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System-wide school mindfulness: addressing elementary students' social-emotional learning and wellbeing

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When considering students' educational needs, emotional and mental health are often lower school priorities than content learning and traditional curricula. Yet, a growing youth mental health crisis is a reality that educators cannot afford to ignore. In this article, we present an illustrative case, at the school community level, as a form of pedagogical innovation. In this practical article, we discuss how a disenfranchised school community incorporated a systemic mindfulness intervention into its school culture, yielding positive and impressive results. Based on teachers' pedagogical perspectives, we share perceptions of changes in students' behavior, mental health, general outcomes, and teacher retention. This was spurred by a need to support students' emotion regulation at school. We situate this local community innovation within the larger issue of youth mental health within US society and education. We describe the local context and setting of the school, including the need for trauma-informed social-emotional support for students with significant needs. After describing the mindfulness innovation in detail, we then share our qualitative analysis and results of its impact. Discussing interviews with school staff and administrators, and our observations of the school and classrooms, we distill findings and offer insights about the outcomes of mindfulness used at the level of an entire school community. Our implications suggest the potential of such community mental/emotional health innovations in education for students and teachers, leading to multiple areas of school improvement.

KEYWORDS

mindfulness, community education, teaching, social emotional learning, student mental health, elementary school, teachers, wellbeing

1 Introduction

When considering students' educational needs, emotional and mental health are often lower school priorities than content learning and traditional curricula (Henriksen and Shack, 2020). Yet, a growing youth mental health crisis is a reality that educators cannot afford to ignore. Mental health among young people was already an increasing concern, before the effects of the pandemic ballooned it to a state of emergency. The American Academy of Pediatrics noted "we have witnessed soaring rates of mental health challenges among children, adolescents, and their families over the course of the COVID-19 pandemic, exacerbating the situation that existed prior to the pandemic" (American Academy of Pediatrics, 2021). Children of color are disproportionately impacted by the youth mental health crisis, due to the impact of racism and structural inequalities (American Academy of Pediatrics, 2021). Even the best-intentioned teachers are often unsure how to address these concerns.

Mindfulness has become a growing area for supporting youth wellbeing, given research demonstrating emotional, physical, and relational benefits. Mindfulness is the intention to give attention to whatever is arising in the present moment (whether pleasant or unpleasant) with an attitude of openness and curiosity (Smalley and Winston, 2021). The *Greater Good Science Center Magazine* (2020) at Berkeley describes mindfulness as moment-to-moment awareness of one's internal and external experiences, with a nurturing lens. Though mindfulness may seem simple, it requires guidance and ongoing practice to do it effectively, especially for children (Albrecht, 2019). We present an illustrative case, in which a disenfranchised school community incorporated a mindfulness intervention into its school culture over several years, yielding positive and impressive results in students' behavior, mental health, outcomes, and teacher retention. This was spurred by a need to support students' emotion regulation at school—which is a problem in the larger issue of youth mental health within U.S. society and education, undermining ability to focus, learn, and get along with others (Herrenkohl et al., 2019).

2 Larger context

In recent decades, within the context of the growing youth mental health crisis, the U.S. National Survey of Children's Health revealed that nearly half of all children have experienced at least one or more types of serious childhood trauma, and a significant portion of adolescents have faced two or more childhood adversities (ACEs) that can impact their future (National Survey of Children's Health, 2011/2012). One large study (Merikangas et al., 2011) showed that approximately 22.2% of children under 18 experience mental health issues such as anxiety or depression. Mindfulness practice can support the physiological mechanisms of physical health that are undermined by childhood trauma (Ortiz and Sibinga, 2017). Similarly, it can improve mental health issues, including symptoms of Post-Traumatic Stress Disorder, anxiety, and depression in populations relevant to this school community, such as refugee and asylum seekers (Aizik-Reebs et al., 2021) and broadly within school settings in populations who have experienced ACEs (Sibinga et al., 2013). As students are increasingly impacted by trauma, anxiety, and depression, healing modalities are needed in schools, and mindfulness can play a role here (Ortiz and Sibinga, 2017). Even for well-adjusted students, mindfulness can support self-efficacy and concentration—including mood, self-regulation, emotion regulation, and engagement (Bennett and Dorjee, 2016). While mindfulness should not replace mental health services in schooling, it can be a beneficial support in schools, even improving academic success (Albrecht et al., 2012). For students with trauma, impaired self-regulation/emotion regulation can disrupt learning. For any student, stress (even in common forms, like testing anxiety) impedes cognition and memory. Mindfulness has the potential to reduce the hold of stressful thoughts, fears of failure, and negative internal narration that may affect children in schools (Albrecht, 2018).

In this illustrative example, we discuss a schoolwide mindfulness intervention at David Crockett Elementary School in Phoenix, Arizona, developed to support children's mental/emotional health in a school community faced with multilayered challenges and adversities. We have examined this schoolwide program as scholars from a local university. The successes of this program at Crockett

Elementary recently spurred a district-wide mindfulness program in the overall district (Balsz School District). However, since the district-wide program is newer and less established, we focus on the Crockett school community as an case of a transformative wellbeing schooling innovation.

3 Local innovation context: setting and population

David Crockett Elementary School (Crockett Elementary, a K-5 school) is situated in the urban area of East Phoenix, Arizona, having 545 students, 35 teachers, and 55 staff members. Crockett is a Title One school¹ in the Balsz District, the fifth most economically segregated school district in the country, with over 50% of families at or below poverty levels. In studying this setting, we obtained written permission both from the Balsz School District, and from David Crockett Elementary school (as well as the school principal and superintendent) to identify the school, its leadership, and the district by name, so that their mindfulness innovation might inform others.

Several years ago, the school leadership and staff recognized that many families in Crockett Elementary faced issues like economic insecurity, exposure to domestic and community violence, homelessness, or refugee/immigrant status—experiences associated with trauma. Teachers saw the destabilizing influence of these experiences leading to students' emotional, behavioral, relational, and academic difficulties. With 17 languages spoken in the school, students come from many countries, including: the United States, Mexico, Bulgaria, Burundi, Democratic Republic of the Congo, Cuba, Egypt, Eritrea, Ethiopia, France, Germany, Guatemala, Iraq, Jordan, Kenya, Kuwait, Malaysia, Namibia, Nicaragua, Pakistan, Puerto Rico, Rwanda, Somalia, South Africa, Syrian Arab Republic, United Republic of Tanzania, Tunisia, Uganda, and Zimbabwe.

Crockett Elementary School has a large Somali refugee population and is the home school for a United Methodist Outreach Ministries (UMOM) homeless shelter. Many families live with several generations under one roof. Given the multilayered needs, families and children require trauma-informed support. The school provides connection points for families to locate and receive government or other resource supports (e.g., free/reduced lunch, food distribution, discounted internet, homelessness assistance, veteran's assistance, etc.). Yet, the need for behavioral, social, and emotional support goes beyond external resource programs. Despite the challenges, there is strong community and shared, celebrated pride in diversity. Several years ago, the school principal (Sean Hannafin) saw the potential of mindfulness to give students the tools/skills they needed to support wellbeing and improve mental and emotional health, saying:

We were researching programs to address behaviors that we were seeing on campus that manifested from Adverse Childhood Experiences. Mindfulness supported not only the students

1 In the United States, a school or school district is classified as Title One if 40% or more of the population it serves meets low-income criteria for students to receive free or reduced lunch. Title I school services focus on children who are failing or who are most at risk of failing to meet state academic standards.

suffering from ACEs, but also all students in giving them tools that helped them understand their feelings and to learn what to do with their feelings.

He began the process of transforming Crockett into a “model mindfulness school,” working with a local Arizona nonprofit (who also gave permission to be identified) to infuse mindfulness into the school culture.

4 Building a school mindfulness program

In August of 2016, Crockett began working with the Arizona nonprofit “Mindfulness First,” who helped them reframe the school culture around mindfulness practices. The nonprofit’s mission is to support mental health in schools through mindfulness—infusing mindfulness practices in schools in simple, easy-to-grasp ways, focused on social/mental/emotional wellness. Mindfulness is applied and taught as an entirely secular approach, not connected to any spiritual or religious background.

While mindfulness has roots in Eastern traditions, it has been increasingly adapted for secular practice in mainstream culture, as varied social organizations (including prisons, hospitals, veterans’ centers, and schools) teach it for emotional, mental, social, and physical health intervention (Henriksen et al., 2020). Research on mindfulness conducted in schools is still in early stages, demonstrating mixed results and leading to calls for more uniform approaches to conducting research in this space, including rigorous frameworks (Baelen et al., 2023). While some examples of whole school or even multi-school mindfulness exist, including a recent cluster randomized trial involving 36 schools (Brown et al., 2023) the school wide mindfulness program at Crockett takes a unique approach in that it continues to evolve over time and is tailored to the individual needs of the teachers and students, weaving mindfulness across multiple components of school life and culture. This intervention also provides clues about sustainability of mindfulness teaching and practice over time throughout a school.

At Crockett, Principal Hannafin has worked to ensure that mindfulness was a systematic and sustained effort and not “just another new initiative.” After researching the impact of mindfulness on ACEs, Hannafin “brought the idea to a staff meeting, and they were all on board.” He further explained that as “we have changed staff members over the years, it has become something that our staff connects with and implements.” This implementation has been ongoing, constantly adapting to the present moment needs of the teachers and students. The initial implementation of the program was developed over 3 years (and has since been maintained/sustained and grown).

To start, the teachers received several months of mindfulness training through a mindfulness curriculum developed by Mindfulness First. Using the curriculum, teachers practiced mindfulness themselves, also learning how to infuse mindfulness into their own curricula, including class-wide or individually tailored mindfulness activities or practices. Mindfulness First instructors also visited each teacher’s class periodically during the school week while they were first learning, to offer a short mindfulness lesson to students

(providing additional modeling to teachers and allowing them an opportunity to watch/participate).

These are several core practices and elements in which mindfulness has been infused in the Crockett school day, in this innovation (Henriksen et al., 2023), including:

- Mindfulness is incorporated into daily morning announcements. For instance, the student council’s teacher-leader may invite a student leader to guide the entire school in a mindfulness exercise. Practices vary from 2 to 5 min.
- Students engage in mindful walking within the school premises. As needed, they can seek permission to step outside their classrooms to engage in 3–4 min of mindful walking whenever they need to calm down or refocus. Teachers can also recommend this practice to students, emphasizing the importance of being “safe, respectful, and responsible.”
- If a student notices that either they, individually, or the whole class, are feeling agitated, restless, or struggling, they can raise their hand giving a specific fist hand signal—signaling to the teacher that they need a mindful moment (or the class overall needs one) of deep, quiet breathing. This has become a settling practice that students know how and when to use/request during classes.
- Mindful eating is encouraged both in classrooms and during snack time at school. Three times a week, snacks are provided in class, and teachers lead mindful eating exercises. For instance, recently, kiwiberries were offered as a snack, prompting students to reflect on new tastes, textures, and sensations, also supporting language and vocabulary development.
- The lunchtime atmosphere in the cafeteria is relaxed, but if noise levels get too high, any adult or child can raise their hand to request a mindful moment for the whole cafeteria, helping to reset the environment.
- Teachers receive ongoing training/support from Mindfulness First, to help them lead mindfulness practices in classrooms and incorporate them into teaching methods through regular professional development. All teachers at Crockett undergo mindfulness training for personal benefit and for using it with their students.
- Newly hired teachers receive training over a period of 8–12 weeks, ensuring a consistent understanding and expectations for implementing mindfulness.
- Staff meetings involve discussions on self-regulation/co-regulation between teachers and students in classrooms.
- The principal consistently emphasizes the importance of ongoing mindfulness practice during meetings.
- At least once per quarter, teachers share mindfulness strategies that help students stay engaged.
- More recently, Crockett offered mindfulness support and training for parents. This parent mindfulness effort was led by the second author of this article (Gruber, who is a certified mindfulness teacher and licensed clinical social worker). This included a 6-week series of mindfulness sessions to facilitate mental–emotional wellbeing for community parents (Gruber, 2023).

Since the program’s inception, Crockett Elementary has seen impressive, measurable improvements. This includes a reduction in behavioral issues—from an average of 45 yearly suspensions when the

program started, down to just 3 per year by the third year. This had effects on school quality measures. Crockett rose in the Arizona Education Foundation (AZEF) school ratings—from a C rating, to recently attaining an A+ rating. Teachers are also more likely to stay with the school, which had previously struggled with staff retention. Crockett attained a 98% teacher retention rate by the third program year (2018–2019), and a 95% teacher retention rate for the 2019–20 school year. This is in stark contrast to the state of Arizona overall, which is plagued by teacher attrition (with 25% of teaching positions being vacant on average, and another 44% filled by individuals who do not meet state certification requirements; Riley, 2023). Crockett became a place where teachers want to stay, and mindfulness is authentically part of the process.

5 Gathering teachers' perspectives: researching the program

This work is part of an ongoing examination of the school community mindfulness innovation. We present a synthesis of several key themes, emerging from qualitative data, via interviews with teachers/staff, and observations/visits to the school. As previously noted, the school, the district, the leadership, and Mindfulness First gave permission to be identified in public products or publications describing this work. Teachers gave permission for us to share their stories and any information they provided in direct quotes, as well as basic grade level information. However, we avoid directly naming teachers and we have been careful to avoid identifying any indirect participants such as students.

Using a semi-structured interview protocol (Appendix A), we conducted one-hour interviews with Crockett teachers to explore their experiences with mindfulness in the school and in their teaching. The interviews were audio-recorded and professionally transcribed. Also, over the course of multiple school visits, classroom observations provided a more naturalistic lens on elements of school culture and teaching/learning with mindfulness.

In alignment with recommended qualitative procedures (Percy et al., 2015), we first spent time familiarizing ourselves with the data before analyzing it. Our data included descriptions of the context, the school change effort, and participants' understandings based on their experiences (Creswell and Poth, 2016). As Saldaña (2021) suggests, after multiple rounds of open coding of interviews and observations, we identified significant statements and repeated ideas. When constructing themes, we considered similarities and differences in data, to develop contextual themes that could also inform other contexts or school improvement efforts (as per approaches outlined in Creswell and Poth, 2016).

6 Discussion of pedagogical findings and lessons learned

One key takeaway is that mindfulness works best in a school community when applied in ways that are systemic and systematic—throughout the school culture, routines, and practices. By approaching mindfulness as a consistent and thoughtfully applied change effort, the school (led by Hannafin) created sustainability. This systemic and systematic effort involved changes to the external environment of

classrooms and school practices, and internal changes for teachers and students because of mindfulness becoming embedded in the community. Thus, an outside-in, inside-out, form of individual and systemic regulation promotes results for students, teachers, and educational outcomes, cyclically reinforcing ongoing mindfulness practice at Crockett.

Overall, students have made substantial gains in their ability to regulate emotions through a series of changes that first occurred externally, from the outside-in, to help support their nervous systems in the external environment. Teachers learned to practice mindfulness to regulate themselves throughout the school day, which helped them create calmer classroom environments, paving the way for co-regulation. Co-regulation, a form of outside-in regulation, happens when one well-regulated nervous system regulates another (Porges, 2009). This improves classroom dynamics, teacher-student interactions, and student-student interactions, creating feelings of safety and opportunities for better relationships (i.e., calmer/better-regulated teachers made for calmer/better-regulated students). As teachers learned to embed mindfulness practices into their teaching and learning routines, they created more opportunities for choice and connection in their classrooms, further promoting regulation from the outside-in (Dana, 2022). As students took part in mindfulness with classroom teachers and Mindfulness First instructors, they internalized their learning, carrying it forward and making choices to regulate themselves through mindfulness, building regulation from the inside-out. As the school infused more practices within schoolwide routines (e.g., morning announcements) students and teachers became more collectively regulated. A culture of system-wide mindfulness grew, further reinforcing mindfulness from the outside-in, for teachers and students alike.

6.1 It starts with the teacher: building co-regulation

The mindfulness work started with the teachers, before disseminating mindfulness to the students. Some teachers described how mindfulness helped them respond less reactively in classrooms, and students responded in kind. Neuroception, the nervous system's built-in detection system, constantly gages for cues of safety in the environment, which directly influences automatic feeling states and behavioral responses (Porges, 2004). For children, being surrounded by well-regulated adults helps them feel more grounded and able to calm down.

The benefits increased as they were able to teach mindfulness to students and integrate it in lessons. The school shifted to using mindfulness as emotion-regulation support for struggling children, as opposed to punishment. As Principal Hannafin noted, regulation is visible in students' openness and receptivity to adults. Hannafin described how students have learned that adults are safe and trustworthy, which has helped to create an open, warm, and inviting atmosphere at Crockett, which was also evident in observations. This is another way of building regulation and feelings of safety from the outside-in.

One Crockett teacher described the transformation as “a miracle at times,” especially among students with the highest emotional needs. Often, teachers described these changes happening through their own strengthened awareness, as one noted:

Being able to, in the moment, to step back and say, “Hey, let’s all of us reset...Everybody resets. I reset, you reset, everybody resets.” You may have to take yourself away from the teaching content briefly and recognize the needs in a moment.

Another teacher described a similar effect, in how mindfulness allowed her to pause in the moment and see her own frustration, then come at things from a different angle to help herself and her students:

When I started getting upset with a student, I’d see myself from outside and say, “I’m getting frustrated, my voice is rising.” So, I stop and take 30 seconds, walk around the room, return, and then talk to the student in a calm tone. It’s made me a better teacher...Or, if something feels overwhelming, I’m like, “Okay, we all need a few mindful moments. Everybody, stop what you’re doing. Feet on the floor, hands on your knees, let’s do some deep breathing.”

Other teachers described starting the school day with positive affirmations and deep breathing, saying it, “helps get the kids to get centered and ready for learning.” These practices have helped students build regulation internally. Teachers noted they have seen evidence of these changes in students, via immediate improvements on test anxiety, ability to tolerate frustration, and to persist through difficulty (essential to creative thought or open-ended work), with an increased sense of self-awareness and agency.

6.2 Strengthening emotion regulation abilities in difficult moments

One teacher who has worked with emotionally-disturbed children, arguably those with the most difficulty self-regulating, noted the benefits of learning mindfulness. It helps the teacher to remain calm and “step outside of herself, to not take things personally,” with children that have outbursts, even physical ones:

The more I do mindfulness, the calmer the room stays, and the kids can better manage themselves and support each other. So, I don’t see kids have many outbursts at all anymore. But if they’re starting to yell or get physical, I stop. In the calmest voice, I’ll ask them a question to break the flow of the outburst, like, “where’d you get those shoes?” Usually they stop—then I can ask, “are you ready to take a mindful break?” and they will say yes.

This teacher’s improved abilities to self-regulate during moments of extreme intensity has helped her students do the same, accelerating improvement. She noted that many students are mainstreaming out; some students who came to the school having up to 10 physical outbursts per day were down to one a month. She perceived the effect of mindfulness on students’ progress as, “50% faster and more sustainable. They’re keeping their progress instead of going up and down, up, and down.” Further, many of these effects benefitted her as an individual with her own challenges:

I experienced an early trauma, and that’s why I picked this area because most emotionally disturbed students have trauma. That’s why kids act out physically and verbally. I’ve experienced some

internal healing from mindfulness because I think trauma continues to perpetuate when you’re reactive.

As students and teachers increase their internal and collective regulation in classrooms, they get better at addressing conflict when it arises. Within a self-contained special education classroom, the teacher has adapted a non-violent communication model, which students have learned and use independently to resolve conflicts. The teacher believes that mindfulness has helped students build emotional/self-regulation, reducing reactivity to engage without feeling threatened. This is supported by other research in special education which shows the importance of teachers’ human-centered skills (e.g., empathy, resilience, etc.; [Fernandes et al., 2021](#)). Other students in mainstream settings at Crockett have told teachers that mindfulness helps them handle situations with other kids, instead of just relying on friends for support.

Teachers also noted that professional development sessions were done in an ongoing and sustained way (with modeling), allowing each teacher to interpret it through their own teaching style, creating systematic support for ongoing practice, rather than leaving teachers to figure it out or enforcing a prescribed, rigid approach. This sense of agency also carries over to the ways that students can use mindfulness at Crockett.

6.3 Giving students agency in their emotional needs

An important aspect of neuroception for safety, both physical and emotional safety in classrooms, includes some degree of agency for students ([Dana, 2022](#)). Mindfulness practices have created opportunities for students to draw from a range of choices when they are feeling dysregulated. We noted some examples of this in the earlier section describing the innovation (e.g., students can initiate a “mindful moment” via a hand signal or take a brief mindful walk).

Students’ self-awareness and ability to advocate for their emotional needs is something that repeatedly showed up in our observations. For instance, in an early Friday morning observation of a classroom science lesson, the students began the day quietly working on their “Zen Tangles,” a mindfulness-based art activity. The teacher gave them time to settle in, take a few moments for themselves, and enjoy the quiet before learning. To transition into their science lesson, students closed their eyes and counted backward with the teacher from 10 before beginning. As the science lesson started, progressed, and became increasingly challenging, a collective sense of frustration and restlessness seemed to arise. But before any behavior issues popped up, three students raised fists in the air, signaling a need for a mindful moment. The teacher asked whether those students needed the moment for themselves or for everyone, and the kids immediately responded that the whole class needed it. The teacher nodded, stopped the class, and led everyone through a moment of deep breaths before returning to work, refocused.

Many teacher interviews also referenced students actively taking part in regulating their emotional states. One of them described teaching them how to use mindfulness to self-regulate in moments of need:

I show them how to relax instead of feeling test anxiety, like, “If you lose your focus during this long test, try this. If you feel frustrated, just let me know and you can take a walk, you can take some deep breaths, you can go out, whatever it is that you need to do in that moment, to come back to where you need to be to be successful.”

As another teacher put it:

At Crockett, you can do that any time. You just let your teacher or adult know you need a mindful moment. That’s the expectation, that kids can take that mindful moment then when they need it... We want to help kids realize that they are self-regulating...they have choices, and you can identify your feelings.

Another teacher described how in the past, a student came to her school (during the pandemic when some students were in-class, and others joined remotely). This student had experienced trauma and was shut down, so she kept his desk next to hers. She described an instance where the student had a “meltdown” and she used mindfulness to give him choices and some agency for his feelings:

He had a tear coming out of his eye and I said, “Well, you have a few choices...You can go out to the courtyard for some time outside. You can go somewhere in the room and take some deep breaths, or I can send you next door to a quiet place, and you can make some art.” He lifted his head, and you could see a little bit of light in his eye. He shook his head yes that he was going to go and make art. I said, “You can come back when you’re ready, I’ll just check on you.” I checked on him a few times and soon he was ready to come in and was perfectly fine. He wanted to show what he made to everybody and got better at expressing his needs after that. To have kids realize they have choices to address what they feel... That’s the best success story of mindfulness yet.

These mindfulness-based choices (making art, taking a mindful moment, or a short walk) are available here to give children agency over their feeling states as social-emotional needs arise. It may help students strengthen their emotion regulation from the outside-in, in an environment that promotes choice and celebrates regulation. Students can internalize their learning, engaging in these practices to develop regulation from inside. As more students regulate themselves in difficult moments, they also influence others to do the same, as evidenced in asking for class-wide mindful moments and constructive handling of conflict.

6.4 A different atmosphere

Collective mindfulness has affected the entire atmosphere of the school. Teachers, students, and even visitors to the campus comment on this. One teacher noted that “Other people have been on our campus here at Crockett, and they always say how calm and peaceful it is.” Another teacher stated:

There’s something different on our campus, and you can feel it. Even if you are a visitor, and you have no idea what it is, you can feel this magic or this buzz. You can just feel.. I think it’s a special

place and you cannot step on campus without feeling it...we are an A+ school.

It is a feeling that kids seem to carry off-campus, as teachers described hearing how some of the children seemed to be using mindfulness at home, telling teachers about how they used it to diffuse a fight with a sibling. Another teacher noted:

It has helped staff and helped the kids. I don't know if you're aware of this, but we had some kids who were going over to the Boys & Girls Club after school, and even the Boys & Girls Club said they could see the difference between the Crockett kids and the other kids. Then they wanted to know about mindfulness.

These perceptions about the school atmosphere reflect a desire to put the wellbeing of children front and center:

Everything comes from how we have been able to help kids feel good about themselves—through social-emotional learning, through mindfulness... That’s one of the things that we are best at, and it’s affected our academics, it’s affected our community, our partnerships, the teachers, the quality of instruction. It’s affected attitudes. In my mind, it’s affected everybody.

6.5 Mindfulness grows and brings sustainable benefits

Sustainability is embedded throughout the system. Since mindfulness is supported/reinforced at many levels, the positive effects carry forward for children. However, after kids leave Crockett, they may be left to practice mindfulness on their own, which partly led to the whole school district recently bringing mindfulness on board:

Some of the students who were here and then went onto the junior high, I heard that they’re still using mindfulness, but they miss having it supported. So, I think that’s why the whole district is going to be doing mindfulness, including the junior high. But I thought that it was really cool that they are still using those things that they learned.

One teacher had left Crockett to work overseas for several years, and when she returned to the US and Crockett, she was impressed with students’ growth:

I came back to Crockett and my class, most of them had had it since kindergarten. You could see a huge difference in the kids. It’s a big difference because their response is different than it might be for other kids.

The students themselves seem to feel the same way, reflected in how they talk about school, as one teacher noted, “I have kids saying, as we are walking to specials or to the library, or to lunch, ‘I love school’. I mean I have students saying, ‘I love school,’ amidst all that is going on in the world!”

Everyone at Crockett learns mindfulness—and starting with teachers to build mindfulness from the outside-in for students has been a key to success. Like any good change effort, the work is systemic and systematic. The innovation was an investment of time and resources, and grows through sustained, cyclical efforts.

One way that Principal Hannafin is looking to continue to grow/strengthen mindfulness is through increased parental involvement, further infusing it into other aspects of children's lives, from the outside-in. He noted that the challenges created in the pandemic, along with socio-economic, language, and cultural barriers to engaging parents at school, have made it difficult to engage parents overall, including within mindfulness programming.

Research by one of the authors of this article (Gruber, 2023) demonstrated that although it can be difficult to engage parents in mindfulness programming, it can be done. Once parents have walked through the door to engage in meaningful and authentic ways, it is possible to connect deeply with them, offering opportunities to learn practices for their daily life. This can benefit their emotion regulation and interactions with their children, particularly in moments where children require discipline, setting the stage for positive parent/child relational dynamics. Principal Hannafin aims to continue to develop this programming, which Gruber initiated during the 2022–2023 school year.

7 Acknowledgment of limitations

We began studying the school after it had spent years building this effort (more recent district mindfulness efforts are still emergent). This means our findings are post-hoc as we did not study the enactment in progress. Our evidence is qualitative and based on perceptions of school leadership, teachers, and staff. For them, the work is personal, and perspectives could potentially skew positively in how they describe mindfulness.

Our observations could also be biased by our expectations of positive effects that were described by school stakeholders. The school has seen quantitative metrics improving during and since the inception of the mindfulness program, but we cannot definitively connect these changes causally to mindfulness alone. The school also weaves a focus on social-emotional learning into their mindfulness work, which might play a synergistic role—making it difficult to disentangle the factors in play. Future empirical work could benefit from more varied or in-depth empirical research designs, including experimental studies and quantitative measures (aiming to reduce possible confounding factors).

Practically, developing a program like this requires resources, time, and leadership to ensure sustainability, which, for many schools, could be a limiting factor. The need for consistent, sustained, and thoughtful application demands attention, energy, focus, clear messaging, and commitment from school leadership, which might be a trade-off on other programs. However, with commitment and challenges comes potential for significant rewards, such as those seen and described.

8 Conclusion

This schoolwide mindfulness intervention began in effort to support the many emotional, behavioral, and learning impairment

issues students presented with, stemming from emotion regulation difficulties because of trauma exposure. The five qualitative themes highlighted here suggest that school wide mindfulness had a positive impact on student emotion regulation. As teachers learned to practice mindfulness, they increased emotion regulation, which benefits both teachers and students. This is consistent with other research on benefits of mindfulness for teachers (Albrecht et al., 2012; Kemeny et al., 2012; Albrecht, 2018). As teachers regulate their emotions more easily they can help students do the same, as shown in Albrecht (2016). Our second theme suggests that this teacher-student dynamic makes difficult moments easier to manage, which has a preventative effect on behavioral issues and relational ruptures, as demonstrated through marked improvement reported by teachers. Other studies have demonstrated similar effects of mindfulness practiced in classrooms (Meiklejohn et al., 2012; Harpin et al., 2016). The next theme, students having access to a wider range of strategies to cope with intense emotions as they arise, further helps teachers with classroom management and empowers students to build stronger awareness and regulation, with shared understanding and language surrounding emotions, the classroom and school environment becomes more of a harmonious container and cohesive community, as in results found by Haines et al. (2017). Finally, this community provides concrete clues about the role of principal leadership and commitment to mindfulness practices schoolwide, also shown by Hudson et al. (2020). The Crockett principal brought all stakeholders on board and supported them in a sustained, living, constantly evolving practice, designed to meet the present moment needs of the school community. Future work within this district (and beyond) might examine leadership practices that support school change at school and examine commonalities and differences in mindfulness implementation and observed changes for students and teachers across campuses within this mindful school district.

Data availability statement

The datasets presented in this article are not readily available because our institutional IRB requires that data be confidential and only available to the PI and Co-PI for a time limited period, after it was collected. Queries can be directed to the corresponding author.

Ethics statement

The studies involving humans were approved by Arizona State University—Research Integrity and Assurance. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided written informed consent for participation in the study and for the publication of any identifying information included within the article.

Author contributions

DH: Conceptualization, Formal analysis, Investigation, Methodology, Project administration, Resources, Supervision, Writing – original draft, Writing – review & editing. NG: Conceptualization,

Data collection, Formal analysis, Investigation, Methodology, Writing – original draft, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Appendix A

1. How was the Mindfulness First training for you? Were there particular highlights or challenges?
2. Did you have previous experience with mindfulness?
3. Did you feel you learned mindfulness? (How would you describe mindfulness?)
4. When you think back to when you were in the training, were you actively practicing mindfulness in your everyday life- formally or informally?
5. Are you actively practicing now- formally or informally?
6. How do you think mindfulness influenced your experience at work and teaching through the training? With students?
7. How has mindfulness impacted your interactions with others at work? Can you give me any examples?
8. How do you think mindfulness has influenced your day-to-day experience outside of work?
9. How has mindfulness impacted your interactions with others in your life outside of work?
10. Have you noticed anything new as a result of practicing mindfulness?
11. Have you learned anything about yourself as a result of practicing mindfulness?
12. Has the way you relate to stress or difficult emotions changed at all since learning mindfulness? If so, do you think your students benefited or changed because of this?
13. Has the mindfulness training impacted how you feel about your job? If so, how?
14. What do you think about the upcoming training with students this semester? Do you foresee challenges, anticipate success?
15. What are you most looking forward to with the start of this new school year?
16. Is there anything I have not asked you that you think is important to share for me to understand your experience with mindfulness practice or training?