Jl. of Technology and Teacher Education (2022) **30**(2), 145–154

Looking to the Future from the Present: A Call for Well-being and Mindfulness in Education

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This article calls for a focus on well-being and mental/emotional health in teacher education programs—driven by two important, accelerating societal and educational trends: an influx of digitally-networked technologies, and a rising crisis in mental health and emotional well-being. Internet technologies have significant learning affordances to connect people and improve their lives; but without attentiveness to human-centered well-being, they can also allow for negative effects. Prior to the pandemic, there was already rising concern about mental health in education, and its stresses and tolls have only heightened the problem. We propose that teacher education should implement curricula that supports teachers' well-being, in addition to helping them learn skills to support students' well-being. Focusing on mindfulness as a valuable and well-validated method of supporting well-being in education, we discuss existing literature on the topic, and share anecdotal evidence from a mindfulness school initiative that the authors are involved in. Concluding with specific implications for teacher education, we also consider technological implications for well-being and mindfulness.

INTRODUCTION

Defining a vision for the future of teacher education demands an understanding of the forces and trends that are affecting it. We argue the need for teacher education programs to focus on issues of well-being and mental/emotional health—as driven by two essential and accelerating trends in society and education in recent years. Those trends include an influx of digitally-networked elements in our lives via internet technologies (e.g., remote/online learning), and also a rising crisis in teachers' and learners' mental health and emotional well-being. These trends overlap and intersect, and though they were already accelerating before the pandemic, recent years have catapulted them to a more urgent focus.

One accelerating trend is the infusion of internet technologies in human lives and learning settings. Digital tools have incredible beneficial affordances for teaching and teacher education. They connect people and can improve our lives—but tools of any sort can also create potential negative effects or challenges. Without attentiveness to teachers' and students' well-being, the benefits of internet learning and tools can be complicated by mental and emotional challenges, such as heightened feelings of alienation, distance, overfocus on negative information, screen-time exhaustion or overstimulation, among other concerns (Dienlin & Johannes, 2022; Fernández-Batanero et al., 2021).

Another accelerating trend is a rising concern about mental health overall, including in education, which predates the pandemic, but has become more urgent because of it. Digital technology has a complicating role here as well, seen in the stresses of sudden shifts to remote settings, and overreliance on the internet for human connection. All this happened alongside stretches of social isolation, ongoing familial or health worries, personal or economic losses, and other challenges. This situation has contributed to a sudden sharp rise in mental health concerns in society overall, but particularly in education.

Thus, a key focus for the future of teacher education should be on supporting teachers' well-being and teaching them to support students' well-being. There are many ways to support teachers' well-being, including varied mental health supports/interventions—and of course, ensuring that teachers' needs are met through better work/pay conditions is also important. While we support these approaches, some are not within the immediate control of teacher educators. Having actionable content and tools for well-being is critical, and we emphasize the potential of mindfulness as a well-validated approach to teacher well-being, with an eye to its intersection with technology.

We begin with a brief background on the topic of well-being and mindfulness in education to position our call; we then share anecdotal evidence from a local district-wide mindfulness school initiative. We conclude with a discussion of implications specific to teacher education and the technological implications of this vision. Technologies are tools, which can support or detract from well-being, and this must be factored into the equation.

VISION

A Focus on Teacher Well-being and Mindfulness

Our vision involves implementing mindfulness training into teacher education, professional development, and school cultures. In calling for a well-being focus, we must define the term and why it is important. Well-being in teacher education involves the healthy emotional and mental functioning of teachers that influences personal and professional relationships, situations, abilities, and engagement (Collie et al., 2015). The pandemic has been a stressful life event leading to a rapid decline in the professional well-being of teachers (Boyer-Davis, 2020; Carver-Thomas et al., 2021). In a survey administered to 1,006 K-12 teachers across the United States, approximately 75% were frequently stressed, 50% felt burned out, and 25% experienced symptoms of depression throughout the 2020-2021 academic year (Steiner & Woo, 2021). Moreover, 23% expressed a desire to leave the teaching profession (Steiner & Woo, 2021). Technology plays a role here, as many teachers reported increased levels of 'technostress' caused by the sudden transition to remote teaching and the associated acceleration of technological trends (Beames et al., 2021; Steiner & Woo, 2021). *Technostress* is a negative psychological state related to technology usage caused by perceptions of discrepancies between technology-related resources and demands (Penado Abilleira et al., 2021). During the pandemic, teachers particularly struggled with excessive screen time, information overload, and workloads intensified by a lack of technological knowledge (Baker et al., 2021; Beames et al., 2021), leading to greater fatigue, tiredness, mental/cognitive exhaustion, and anxiety and negatively impacted their job productivity, satisfaction, and commitment (Boyer-Davis, 2020; Penado Abilleira et al., 2021).

Mindfulness practices have shown empirical and practical potential to reduce psychological distress (including technostress) and increase teacher well-being (Tuan, 2022; Zarate et al., 2019). It is a secular practice, ap-

propriate to schooling, which does not impinge on the beliefs of any individual or group's religion, or those with no religion. *Mindfulness*, described as a "state of nonjudgmental, moment-to-moment awareness" (Kabat-Zinn, 1990, p. 2), is often cultivated through meditation practices which can include a "sustained focus on breathing, while noticing distractions or thoughts that emerge in consciousness" (Henriksen et al., 2022, p. 149). It can be developed through a range of meditation practices to support awareness and acknowledgment of present experience (e.g., mindful eating or walking, or a number of mindfulness learning activities), and in any contexts, including online or remote settings (where people often feel uncertain or isolated). Research has shown how mindfulness practices among teachers can help them self-regulate stress, anxiety, depression, and burnout (Zarate et al., 2019).

In terms of technology, mindfulness offers a "crucial personal antecedent to proactive coping for technostress" (Tuan, 2022, p. 1), and meditation applications offered a way to self-regulate technostress and information overload throughout the pandemic (Houli & Radford, 2020). For instance, teachers may be able to reduce technostress via mindful awareness—modifying their technology usage routines, regulating their emotions triggered by techno-stressors, and temporarily disengaging from technology (Salo et al., 2017). Furthermore, teachers can show their students how to apply mindfulness to their media usage, by increasing their ability to selectively limit screen time to specific types of content and situations (Robinson & Borzekowski, 2006)—teaching children to be more aware, mindful, and discerning about the media they use and the volume they consume.

Although mental health and wellness support for teachers has been overlooked and neglected (Carver-Thomas et al., 2021), teacher well-being is integral to the progress, health, and professional success of pre- and in-service teachers and their students (Beames et al., 2021; Boyer-Davis, 2020). In a world with already-critical teacher shortages, those who can maintain their mental and emotional well-being—amid technological acceleration and intensification—will be equipped to teach, support, and connect with vulnerable, often crisis-affected students (Baker et al., 2021).

Envisioning What This Looks Like: Sharing a School-based Example

One way technology can be used to enhance teacher well-being is through mindfulness training programs, which can be offered synchronously, as a hybrid model, with an online live or in-person component, or asyn-

chronously. Offering mindfulness content in multiple modalities strengthens access to it, and helps teachers see how online settings and technology tools can seamlessly be connected to well-being content. These programs can be embedded into teacher professional development programs with school districts or into existing curriculum for teachers in training.

We, the authors, are involved in research in a school district that has taken on mindfulness training for all students and teachers districtwide. Most of the teachers in this district received much of their initial mindfulness training online before transitioning it into classrooms. In 2021, Balsz School District in East Phoenix, Arizona partnered with a local non-profit, Mindfulness First, which offers teachers mindfulness teacher training. First, teachers learned mindfulness via online/hybrid training. They then began sharing simple mindfulness-rooted strategies with their students. Although this study is still in progress, teachers are already reporting that mindfulness practices have a settling impact on many students, which helps them to strengthen their emotion regulation over time.

Importantly, there is existing evidence of the success of this model. For instance, one district school (Crockett Elementary) served as the pilot school for this mindfulness project. There, mindfulness training and practices were implemented for students and teachers for several years, with extraordinary outcomes. Through the years of mindfulness implementation, the school went from an average of 45 suspensions a year to three and rose from a state-level school grade of C—to recently being designated as a "highly achieving" A+ school by the Arizona Education Foundation.

Mindfulness became part of the school culture, integrated into classes (embedded in distinct lessons via content learning), with mindful eating at lunch, mindful walking on school grounds, mindfulness at morning announcements, and more. Its success at the pilot school prompted the district to recently begin this systematic shift to mindful culture. One teacher noted how mindfulness has promoted students' emotional resilience, saying, "It doesn't make the children victims of their circumstances…it brings them up and out. It gives them hope for a future, because they know how to handle it."

The district teachers are increasingly reporting less stress, better relationship quality, more work-life balance, and the ability to help students self-regulate. In order to succeed, teachers need skills for recognizing and working with students in distress. The awareness generated by practicing mindfulness offers a way of cultivating compassion—both for students and for the teachers themselves. As one Balsz teacher said, "I think the way that this training was set up, it also made you work on yourself. It's not just for

the students—it's for the benefit of the whole school. For the staff, for everybody."

Technology inevitably plays a role in the awareness, availability, and access to educational practices like mindfulness training, including formalized mindfulness training in teacher education or in professional development. Although technologies can potentially increase issues of technostress as we described (e.g., feelings of isolation, skewed perspectives, overexposure to screens)—technologies are also tools for information-sharing and connectedness and have affordances to support mindfulness and well-being. Mindfulness training in a group setting, online or in-person, can lead to enhanced social connection, both within the group, which could include colleagues or other teachers in training, and within teachers' personal lives as well. Through pedagogy that encourages group members to strengthen their self-regulation and insight through mindfulness, people increase their feelings of connectedness.

Particularly in digital spaces, such connectedness feelings can have a positive impact on relating to others. Through social media, internet, and increased availability of mindfulness and other mental health activities including therapy, technology can also play an important role in changing attitudes about programming aimed at supporting mental health, bringing it into mainstream culture with more accessibility. One Balsz teacher described how when she was first learning mindfulness she loved having access to online training with videos and resources she could use with students. Over time, she gradually became more confident in instructing and leading her students through mindfulness practices or integrating it in lessons herself, "I now feel much more confident saying to them, 'Be aware of what's happening, be mindful, be aware.'" She discussed how internet resources and online training were necessary to her, initially, in leading mindfulness movement lessons or meditations; and in time these resources scaffolded her to building her own ways of "cueing" mindfulness lessons, as she learned to structure activities and directly cue students about how to be mindful. The internet can be used for promoting and scaffolding such mindfulness education practices and creating online space for community among educators, which can have a significant impact culturally and professionally, in spreading and accepting new ideas and resources (e.g., apps, tools, games, practices for learning and more).

IMPLEMENTATION

Preparing Teachers to Implement Mindfulness

There is no single formula for applying mindfulness in teacher education, because mindfulness is not a singular practice, but a state of emotional-mental awareness and nonjudgmental curiosity that is cultivated through many practices. But there are several strategies for implementation, and we outline and discuss four key ones for teacher education (though many others are possible too):

- Incorporating mindfulness moments within all classes in teacher preparation coursework;
- Including dedicated courses about well-being and mindfulness in teacher preparation coursework (i.e., for teachers to manage their own emotional well-being, and to help them support students);
- Integrating mindfulness into lesson planning within other content or methods areas (e.g., ways that mindfulness could be part of a science or art lesson); and
- Using technology resources and tools (e.g., apps) to scaffold mindfulness—while also teaching about mindful uses of technologies and self-awareness of screen-time.

We advocate for mindfulness to be employed at multiple levels in teacher training. This includes opportunities for teachers to experience mindfulness for themselves, through regular mindfulness moments across teacher preparation coursework. During coursework, teacher educators can show teachers how easy and beneficial it is to have "mindful moments" (brief meditations, or quiet/centering moments) at the start and ending of any class. As one Balsz teacher said, "It's so easy to do in just a quick moment. It doesn't take a setup. It doesn't take anything. It's just your thoughts, like your breathing, just you…you can do it anywhere. So, I love that part of it." Whatever the teacher-education course content might be, instructors could consider giving students a moment or two of mindful meditation at the beginning and ending of classes across their program. Both preservice and in-service teachers are often stressed and dealing with their own schedule and life-demands, and many instructors find that it supports a better learning environment when students have a peaceful, mindful moment to open and close a class (Henriksen et al., 2022). It is necessary to ensure that instructors have the training to be comfortable leading this practice and help

them understand where and how technology resources can support them. For instance, there are countless apps or free Internet resources that could help instructors offer guided meditations or scaffold opportunities to take a moment to focus on breathing and present-moment awareness.

It is also important for teacher preparation programs to develop dedicated courses focused on well-being and mindfulness. Empirical evidence shows that quality mindfulness training with prolonged and repeated mindfulness practice, such as Mindfulness Based Stress Reduction, leads to the most pronounced benefits (Goldberg et al., 2020). Colleges and universities who offer more immersive opportunities for teachers in training to learn about and practice mindfulness in dedicated coursework should do so with experienced, trained mindfulness instructors using high quality programming. Technology can make access to high quality content and instructors possible. Expanded mindfulness training in education is also an opening to develop high-quality well-being curricula specific to teacher education, preparing teachers for use of meditation in the classroom.

Importantly, mindfulness also pairs well with existing methods classes about subject matter teaching strategies, offering pedagogical design work aimed at helping teachers integrate mindfulness into subject content. Research has demonstrated how mindfulness in subject learning can help students learn the content more meaningfully and effectively, while also improving self-regulation during learning (and helping each other to co-regulate) (Davenport & Pagnini, 2016).

Finally, given the fluid role of technology in our lives, and in education, coursework about mindful technology use could be invaluable. This would involve helping teachers understand technology as a tool with affordances, helping them observe places where types of usage might be affecting their sense of well-being—as well as considering how to use technology and mindfulness to engage with wellness practices. There is an important tension and needle to thread here, in recognizing the utility of technologies for access to well-being content and resources, balanced with a need for awareness of when technology might contribute to well-being problems—a key tension for teacher education to navigate.

To meet the needs of the future, teacher education must account for issues of mental health and well-being needs among teachers and their students, and also support the learning of concrete skills and tools for working with stress and promoting resiliency. The pandemic demanded an expansion of access to and distribution of knowledge on well-being, and technological connectivity has increasingly been a path to this. It has brought more recognition of the importance of individual and collective healing/well-being. Teacher preparation programs play a pivotal and necessary role in shaping

future teachers and educational leaders. Embedding accessible mindfulness into teacher training programs is an accessible starting point to deliver a focus on well-being systemically.

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