making.

For instance, research is burgeoning on the negative effects of teacher stress on student well-being (e.g., Hamre & Pianta, 2004, 2005; Oberle & Schonert-Reichl, 2015), suggesting teachers be vigilant in exercising self-care and maintaining their own well-being, so as to not negatively impact their classrooms. Moreover, teachers have a responsibility to model the

healthy behaviors they expect of their students (Greenberg et al., 2016; Jennings & Greenberg, 2009).

Social and Emotional Skills Can be Developed

The body of literature cited in this literature review support the notion that social and emotional learning is an essential piece in the promotion of positive school outcomes. Further, the growing interest in SEL stems, in part, from the finding that these skills are malleable and can be explicitly taught (Diamond, 2012; Durlak et al., 2011; Immordino-Yang & Damasio, 2007). This makes SEL a realistic and hopeful focus for interventions and school programs. For example, in a recent meta-analysis by Durlak et al. (2011), of 213 school-based SEL programs that included 270,034 students of all ages, they found that students in the intervention groups demonstrated improved prosocial attitudes and behaviors and fewer internalizing and conduct problems, compared to the control groups.

There is less extant research on the plasticity of SEL skills among teachers (Jennings & Greenberg, 2009), but more recently the field has turned its attention to examine this issue (Jennings et al., 2013; Swan & Riley, 2015), with particular interest in mindfulness-based programs (Lawlor, 2016). Mindfulness can be defined as "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (Kabat-Zinn, 2003, p. 145). There is growing evidence of the efficacy of these types of practices on teacher well-being and SEC (Jones et al., 2013). Emerging evidence indicates that mindfulness training programs that focus on improving teachers' own emotion awareness, can lead to enhanced empathy, a more compassionate classroom climate, and even decreased self-reported depression by teachers (Jennings, 2007; Jennings et al., 2013; Kemeny et al., 2012). A recent study conducted by Schussler, Jennings,

Sharp, and Frank (2016) analyzed data from four focus groups of teachers who participated in the mindfulness-based professional development program, *Cultivating Awareness and Resilience in Education* (CARE). They found that teachers expressed greater self-awareness, less emotion reactivity, and even recognized the need for better self-care, following their participation in the CARE program. An additional study, conducted by Roeser and colleagues (2013), also found benefits to teacher well-being in relation to mindfulness practices. In this study, Roeser and colleagues found that teachers who participated in the eight-week mindfulness training program, *SMART-In-Education*, showed greater mindfulness, attention, self-compassion, and lower self-reported stress and burnout in comparison to those in the control group. Although these findings are promising and suggest that mindfulness practices may serve a useful tool in cultivating teacher well-being and SEC, more research is needed to fully understand how such practices serve to promote teacher related outcomes.

Fostering teacher SEC is not only important for teachers' skill-sets and behaviors in the classroom, but also has implications for their well-being (e.g., Brackett, Palomera, Mojsa-Kaja, Reyes, & Salovey, 2010; Jennings et al., 2017; Roeser et al., 2013; Taylor et al., 2015). For example, Taylor and colleagues (2015) found that teachers who were randomly assigned to receive the SMART program reported greater improvements in their ability to use adaptive strategies when coping with stress and also tended to evaluate challenging students in a more positive manner in comparison to teachers who did not receive the training. Additionally, those who received SMART training reported increased feelings of efficacy and a greater capacity to forgive others. Interestingly, these changes in teacher efficacy and ability to forgive others partially mediated the reductions found in teachers' stress (Taylor et al., 2015). A recent study conducted by Patricia Jennings and colleagues (2017) also provides support for the development

of teacher SEC in efforts to promote well-being. In this study, Jennings et al (2017) found that participants who were randomized to receive CARE, reported significant improvements in levels of psychological distress and feelings of stress associated with time pressures and urgency. These findings are promising and add validity to the intervention efforts currently in schools. Still, more research is needed to investigate the effects of other types of interventions and professional development programs on teacher SEC and well-being, beyond, and in addition to mindfulness programs, which have been the main focus of study in the past decade.

Examining Key Ingredients of the Millennium Teacher Forum

As mentioned above, the Millennium.org team seeks to contribute to the research regarding teacher well-being and SEC by proposing a set of collective practices that further develop these traits. The previous section outlined the importance of teachers' own SEC and the impact these dispositions and skills can have on classrooms and students. Now, we delve into the recent research on how to foster teachers' SEC, with particular interest in those areas relevant to the activities and essential ingredients of the Millennium Forum.

Key Ingredients of Millennium Forum

The Millennium Forum use *circles of trust*, an embedded professional development approach developed by the Center for Courage Renewal and Parker J. Palmer (see Chadsey & Jackson, 2012), which focuses on individual growth and self-care as well as interpersonal connection, in order to support teachers to develop social-emotional competencies. The leaders at Millennium.org use circles within their Teacher Forum with the intention of building teacher SEC related to 1) Individual growth and self-care; 2) Interpersonal connection; 3) Embedded professional development (PD). Without extensive study of the Forum's TOC, it is undetermined

whether or not the use of circles specifically promotes these capacities. Still, the following sections examine what *is known* about individual growth and self-care, interpersonal connection, and embedded PD in relation to the development of teacher SEC and well-being. The provided research may serve to provide validity for the inclusion of these elements within the Millennium TOC.

Individual growth and self-care. As discussed above, supporting teacher well-being is of critical importance that may have serious implications for school outcomes. Teacher wellbeing is not only related to teacher outcomes, such as levels of stress and burnout, but may also influence students' academic, social, and emotional outcomes (Flook et al., 2013). In fact, it can be argued that teachers need to take care of themselves before they will have the full capacity to take care of their students (Schonert-Reichl, 2017). There is growing evidence of the negative impact of teacher stress, not only on teacher well-being and efficacy (e.g., Brown et al., 2010), but also students' well-being and classroom quality (Hamre & Pianta, 2004, 2005; Oberle & Schonert-Reichl, 2015). For example, a recent student by Oberle & Schonert-Reichl (2015) found that teachers' self-reports of burnout were linked to students' levels of the stress hormone cortisol. Further, depressive symptoms of teachers have been shown to be related to lower levels of classroom quality and student-teacher relationships (Hamre & Pianta, 2004, 2005). In contrast, research has found that personal qualities, such as teacher optimism, are related to higher quality teaching and care among early childhood educators (de Schipper, Riksen-Walraven, Geurts, & Derksen, 2008). These findings support the orientation of the leaders at the National Council for Accreditation of Teacher Education (NCATE, 2008) who argue that teachers who attend to their own well-being are more likely to accurately assess, develop, facilitate, and inspire students to adopt their own well-being practices.

Self-compassion. A budding topic in the field of teacher well-being and self-care is self-compassion (see Neff 2003a, 2003b; Roeser et al., 2013). Self-compassion refers to the way an individual kindly and positively relates to the self without using harsh self-evaluation or social comparison. In addition, self-compassion allows one to relate to the self in a kind way regardless of performance level or ability (Neff, 2009; Neff, Hsieh, & Dejitterat, 2005).

Multiple studies conducted within the field of psychology have found the development of self-compassion to be associated with human resilience and well-being (e.g., MacBeth & Gumley, 2012; Neff, 2003a, 2003b, 2009; Neff & Germer, 2013; Neff, Kirkpatrick, & Rude, 2007; Neff & McGehee, 2010). These studies, mostly conducted with adults from the general population and college students, have found higher levels of self-compassion to be linked to life satisfaction, feelings of happiness, optimism, curiosity, social connectedness, the ability to adapt and cope with failure, and an increase in emotional intelligence (Neff, 2003a, 2003b, 2009; Neff et al., 2007, Neff & McGehee, 2010).

A Randomized Controlled Trial (RCT) conducted by Roeser and colleagues (2013) is one of the few studies that has examined self-compassion with a population of teachers. The findings of this study provide some preliminary empirical evidence that self-compassion may support teacher well-being. Specifically, Roeser and colleagues (2013) found that those teachers randomized to receive training through the eight-week SMART program reported significantly greater improvements in self-compassion after completing the training and continued to report such improvements at a three-month follow-up. Interestingly, teachers assigned to the control group (who did not receive SMART training) did not report significant changes in levels of self-compassion over the course of the study (Roeser et al., 2013). These findings suggest that self-compassion is a learnable and malleable trait that can be developed within populations of

teachers when they are provided with appropriate training. Furthermore, this study revealed that self-compassion may be a critical trait for teachers to develop, because it not only mediated reductions in stress and burnout post-program, but also mediated symptoms of depression and anxiety at a three-month follow-up. The researchers concluded that self-compassion may help mitigate teacher stress, anxiety, and burnout by providing them with a positive mindset whereby they are able to view themselves in a kind, forgiving way, which may help promote their ability to adapt to the challenges of teaching without judging themselves harshly (Roeser et al., 2013).

A focus on self-compassion is not only important for teachers own well-being, but has been shown to be related to classroom quality and student outcomes as well (Jennings, 2015a; Pianta et al., 2008). For example, a study recently conducted by Patricia Jennings (2015a) examined the associations among self-compassion, observed teacher SEC, and dimensions of teacher burnout. Jennings found that teachers' self-reports of self-compassion were positively related to their ability to provide emotional support to their students, as rated by the CLASS system (Pianta et al., 2008), a well-validated observational measure of classroom quality. Further, she found a negative correlation between teachers' self-reports of burnout and observed emotional support capacity. These findings suggest that when teachers exercise compassion toward themselves, there may be additional positive effects that cascade down to their classrooms and students.

Teacher efficacy. Teacher efficacy is defined as a teacher's perception about their level of performance and ability to teach (Gibson & Dembo, 1984). The development of teacher efficacy has received a significant amount of study over the past few decades. A focus on efficacy is due, in part, to the fact that efficacy is often associated with positive school outcomes (Collie et al., 2012). Indeed, studies have found teacher efficacy to be associated, not only with

lower levels of teacher burnout, but also with a greater sense of commitment toward the school they work in, job satisfaction (Caprara et al., 2006), and increased motivation towards professional learning (Gorozidis & Papaioannou, 2014).

Teacher efficacy is also associated with positive student outcomes (Schonert-Reichl, 2017). Specifically, teacher efficacy is related to a teacher's use of effective teaching practices (which improves student learning outcomes and achievement), student motivation, and student self-efficacy (Collie et al., 2012; Skaalvik & Skaalvik, 2007). Researchers are now beginning to investigate the factors that may support or detract from teacher efficacy, with evidence suggesting that teacher efficacy can be improved through explicit professional development (Buman, 2009; Collie et al., 2012; Rimm-Kaufman & Sawyer, 2004; Ross & Bruce, 2007).

A large body of research shows that an improvement in teaching skills enhances teacher efficacy (e.g., Collie et al., 2012; Ross & Bruce, 2007), with fewer studies investigating the social and emotion contributions to efficacy (Collie et al., 2012; Rimm-Kaufman & Sawyer, 2004). For example, in a study of 69 elementary school teachers who received the evidence-based SEL program, *Responsive Classroom* (RC), Rimm-Kaufman and Sawyer (2004) found that teachers who used more of the RC practices also reported greater self-efficacy beliefs. In a study by Collie et al. (2012), in which 664 elementary and secondary school teachers from British Columbia and Ontario, Canada were surveyed, researchers found that perceptions of the level of collaboration among teachers at their school, students' behavior and motivation, and teachers' own comfort in implementing SEL were all significantly and positively related to teacher efficacy. Additionally, they found that teachers' feelings of stress related to student behaviors was negatively associated with teacher efficacy. These findings suggest that the development of efficacy is a critical skill that teachers need to develop.

Interpersonal connection. It is becoming well established that a positive interpersonal connection between teacher and student is integral to students' academic, social, and emotional success (Hamre & Pianta, 2010; Jennings & Greenberg, 2009; Milkie & Warner, 2011).

Interestingly, the student-teacher relationship has been shown to be protective for the teachers' well-being as well (for a review see Spilt, Koomen, & Thijs, 2011). Much like their students, teachers thrive when they are surrounded by positive, supportive relationships (Flook et al, 2013; Klassen, Perry, & Frenzel, 2012).

Relational trust. Growing research is indicating that an important aspect of these relationships is trust (Bryk & Schneider 2002; Forsyth 2008; Goddard et al. 2001; Tschannen-Moran & Hoy, 2000). A greater sense of trust in schools has been shown to not only lead to academic success among students (Goddard et al. 2001), but is also associated with positive outcomes for teachers and staff as well (Tschannen-Moran & Hoy, 2000).

A thorough and multidisciplinary analysis of trust, conducted by Megan Tschannen-Moran and Wayne Hoy (2000), provides rationale for the development of trust within organizations. In this analysis, Tschannen-Moran and Hoy examined four decades worth of critical evidence and theory related to the study of relational trust within organizations. Based on their analysis, they concluded that trust is a fundamental characteristic of well-functioning organizations. Specifically, they reported that interpersonal trust is critical to support effective communication and cooperation. Further, they argue that effective communication and cooperation serve as the "foundations for cohesive and productive relationships in organizations" (p. 549). Their analysis concluded that trust is associated with multiple positive outcomes, including a reduction in feelings of uncertainty, improvements in communication and collaboration, and the promotion of positive culture and environment. Additionally, their analysis

showed that "when relationships are embedded in an organizational context, the dimensions and dynamics of trust have a very real impact on the effectiveness and collective sense of efficacy of the organization" (p. 581).

More recent research indicates the conclusions of Tschannen-Moran's and Hoy's (2000) analysis are still relevant. Indeed, when specifically examining the role of trust in schools, multiple studies have shown that it continues to play a role in a school's success. For example, relational trust in schools has been found to be related to degrees of teacher professionalism (Tschannen-Moran, 2009). Further, teachers who have a trusting relationship with their school administrators are more likely to support the school vision, participate in professional development, have a desire to develop new teaching practices, collaborate, and feel greater satisfaction towards the school community and their job in general (see Davis & Wilson, 2010; Eyal & Roth, 2010; Gorozidis & Papaioannou, 2014). Such findings suggest that the development of trust in schools, albeit between faculty and staff members or with (and between) students and parents, is a critical factor associated with a school's success.

Empathy and compassion. A topic currently receiving a lot of attention and investigation within studies of student SEL is empathy (Malti, Chaparro, Zuffianò & Colasante, 2016; Schonert-Reichl, 2011; Schonert-Reichl & Oberle, 2010; Warren, 2018). Research shows that empathy is essential for healthy social relationships and even has implications for academic success (Schonert-Reichl, 2011). Perhaps more importantly, there is a growing evidence to support the notion that empathy can be taught (Hoffman, 2000, 2008; Preston & de Waal, 2002; Schonert-Reichl & Oberle, 2010). Less research has been done on the impact or development of teacher empathy, but some studies are emerging that show the importance of this trait in teachers (Jennings & Greenberg, 2009; Peck, 2015; Warren, 2013, 2018) and the potential malleability of

empathy, and related traits such as compassion (Jazaieri et al., 2013). For example, in a study of 100 adults, Jazaieri et al. (2013) found that the adults who took part in a nine-week compassion cultivation training (CCT) reported significantly higher compassion for others, self-compassion, and willingness to receive compassion from others at post-test, compared to the control group. Although these findings are promising, more research is needed to investigate the impact of teacher empathy on students, the student-teacher relationship, and the classroom context.

Researchers have also begun to investigate the personal and social factors that may promote empathy among teachers (e.g., self-evaluation, self-efficacy) (Goroshit & Hen, 2016; Serbia, Stojiljković, Todorović, Đigić, & Dosković, 2014). For example, in a study of 120 teachers in primary and secondary schools, Serbia et al. (2014) found that the favorable social self-concept, defined as the subjective assessment of someone's own social value, was a significant predictor of high empathy among teachers. Another study conducted by Goroshit & Hen (2016), which included 545 teachers, found that teacher efficacy was a significant predictor of empathy in teachers. These findings suggest the value of targeting both cognitive and affective aspects of teaching in professional development programs.

Embedded professional development. "Externally driven, isolated workshops and conferences have produced little impact on in-service teacher learning and change... when professional development is school-based and embedded in the daily work of teachers, learning is more likely to occur" (Knight et al., 2015). Evidence suggests that providing teachers with the opportunity to learn through effective professional development is of critical importance (Darling-Hammond et al., 2017). Indeed, research shows that professional development that is meaningful, sustained, and intensive is associated with positive school outcomes including teacher efficacy and student achievement (Darling-Hammond et al., 2009; Desimone, 2009).

Professional development refers to formal, structured, or systematic activities that aim to develop the knowledge, skills, and characteristics of teachers (Guskey, 2002). When implemented well, professional development can foster positive school outcomes by shifting teachers' practices or attitudes and beliefs to better support student learning (Darling-Hammond et al., 2017; Guskey, 2002).

Unfortunately, research suggests that while some school leaders do provide effective professional development to teachers, it is often inconsistent and many fail altogether (Darling-Hammond et al., 2009). For example, research has shown that "one-shot" workshops are ineffective (Wayne, Kwang, Pei, Cronen, & Garet, 2008) and that such approaches lack the focus needed to help teachers translate knowledge into practice (Guskey, 2002). A recent study by Darling-Hammond et al. (2017), in which they conducted a thorough scan of the state of teacher learning within schools, found several *features* of professional development that best support teacher learning. Teacher learning was best supported when professional development was content focused, incorporated active learning strategies throughout the delivery of the training, supported collaboration and community, modeled best practices, provided coaching, offered feedback and a chance for reflection, and was of a significant, sustained duration.

One barrier to implementing effective professional development is the amount of time schools or districts allot for teachers to attend professional development within working hours. Most often, teachers are expected to attend professional development in training sessions held outside of school hours, such as after school or during the weekend, and the few trainings provided to teachers during work hours are scheduled sporadically throughout a school year (Darling-Hammond, 2005). The inconsistent nature of such implementation has been criticized

by researchers as "woefully inadequate...fragmented, intellectually, superficial, and [does] not take into account what we know about how teachers learn" (Borko, 2004, p. 3).

One area, however, needing further research is how professional development can be used to help develop teacher SEC and foster well-being (Schonert-Reichl, 2015, 2017). A study by Schonert-Reichl et al. (2015) reveals a staggering finding in the United States; that there is very little social and emotional training and content within teacher preparation programs. In our current educational climate, there is a growing expectation that teachers tend to the social and emotional needs of their students, yet there is a mismatch with the amount of preparation and ongoing development they receive on this topic (Schonert-Reichl, 2017).

One way to promote the development of teachers' SEL and well-being may be to weave it into the fabric of the existing learning structures within a school system. Often such efforts are defined as *embedded professional development* and include practices that combine a variety of approaches and practices which allow teachers to learn from one another through interaction and social-based discourse (Desimone, 2011). Embedded professional development takes place organically throughout a school culture, rather than being isolated or promoted through the use of external trainings. Embedded professional development is often more informal than the external or isolated professional development efforts most often used by schools, therefore, it more easily becomes woven into the very structure of a school system (Avalos, 2011; James & McCormick, 2009).

Community of practice. As discussed above, there is a growing consensus that professional development should be "school based" or "integrated into the daily work of teachers" (i.e., embedded) (Wayne et al., 2008). Fortunately, current trends suggest that some school leaders are beginning to implement professional development that shifts away from

traditional structures to adopt more constructivist approaches that allows teachers to share and negotiate their learning with colleagues in learning communities (Hanson, 2009; Houghton, Ruutz, Green, & Hibbins, 2015). Such professional development structure is commonly referred to as a *community of practice* (CoP).

Well-implemented CoPs allow teachers to become active participants in their learning by engaging directly in activities, conversations, reflections, and other forms of participation with a group of colleagues. By participating within this social sphere, teachers are given the opportunity to have a shared experience with one another. Different than traditional professional development structures, the discussions and content presented within CoPs are driven by the shared dialogue of the group (Wenger, 2010). Within such structures, teachers are invited to "negotiate and renegotiate" the meaning of their experience together (p. 180). Over time, this process allows for the creation of a dynamic learning space that is less formal than traditional professional development structures and driven by the needs of the participants (Wenger, 2010).

Discussion and Future Directions

Teacher SEC is an emerging field, and the Millennium.org team is on the cusp of this revolution in teacher well-being and practice. The literature included in this review has drawn from the most current research in the field of SEL and teacher well-being and provides some supportive evidence of the validity of the Millennium TOC. In particular, this literature review makes a case for the potential effectiveness of the three critical "capacity building" strategies identified by the Millennium.org team (i.e., self-care and personal growth, interpersonal connection, and embedded PD) for promoting teacher well-being and positive student outcomes.

Findings suggest the Millennium Teacher Forum may actually be addressing some teacher SEC needs within the SEL categories of self- and social awareness, self-management,

relationship skills, and responsible decision making. It may also be true, that the Millennium Teacher Forum is addressing additional teacher capacities, such as self-compassion, mindfulness, empathy, and teacher efficacy, though they are not explicitly identified in the Millennium TOC at this time.

Whether or not the "capacity building" inputs, identified in the Millennium TOC, lead to the desired outcomes of improved teacher well-being and dispositions, and whether or not these teacher outcomes lead to their desired student outcomes has yet to be determined. To fully understand if these skills are cultivated as a result of the Millennium Teacher Forum, and subsequently lead to the outputs intended by the Millennium.org team, it is necessary for them to conduct an empirical study (ideally a randomized-controlled trial [RCT]) to examine the individual and collective effects of the elements of their TOC. Such a study would allow the Millennium.org team to identify which elements currently included in their TOC are the most critical and dynamic in relation to the others and would inform which areas of their TOC need expansion or adjustment.

Conclusion

The innovative Millennium Teacher Forum and associated TOC both contain multiple components that reflect current research in the field of SEL. Specifically, their focus on building teacher capacity through the development of self-care, interpersonal connection, and embedded PD align with the emerging literature on the value of fostering teacher SEC and teacher well-being. There are, however, potential opportunities for the Millennium.org team to more intentionally align the Millennium Teacher Forum and TOC with the well-established research on social and emotional competencies. Additionally, Millennium.org is in a great position to

conduct an RCT research study that could contribute, not only to their own vision and design, but also to the teacher SEL field of literature.

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