



Teacher-Preparation Programs and Trauma-Informed Teaching Practices: Getting Students to CHILL

Stacy Bailey
University of Northern Colorado

Abstract: If the recent turbulent times have shown educators anything, it is that we need to be prepared to address our own and our students' social and emotional needs. However, moments of tension are not the time to start. Rather, students need to be prepared to engage in meaningful ways with skills and competencies. To achieve this state of readiness, teachers can use self-regulation strategies such as the one I call "CHILL." CHILL is an easy-to-implement five-step process designed to reduce tension in moments of crisis and create the conditions whereby students are prepared to reengage with instruction, both with the teacher and with the class. C is for Calm down, H is for Hear yourself breathe, I is for Investigate your condition, L is for Let yourself know what you need, and the second L is for Let others know what you need. Based on the unique developmental aspects of the adolescent brains, CHILL is designed to support both pre- and in-service teachers as they seek to negotiate tense classroom situations and build skills in self-regulation and resiliency. Importantly, CHILL is a strategy for de-escalation that supports students and teachers in the face of student behavioral challenges.

Keywords: SEL, adolescent social and emotional learning, trauma-informed teaching, TITP, secondary teacher education, self-regulation

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Two years ago, the teacher-preparation program (TPP) in which I teach developed a new methods course designed to address two increasingly significant challenges faced by our teacher candidates (TCs): the effects of trauma on students and the need to cultivate both their own and their students' social and emotional learning (SEL) skills. The need for our curricular change was apparent in light of the National Education Association's assertion that the rising levels of trauma students experience are tantamount to an epidemic (National Education Association,

2019). While teaching the resulting course, I encountered the fallout when one of my TCs posed a startlingly simple question: “How do I talk about SEL strategies when a student is about to hurl a desk across the classroom?” In such moments of crisis, even the best pedagogical intentions are sometimes insufficient.

TCs seeking licensure in secondary education are, of course, working with adolescents, so teacher training raises a number of very particular issues. First and foremost, adolescents are living through substantial developmental changes. Researchers have described these changes as “similar to early childhood in terms of the significance of the brain’s growth and development” (Craig, 2017, p. 31). Highlighting, if not compounding, these developmental changes are the consequences of the COVID-19 pandemic and larger political turmoil. For their part, educators at all institutional levels face the short- and long-term effects. The situation is complex, particularly because on the front lines will be a new generation of teachers who will have experienced these events themselves and be responsible for guiding their still-younger students. Accordingly, TPPs must adapt the ways they ready these future teachers for the day-to-day classroom by addressing more than their students’ academic needs: they must prepare TCs to consider the whole student. After all, for those wrestling with trauma or with limited skills to address social and emotional challenges like self-regulation, focusing on learning is a struggle (Deci & Ryan, 2002; Lüftenegger, 2012; Pintrich, 2003).

According to the Substance Abuse and Mental Health Services Administration (2014), adolescents struggling with trauma or without the skills to address SEL challenges often wrestle with anger, anxiety, and disorientation. Or, they can appear moody, emotionally detached, or unable to control their emotions and reactions. Thinking that teachers can simply deliver content or address academic standards without attending to students’ SEL needs is an idea fraught with problems. As researchers have begun to recognize, “instructional strategies that teach students self-regulation techniques have demonstrated positive results for both behavioral and academic outcomes” (Popham et al., 2018, p. 240). Further proof of the value of this type of instruction can be found in the fact that 27 states have adopted K-12 SEL competencies (Bunting, 2022). Similarly, TPPs have begun to introduce trauma-informed teaching practices (TITP) into their curricula. At the same time, two considerations are essential alongside SEL and/or TITP. The first is ensuring that secondary teachers design instruction that addresses adolescents specifically (Yeager, 2017) and the adolescent brain in particular (Dorado et al., 2017). The second is recognizing that no strategy, however thoughtful and well-intentioned, can be implemented when students are in a moment of crisis and unable to self-regulate (Thiers, 2020).

In the following discussion, I begin by addressing how any TITP or instruction in SEL must be developed with an eye to the particulars of the adolescent brain. From that starting point and with those particulars in mind, I introduce a strategy for de-escalating situations where students are in crisis. Only after such a de-escalation will the student—and the teacher—be prepared to introduce TITP or SEL competencies designed to address the student’s academic or social and emotional needs. This strategy, which I call “CHILL,” is designed for pre- and in-service TCs to help them negotiate tense situations and build skills in self-regulation and resiliency for both their students and themselves. Each letter of my CHILL strategy, discussed in detail below, addresses a step in the process of de-escalation: C is Calm down, H is Hear yourself breathe, I is Investigate your condition, L is Let yourself know what you need, and L is Let others know what you need. CHILL helps maintain positive teacher-student relationships even in the face of student challenges. Derived from approaches associated with TITP and SEL, CHILL is designed to reduce tension in moments of crisis and create the conditions whereby a

student or students can subsequently reengage with the class community and curricular instruction. In this light, my formulating this slang-ish term is a deliberate act. The Urban Dictionary (2019), a source of all hip definitions, explains that to be “chill” is to “go with the flow,” to “calm down,” or “to be okay.” This general attitude aligns with the purpose of the CHILL strategy, and the accessibility of using an acronym that comes from the lexicon of our students makes it more congenial for them to carry the practice from inside the classroom to the world beyond it.

Dealing with Trauma and Vicarious Trauma

Social and emotional challenges brought on by trauma cut across age, race, gender, and socioeconomic status. Moreover, certain triggers are nearly universal because almost all students experience some degree of stress from academic, social, or out-of-school pressures. Most conspicuously, going through adolescence involves forming and maintaining relationships with peers, a process that can vary widely (Allen & Loeb, 2015). Additionally, individual students experience widely different levels of support from the adults in their lives, which, in turn, affects their ability to learn and the nature and extent of their engagement with school. When students find themselves a bit wobbly on their feet, teachers should not be surprised. In their response, teachers are best served by having a tool for immediate action to address the causes of their student’s behavior. CHILL is just such a tool.

As with all the pedagogies they implement, teacher educators should instruct their candidates in the theories and practices that will prepare them to remain steadfast to their curricular mission even while responding meaningfully to students who are experiencing trauma. For these reasons, it is essential that, alongside instruction in content and pedagogy, TPPs prepare TCs to recognize and address the effects of trauma on students. Equally important is that TPPs provide TCs with the skills to also deal with the effects of vicarious trauma—what is sometimes called compassion fatigue. With such fatigue, the effects of exhaustion, burnout, and even chronic illness on their own lives are magnified (Eyal et al., 2019). Like their students, beginning teachers often experience social isolation and, for many, economic hardship. Preparing them to address trauma-driven behavior with their students can, at the same time, help them deal with their own anxieties and stressors—it is what Yeager and Walton (2011) call a “stealthy approach” (p. 284) whereby, in working to help their students, teachers concurrently heal themselves. To be clear, even the most experienced teachers are not immune from the effects of trauma. Most notable has been the COVID pandemic. There is no need to document here the balancing act teachers have been forced to master: it has been the subject of academic journals, national news, and social media (Cardoza, 2021; Casey, 2022; Pressley et al., 2021). Indeed, younger teachers are mistaken if they believe that veteran teachers are more secure in their status because they have somehow weathered the challenges of teaching unscathed. Rather, all teachers, regardless of their level of experience, benefit from meaningful strategies that serve their students and themselves.

Addressing Adolescent Brain Development in Approaching CHILL

Trauma, it seems, is everywhere. Researchers refer to the traumatic events of children from age 0 to 17 as adverse childhood experiences. Data from the National Survey of Children’s Health (2016) confirm that 55 percent of America’s children between the ages of 12 and 17 have had at least one such experience, while one in five U.S. children has had two or more. In short, trauma has been “hiding in plain sight” for decades (National Education Association, 2019, p. 2). Given the numbers, it is safe to say that TPPs have always had to prepare their TCs to work with

diverse situations. For example, TPPs typically include courses on educational psychology, although these are often introductory overviews of “development, learning, and assessment” (Patrick et al., 2011, p. 73). Only recently, schools and TPPs have begun to address trauma in meaningful ways. In particular, TITP offers significant benefits for students who have experienced trauma. Still, given the multiple ways that trauma can suddenly manifest, teachers need a strategy that allows them to respond effectively, and especially in the moment, to support students who struggle with trauma.

Overall, my CHILL strategy aims to de-escalate moments of crisis in the classroom and prepare teachers and students to address the effects of trauma. In addition to elements of TITP and SEL, CHILL seeks to cultivate mindfulness and self-regulation in students. Integral to this approach is how CHILL accounts for what is unique about the adolescent brain. Focusing on the particulars of the adolescent brain is key when it comes to addressing students’ social and emotional competencies and the effects of trauma, especially in terms of how trauma affects particular areas of the brain. Equally important is differentiating practices for secondary education from those addressing elementary education (Yeager, 2017). Such differentiation accounts for the unique features and opportunities that stem from adolescent brain development.

Useful to framing CHILL is some basic information about the effects of trauma on the adolescent brain, most significantly, the amygdala (Ganzel & Morris, 2011; Norbury & Goodwin, 2007). The amygdala is essential to emotional learning and memory, emotional modulation of memory, emotional influences on attention and perception, emotion and social behavior, and emotion inhibition and regulation (Phelps & LeDoux, 2005). Importantly, it is the portion of the brain that mediates the acquisition and expression of conditioned fear and the enhancement of emotional memory (Koenigs & Grafman, 2009). As a result, alterations in the amygdala that result from trauma can affect emotional behavior in significant ways. When the amygdala has been required to react to a traumatic event, it can make an individual more likely to react to triggers—even mild ones—by combining them with the stress of a previous traumatic event (Ganzel & Morris, 2011). The result can be greater emotional extremes and a struggle to self-regulate. In school, these struggles can manifest as excessive reactions to stressful events. In such instances, the sooner teachers intervene to de-escalate the moment, the better.

Helping teachers to recognize the causal relationship between trauma, the brain, and student behavior achieves two important ends. Most obviously, it better prepares teachers to recognize and address the social, emotional, and academic needs of students suffering from trauma. Additionally, and equally important, it is a means for understanding and addressing their own emotional exhaustion that manifests in teacher burnout. The statistics regarding this latter point paint a worrisome picture: researchers found that 37.9% of secondary teachers experience “severe emotional exhaustion” (Garcia-Carmona et al., 2019, p. 201) and that emotional exhaustion has been on the rise since COVID (Sojkal et al., 2020). At the core of the emotional exhaustion are negative interactions between teachers and students.

TITP are an essential step towards addressing both student trauma and teacher burnout because they shift how classroom behavior is understood. Instead of approaching self-regulation problems as classroom management issues, TITP encourage teachers to perceive self-regulation problems as potential indicators of trauma. In advocating for schools to be more trauma aware, Dorado et al. (2016) promote a mindset shift for teachers: far different from beginning with the question, “What is wrong with you?” teachers begin by asking, “What has happened to you?” (p. 164). Without the training to make this shift, these researchers warn, “trauma-impacted students are at risk of being seen as children with ‘problem behaviors’ rather than as children in need of

help who have made adaptations in order to survive trauma” (Dorado et al., 2016, p. 164). TITP is also an approach endorsed by the Substance Abuse and Mental Health Services Administration and the Center for Developing Adolescents, which has advocated for those who work with adolescents to improve their “understanding of the mechanisms that affect sensation-seeking, cognitive control, and emotional regulation” (Institute of Medicine and National Resource Council, 2011, p. 44).

In their classrooms, teachers benefit from an approach such as CHILL by understanding that when a student reacts to a stressor in a way that is disparate to the stressor, that reaction could be based on previous factors. For example, students who yell at teachers who ask that they simply “sit down and take notes” might seem to be exhibiting unreasonable behavior. Teachers not trained in TITP are more likely to perceive such a reaction as a “bad behavior” and proceed with a disciplinary strategy (Public Counsel, 2015; West et al., 2014). This assumption, however, can lead to what Jennings and Greenburg (2009) refer to as a “burnout cascade” (p. 492)—that is, a tumble of repeated ineffective teacher responses to student behavior problems that result in increased student anger and teacher frustration and emotional exhaustion. The outcome is often more intense and frequent punishments for students, which can lead to “vicarious traumatization” (Pawlo et al., 2019, p. 38). For teachers trained in TITP, the situation calls for a more measured response to reduce escalation and implement calming strategies.

Recognizing trauma can clarify the link between students who have experienced trauma or are struggling with self-regulation and vicarious trauma. Developing the skills needed to distinguish trauma-informed behavior and implement trauma-informed strategies must become a central component in teacher education. Teachers who understand the effect of trauma recognize that students’ actions could result from a combination of previous trauma and a current event. As a result, the strategies teachers implement and their composure in addressing the behavior in the moment are key to reducing stress in the classroom. During moments of high tension, teachers need a strategy for de-escalation based in evidence-based practices. To start, the difference between the brain-based behaviors of adults and children must be understood. Neuroscientists have called adolescence an age of opportunity in terms of the ability to learn new resiliency skills and how to overcome adversity (National Academies of Sciences, Engineering, and Medicine, 2019; Rimm-Kaufman & Jodl, 2020). A report by the Institute of Medicine (2011) also addressed the uniqueness of brain development in adolescence, noting that changes in the adolescent brain make this age a prime time for “modulating behavioral responses . . . and exert[ing] control over impulses and emotional and social responses” (p. 37). A consortium called the Adolescent Brain Cognitive Development Project established that adolescent brains have “tension[s] between developing capacities for cognitive control and the emergence of strong incentive strivings” (Luciana et al., 2018, pp. 67-68). The unique cognitive development in adolescents can lead to behaviors such as increased risk-taking and increased reliance on peers for validation and support (Collaborative Association of Social and Emotional Learning, 2015; Luciana et al., 2018). Not surprisingly, then, growth in the regions of the brain that result in these behaviors outpaces growth in the regions of the brain that are used for making judgment calls and planning (Willoughby et al., 2013). Any strategy for addressing adolescent behaviors must account for the development of the adolescent brain.

Finally, in the same way that it is important to distinguish the adolescent brain from that of adults and children, any classroom strategy such as CHILL must differentiate between the experiences and needs of elementary and secondary teachers and students. Yeager (2017), in his study of social and emotional learning programs for adolescents, explains that promoting the use

of elementary SEL practices in the secondary setting is common. Such practices can explain why “typical SEL programs, which directly teach skills and invite participants to rehearse those skills over the course of many classroom lessons, have a poor track record with middle adolescents (roughly age 14 to 17), even though they work well with children” (p. 73). These “aged-up versions of childhood programs” (p. 74) do not address the particular challenges of working with adolescents, and the “poor track record” (p. 74) of such programs creates frustrations for students and teachers. Moreover, unlike children, adolescent behavior is more frequently characterized by risk-taking. Discussing this concept, Siegel (2014), a clinical professor of psychiatry at UCLA, described counseling a high-school student who was expelled for bringing alcohol to a school dance. The student remarked, “I guess I knew what might happen. . . But the fun of it just seemed like too much to turn down” (Katey, 2014, as cited in Siegel, 2014, para. 3). Any strategy that fails to account for what is unique to the adolescent brain, summarily stated, stands little chance of sustained success.

Taking Time to CHILL

When the effects of trauma or anxiety or frustration interfere with implementing instruction, teachers need a strategy that can diminish tension—for an individual student or an entire class—and create a climate wherein the student is better prepared to self-regulate and engage without anxiety or anger. CHILL is a self-regulation strategy designed to de-escalate tense situations quickly. For example, when the risk-taking adolescent challenges a teacher publicly, even aggressively, the response must be immediate and effective. At the same time, when frustration or anxiety prevents a student from engaging or performing, teachers need a strategy that helps students to focus. Because the CHILL technique is based on research surrounding self-regulation and effective SEL interventions, it can be effective in all such instances, for as researchers have determined, self-regulation strategies “have been successfully implemented across a variety of settings including general education classrooms” (Popham et al., 2018, p. 240).

What follows is a section about each of the five steps of CHILL and then a section about how the strategy can be modeled in the classroom. Once students are familiar with the process and the practice, the entire CHILL intervention can be implemented in as little as two to three minutes. Importantly, students who are taught the CHILL process can (and should) practice “CHILL-ing” before a tense situation escalates. Indeed, researchers have concluded instruction in self-management techniques can actually “serve as a cue” to help students self-manage (Mooney et al., 2005, p. 204). And, CHILL strategies can be applied to situations inside and outside school. It is the ease and speed with which it can be implemented that makes CHILL invaluable for teachers and students: almost any practicing teacher will relate that trying to stop an entire class to have a fifteen-minute counseling session with one student invites chaos. Instead, teachers can simply ask students who are escalating whether they would like to take a few minutes to CHILL. Equally important, CHILL can be used as a tool for the teachers themselves. When teachers learn to CHILL, they build their own self-regulation and SEL skills and are more authentic models for implementing the strategy.

C: Calming Yourself Down

To begin, creating calm in tense situations asks students to practice the competencies of self-management and responsible decision-making. The sense of calm is created through self-talk, an internal dialogue during which we tell ourselves to be calm and take control of our emotions—in the common expression, “to be the boss of you.” Researchers have found that self-

talk is an effective strategy for helping students self-regulate (Popham et al., 2018). This step, to be sure, involves more than saying the words “calm down.” Rather, it is a process. Thomas (2020), a cognitive psychologist, advises teachers that counseling their students about managing stress in the middle of stress is counterproductive: “telling students to calm down doesn’t give them the tools to manage their stress levels and their anxiety. How can one do something (like calming down) if they don’t know how to do it?” (as cited in Thiers, 2020, p.12). Teachers, in other words, need to model the calming behaviors they expect in their students. Part of this strategy involves tapping memories.

The neuroscience of memory demonstrates that accessing sensory memories results in strengthening the synapses in the brain, a process called myelination (Xin & Chan, 2020). Synapses, which are the small gaps between neurons, must be bridged in order for messages to travel from one neuron to the next. The more often that bridge is traversed, the more myelinated those synapse pathways become, and the more efficiently messages can cross that gap or synapse (Fields & Bukalo, 2020). One analogy that helps explain this process is driving a car. City traffic moves slowly in starts and stops. Highway driving moves quickly, with few, if any, stops. The lesser myelinated synapse is like city driving—stop and go. The higher myelinated synapses are like speeding down the interstate—smooth sailing. When students experience moments of high stress, it is more difficult for the brain to access these smooth-flowing pathways. However, by practicing CHILL and focusing on creating calm, we can strengthen the brain’s synapses, effectively clearing the traffic.

The practice of calming yourself down involves not only self-talk but visualization, the two together tapping into a pleasant sensory memory and practices that directly affect the brain (Norelli et al., 2021). Self-talk can take the form of a personal or occasional mantra that the student summons as needed. Visualization, also known in research studies as “guided imagery,” asks students to return to or imagine a place that makes them feel at peace—their particular “happy place”—a spot they can envision when overwhelmed by emotions or anxieties (Skeens, 2017, p. 92). The more often students practice these strategies in moments of calm, the easier it will be to access them in moments of need. To extend the driving-a-car metaphor, the more often student practice using the on-ramp to their myelinated highway, the easier it will be to find that route when they are stressed. In some instances, sharing these memories can help students concretize them. We can ask them to write a description, draw a picture, or find a photograph. Still, teachers must be wary. With all elements of CHILL, it is important to remember the high risk of asking students to disclose or share personal matters in the classroom. Students living with trauma often work daily to hide their trauma. Envisioning one’s safe spaces does not require sharing with the class or the teacher.

H: Hearing Yourself Breathe

After engaging in self-talk, students are better prepared to attune themselves to their bodies. “H” advises them, “Hear yourself breathe.” Hearing is an important mindfulness practice (Kuppusamy et al., 2020). In particular, listening for our audible breath forces us to breathe deeply. This kind of breathing is a common practice in meditation and mindfulness, and research acknowledges the effect of such practices on the body. Neuropsychologist Rhoades explains that “deep breathing (sometimes called diaphragmatic breathing) is a practice that enables more air to flow into your body and can help calm your nerves, reducing stress and anxiety” (as cited in Princing, 2022, para. 4). In implementing CHILL, teachers can help students to move beyond deep breathing to what is called expiratory breathing. Practitioners of yoga might be familiar with ujjayi breathing, which is a soft, whispering breath that is expiratory. Expiratory breathing

involves producing a wheezing or hissing sound with each exhale—a sound loud enough to be audible.

Expiratory breathing engages the parasympathetic system, the part of the autonomic nervous system that functions as a counterpart to the sympathetic nervous system. Whereas the sympathetic nervous system controls the body's responses to a perceived threat and is responsible for the fight or flight response, the parasympathetic nervous system controls the body at rest by slowing both one's heart and breathing rate (Roelofs & Dayan, 2022). Because when the sympathetic nervous system is engaged, self-regulation is more difficult (McCraty & Zayas, 2014), CHILL uses breathing techniques to engage the parasympathetic system. Expiratory breathing encourages the body to slow its heart rate and breathing speed, thereby exiting the fight-or-flight mode brought on by stressful events. Research specifically designed to assess the effects of parasympathetic breathing on adolescents found that repeated practice led to a stronger ability to regulate the autonomic nervous system (Kuppusamy et al., 2020). An additional study conducted at the Department of Stress and Health Science at Mie University Graduate School of Medicine examined the physiological effects of expiratory breathing, concluding that it significantly activates the parasympathetic system (Komori, 2018). Noteworthy to the Mie University study was the fact that, although participants were able to vary their breathing without any kind of training, practicing the kind of deep breathing needed to engage the parasympathetic system took repeated practice.

I: Investigating Your Condition

The signs of stress can be difficult to recognize or even deceiving, so it is essential to investigate the body for those signs. Some of the signs are easy to spot: queasiness, headaches, or aching muscles. However, these effects are not always associated with stress. Research has shown that adolescents can decrease immediate stress by learning about these symptoms, recognizing that their bodies deliver messages to them about their emotional as well as physical well-being, and working to manage them through mindfulness-based strategies (Fulambarkar et al., 2022; McCraty & Zayas, 2014). Investigating one's body, taking inventory of areas of pain or tension resulting from stress, and working deliberately to mitigate those effects is a concrete way for students to take control of their bodies and, by extension, the situation. This step in the CHILL process is designed to help students de-escalate by directing their own reactions to stressful situations.

One way to engage in self-investigation is through Progressive Muscle Relaxation (PMR) (Marksberry, 2012; Rausch, 2006). PMR begins by focusing on an area of tension identified through the process of investigation. To address areas of tension—a tight muscle or a clenched jaw, for example—PMR involves focusing intently on that one spot and using our breathing to help ease that tension. On each inhale, we tense the spot even further—tightening the muscle or clenching even harder—and on each exhale, we release that tension. In the same way that stress tells muscles to tense, when we work to relax our muscles, we send a reverse message back to the brain telling it to relax, meaning that stress can cause muscle tension in the same way that prolonged muscles tension can cause stress reactions in the brain (American Psychological Association, 2018). Because our nervous systems are bi-directional feedback loops, the process of working to relax areas of stress-induced tension has a powerful reverse effect on the stress itself. PMR, in this way, helps reduce feelings of stress and fear, and, as a result, the tension subsides. In studies conducted specifically with adolescents, PMR was found to be effective in reducing stress (Damodaran & Paul, 2015; Manjushambika, 2017) and maintaining a steady

psychological state (Tsai et al., 2021). PMR then becomes an important step in helping adolescents self-regulate.

L: Letting Yourself Know What You Need

The first three steps of the CHILL practice are designed to prepare students to move from being reactive to being proactive. “Letting Yourself Know What You Need” begins with another kind of self-talk: self-instruction (Meichenbaum & Goodman, 1971). This step helps students self-regulate by transitioning from focusing on feelings to focusing on thinking. Self-instruction can be a tool for analyzing one’s situation, behaviors, anxieties, or fears. Practicing this type of internal communication is an important way of continuing to reduce stress and increase self-management. Self-talk has become an essential component of self-management (Callicott & Park, 2003; Lidstone et al., 2010; Popham et al., 2018). Mooney et al. (2005) found that strategies based on self-instruction resulted in significant positive changes across a variety of settings. Studies on the use of self-talk in public health situations have shown very positive results indicating that individuals trained to use self-talk were able to “enhance rational thinking and quell worry” (Hatzigeorgiadis et al., 2011, p. 388). These are the same results we seek when we ask students to practice and use CHILL.

What one needs at a particular moment can vary. As a result, self-appraisal must be deliberate. For example, one could have a physical need for food or water or sleep, resulting in feelings of anxiety. Or, one’s needs could be emotional, so it is important to understand what underlies feelings of sadness or frustration. Harsh words with a friend or frustration with events at school or at home can require different responses. This kind of self-talk has been a subject of study in multiple areas—from sports psychology and public health policy to early childhood and behavioral development (Daugherty & White, 2008; de Dios & Montero, 2003; Winsler & Naglieri, 2003). For example, in sports psychology, an analysis of self-talk interventions found that there was a positive effect when subjects practiced self-talk (Hatzigeorgiadis et al., 2011; Van Raalt et al., 2016). Because CHILL is a strategy designed to support students in moments of stress for which they were previously unprepared, this research suggests that the results of CHILL will be similarly effective.

L: Letting Others Know What You Need

The simple act of asking for help can seem daunting to students in ordinary circumstances. It can be especially difficult when they are in crisis. The culminating step of the CHILL strategy is “Letting Others Know What You Need.” Asking for help is an act of agency to which the CHILL strategy has been building. Placing this step in the context of a larger strategy empowers students to speak up for themselves in order to get their needs addressed. Boonekamp et al. (2022) write, “For young people to aspire to what is not readily available, they need to be able to form conceptions of what they desire, and to perceive themselves as having the potential for goal-oriented action towards its achievement” (p. 2). This final step needs to be diligently scaffolded. Because CHILL is a deliberate process of working towards de-escalation, students are well prepared, even in the brief time it takes to work through the steps, to begin the process of taking control of the moment. Boonekamp et al. (2022) also assert that critical to engaging in agency is teaching adolescents how to assume “the responsibility to reflect and be responsible for their own choices” (p. 3). Building the skills needed to practice agency has multiple benefits. Wilson & Deane (2001), in their study of high-school-aged students, confirmed that when adolescents engage in help-seeking behaviors, they tend to feel more “heard, valued, accepted, and treated with dignity” (p. 358). These perceptions make engaging in

help-seeking behaviors more likely. As with the other steps of CHILL, students need to be taught how to seek help.

There are three variables involved in help-seeking behavior: the task, the person needing help, and the person whose help is being sought. For this last step, students need to know about the multiple others to whom they can turn for support. For their part, teachers need to explain the available sources for help, whether from classmates and friends, trusted adults in their immediate environment, teachers and school counselors, or professionals such as social workers, psychologists, and other medical professionals. In this light, self-advocacy introduces and depends on a skill set that is different from what is required at other steps in the CHILL strategy. With the other steps, students focus primarily on intrapersonal skills, including self-management, self-awareness, and intrapersonal communication. Advocacy addresses the interpersonal skill of social awareness, one that requires a level of trust that a student might not yet have achieved. Asking for help can be a psychologically difficult task that depends on one's emotional competence. Emotional competence is an important factor both in avoiding and engaging in help-seeking behaviors: the higher a student's level of emotional competence, the more likely they are to seek help (Cherland, 2004).

Modeling CHILL

The goal of the CHILL process is for students to learn an approach that allows them to regulate their behavior in moments of crisis or escalating tensions. There are multiple ways to introduce the complete strategy to students. Although the skills associated with CHILL are different from the content area skills on which their classrooms are centered, the familiar structure of "I do, we do, you do" can make the practice seem less daunting to students. This kind of modeling both ensures explicit teaching of strategies and provides support for students before they are expected to perform the strategy on their own. It also allows teachers to monitor students' levels of mastery as they move through the CHILL steps.

Before beginning instruction in the process, teachers should explain the purpose and benefits of each step of the strategy. How much or how little of the scholarly basis for CHILL teachers choose to share will depend on their classroom situations. For example, some students might find the brain-based research compelling, while others might need proof before they are open to a process that seems out of sync with typical classroom behavior management tools. Teachers can create a lesson or series of lessons that offer direct instruction on the theories that undergird the strategy. Or the steps can be discussed in the context of social and emotional learning competencies.

Here, I shall describe the process I use to introduce CHILL to students, one in which I move through the steps one at a time, first modeling my practice (and thereby building trust) and then walking students through their own unique methods of CHILL-ing. I begin by writing the acronym on the board and briefly describing each of the steps. As with any instruction, I use questioning to engage the class to ensure their understanding and to clarify any misunderstandings about the individual steps and the entire process. I explain that CHILL is a technique that can reduce stress and lower their anxiety, and I make clear that before I ask them to practice, I shall model each step for them to show how easy it is to implement. If students are familiar with the activity called a think-aloud, then they should recognize the self-talk of the first stages of CHILL during the "I do" process and be comfortable at the next stage, "you do." In brief, the think-aloud technique is a strategy that teachers use during instruction whereby they engage in the practice while verbalizing the thoughts and decisions that they are making. They are, in essence, modeling the thoughts that underlie the practice. The value of the think-aloud in

this instance helps to ensure that students are hearing examples from which they can build their own internal monologues.

My modeling starts with vocalizing self-talk that encourages calm. Although during CHILL self-talk is typically an internal monologue, I remind students that my modeling is a think-aloud, so I am sharing my personal approach to achieving Calm. As part of modeling, teachers should share, if they are comfortable, a mantra, a calming memory, or a description of a calming space. I explain to students that first, I tell myself to calm down. Then, repeating the phrase, “calm down,” I locate a calming place of memory or a calming space I can visit in my head. I share how sitting in the sun and petting my dog always gives me a sense of peace. So, I travel to that spot in my imagination, and I can feel my body relaxing.

Having modeled calming myself, I guide the class through their own calming practice. “First,” I tell them, “I want you to tell yourself to calm down.” Then, I continue, “In repeating that mantra to yourself, find a pleasant memory or create a calming space in your mind.” While the students engage their own memories or create their own spaces, I remain silent. After a few moments, I bring the class back to the center. After practicing each step, we make time for discussion and how the process felt or worked. This self-reflective pause is the same kind of check for understanding teachers should do regularly during instruction in new academic content or skills.

Once we have worked through the first step of CHILL, I introduce students to breathing exercises. I remind them that they want to hear themselves breathe. I model deep breathing, describing while I do the method of raising the tongue to the roof of the mouth and vocalizing as I inhale and exhale. I remind them that they should be breathing at a normal or comfortable pace. Because students can feel awkward practicing deep breathing, we engage the process as a whole class. We breathe deeply together until we find our own rhythms. Once students are comfortable, we again take a moment to discuss the process and how they feel about the strategy before moving to the next step.

Before moving on, I explain to students that these first two steps are designed to create a condition where they are able to directly address the causes of any stress or anxiety. I advise them, “Now you need to investigate your body’s condition for signs of stress.” I model for them how I do a mental check of each region of my body to locate areas of tension. “For me,” I tell them, “I carry my tension in my shoulders.” Then, I walk them through the PMR process, explaining, “I find that tension in my shoulders, I inhale, and then I squeeze them as tightly as I can creating even more tension.” I show them how I breathe in, hunch my shoulders tightly, and then pause. On my hissing exhale, they watch me release my shoulders back to their regular position. “The tension begins to dissipate,” I tell them, noting that it might take a few breaths to release it all. As with the previous steps, students practice the process of investigating their bodies, and after a few rounds, we discuss the process—not only this step but the first three. Now, I tell them that they are ready to take control of the situation, and taking control, I explain, means asking for help.

As I have already remarked, the first three steps of CHILL focus on students’ intrapersonal skills. Starting with “Let Yourself Know What You Need,” we are moving students outwards towards seeking and getting the support they need in a moment of crisis. I explain to students that after releasing tension and achieving a state of calm, we want to understand the origins of our stress or anxieties. “By engaging again in self-talk,” I tell them, “We put words to our needs.” These needs vary across the physical, social, emotional, and academic, and I make clear to students that their needs can be multiple. In discussing this step and how they feel about

it, I do not ask students to share their needs. Rather, I ask them if they feel comfortable identifying their needs and encourage them, as educator McGee (2022) suggests, to write them down. Next, I tell them, “We are at the hardest step—asking for help.” In moving to the “Letting Others Know What You Need” step, I want students to understand that they do not have to deal with things that challenge them on their own. Asking for help can involve seeking the support of a professional; however, it can also be an act as simple as turning to a neighbor in class, asking the teacher for support, or sharing with a friend. At this step of CHILL, there is real activity on which to reflect with students. This is an opportunity to talk as a class about the people we can ask for help and the resources available to us in the school and community.

Throughout this introduction to CHILL, I share with students those times when the CHILL process can be helpful outside the classroom. I do so by sharing my own moments of anxiety or tension. In all cases, when I share with students, I remain cautious about boundaries. Before modeling any element of the process, teachers must decide in advance what topics they will and will not address with students. The issue here is not simply what is appropriate. Examples we use must be relatable to students. Our experiences as adults are typically very different from those of our students.

Walking students through the phases of CHILL gives them the opportunity to practice the steps on their own. I remind them that there is no right way to breathe, no one mantra to recite, no best “happy place,” and no single place in our bodies where tension resides. Likewise, there is no single moment when the strategy can be implemented. As well, students who have lived with multiple traumas are less likely to be trusting. It can take time to build the kind of trust necessary to engage willingly in the process of CHILLing. Modeling is one way for teachers to demonstrate trust with their students. By modeling, we provide the tools students need to take control of stressful situations and give them permission to advocate for themselves. CHILL is thus not only a powerful skill for self-management and practice for intra- and interpersonal communication but a means for building authentic trust between teacher and students and between the students themselves.

Considering the Implications to CHILL

As teacher educators, we have a bifurcated view of our TCs. On the one hand, we picture them as teachers with their own classes; on the other, we see them still as students in our classes. Although the description of modeling and implementing the CHILL strategy is designed for teachers at any stage in their careers and in any classroom, it is also the very process that I use with my TCs as I introduce them to the strategy in our methods course. TPPs are unavoidably stressful. The closer students get to student teaching and then their own classrooms, the more their natural enthusiasm collides with their anxiety and apprehension. Research indicates that building initial TITP and SEL skills are best done in an indirect fashion. Those who study social-psychological interventions designed to help individuals overcome social and psychological hurdles advocate stealthy guidance over direct instruction, noting that the latter feels controlling (Hulleman et al., 2010; Yeager & Walton, 2011).

Introducing a strategy such as CHILL follows the indirect approach, for it gives TCs a valuable classroom strategy for addressing students’ social and emotional needs as well as preparing the TCs to address their own anxieties, whatever their source. It is, truly, “win-win. Whatever is one’s view of classroom management, though, just as it is shortsighted to think that teachers can simply deliver content or address academic standards without attending to the extra-academic needs of the students in their classrooms, it is equally so for TPPs to think that content expertise and pedagogical training is sufficient to prepare TCs for the classroom. No matter how

well we prepare teacher candidates with content expertise and best practices, supplemented with training in social and emotional learning and trauma-informed teaching practices, they will confront moments of crisis in the classroom. During these moments, teachers need to be able to maintain their own equanimity and the well-being of students in their care. Both they and their students need to take a moment, as it were, to chill out by CHILL-ing.

References

- Allen, J. P., & Loeb, E. L. (2015). The autonomy-connection challenge in adolescent-peer relationships. *Child Development Perspectives*, 9(2), 101-105.
<https://doi.org/10.1111/cdep.12111>
- American Psychological Association. (2018). *Stress effects on the body*.
<https://www.apa.org/topics/stress/body>
- Berg, J., Osher, D., Same, M. R., Nolan, E., Benson, D., & Jacobs, N. (2017). *Identifying, defining, and measuring social and emotional competencies*. American Institutes for Research. <https://www.air.org/sites/default/files/downloads/report/Identifying-Defining-and-Measuring-Social-and-Emotional-Competencies-December-2017-rev.pdf>
- Bunting, S. (2022). *SEL policy at the state level*. CASEL. <https://casel.org/systemic-implementation/sel-policy-at-the-state-level/#know>
- Boonekamp, G. M. M., Jansen, E. L., O'Sullivan, T., Dierx, A. J., Lindström, B., Pérez-Wilson, P., & Álvarez-Dardet Díaz, C. (2022). The need for adolescents' agency in salutogenic approaches shaping physical activity in schools. *Health Promotion International*, 37(1), 1-11. <https://doi.org/10.1093/heapro/daab073>
- Callicott, K. J., & Park, H. (2003). Effects of self-talk on academic engagement and academic responding. *Behavioral Disorders*, 29(1), 48-64.
<https://doi.org/10.1177/019874290302900102>
- Casey, M. (2022, August 27). *School districts move to ease teacher stress, Burnout*. AP NEWS. <https://apnews.com/article/teacher-stress-burnout-f7fa2b061a25849565148a39074722f2>
- Cardoza, K. (2021, April 19). *'We need to be nurtured, too': Many teachers say they're reaching a breaking point*. NPR. <https://www.npr.org/2021/04/19/988211478/we-need-to-be-nurtured-too-many-teachers-say-theyre-reaching-a-breaking-point>
- Cherland, E. (2004). The development of emotional competence. *The Canadian child and adolescent psychiatry review*, 13(4), 121.
- Collaborative Association of Social and Emotional Learning. (2015). *CASEL Guide: Effective social and emotional learning programs*. CASEL. <http://secondaryguide.casel.org/casel-secondary-guide.pdf>
- Craig, S. E., & Sporleder, J. (2017). *Trauma-sensitive schools for the adolescent years: Promoting resiliency and healing, grades 6-12*. Teachers College Press.
- Damodaran, D. K., & Paul, V. K. (2015). Stress management among adolescents. *The International Journal of Indian Psychology*, 3(1), 104-111.
<https://doi.org/10.2139/ssrn.2674512>
- Data Resource Center for Child & Adolescent Health. (2016). *National survey of children's health*. Data Resource Center for Child & Adolescent Health.
www.childhealthdata.org/learn-about-the-nsch/NSCH
- Daugherty, M., & White, C. S. (2008). Relationships among private speech and creativity in head start and low-socioeconomic status preschool children. *Gifted Child Quarterly*, 52(1), 30-39. <https://doi.org/10.1177/0016986207311059>

- Deci, E. I., & Ryan, R. M. (2002). Self-determination research: reflections and future directions. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 431–441).
- de Dios, M. J., & Montero, I. (2003). *The motivational function of private speech: An experimental approach* [Paper Presentation]. Biennial Meeting of the Society for Research in Child Development. Tampa, FL, USA.
- Dorado, J.S., Martinez, M., McArthur, L.E., & Leibovitz, T. (2016). Healthy Environments and Response to Trauma in Schools (HEARTS): A whole-school, multi-level, prevention and intervention program for creating trauma-informed, safe and supportive schools. *School Mental Health, 8*, 163–176. <https://doi.org/10.1007/s12310-016-9177-0>
- Eyal, M., Bauer, T., Playfair, E., & McCarthy, C. J. (2019). Mind-body group for teacher stress: A trauma-informed intervention program. *The Journal for Specialists in Group Work, 44*(3), 204-221. <https://doi.org/10.1080/01933922.2019.1634779>
- Fields, R. D., & Bukalo, O. (2020). Myelin makes memories. *Nature Neuroscience, 23*(4), 469-470. <https://doi.org/10.1038/s41593-020-0606-x>
- Fulambarkar, N., Seo, B., Testerman, A., Rees, M., Bausback, K., & Bunge, E. (2022). Review: Meta-analysis on mindfulness-based interventions for adolescents' stress, depression, and anxiety in school settings: A cautionary tale. *Child and Adolescent Mental Health, 17*(12), 1257-1272. <https://doi.org/10.1111/camh.12572>
- Ganzel, B. L., & Morris, P. A. (2011). Allostasis and the developing human brain: Explicit consideration of implicit models. *Development and Psychopathology, 23*(4), 955-974. <https://doi.org/10.1017/S0954579411000447>
- García-Carmona, M., Marín, M. D., & Aguayo, R. (2019). Burnout syndrome in secondary school teachers: A systematic review and meta-analysis. *Social Psychology of Education, 22*(1), 189-208. <https://doi.org/10.1007/s11218-018-9471-9>
- Golberstein, E., Wen, H., & Miller, B. F. (2020). Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. *JAMA Pediatrics, 174*(9), 819-820. <https://doi.org/10.1001/jamapediatrics.2020.1456>
- Hatzigeorgiadis, A., Zourbanos, N., Galanis, E., & Theodorakis, Y. (2011). Self-talk and sports performance: A meta-analysis. *Perspectives on Psychological Science, 6*(4), 348-356. <https://doi.org/10.1177/1745691611413136>
- Hulleman, C., Godes, O., Hendricks, B., & Harackiewicz, J. (2010). Enhancing interest and performance with a utility value intervention. *Journal of Educational Psychology, 102*(4), 880-895. <https://doi.org/10.1037/a0019506>
- Institute of Medicine and National Resource Council. (2011). *The science of adolescent risk-taking: Workshop report*. National Academies Press. <https://doi.org/10.17226/12961>
- 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*(1), 491-525. <https://doi.org/10.3102/0034654308325693>
- Koenigs, M., & Grafman, J. (2009). The functional neuroanatomy of depression: Distinct roles for ventromedial and dorsolateral prefrontal cortex. *Behavioural Brain Research, 201*(2), 239-243. <https://doi.org/10.1016/j.bbr.2009.03.004>
- Komori, T. (2018). The relaxation effect of prolonged expiratory breathing. *Mental Illness, 10*(1). <https://doi.org/10.4081/mi.2018.7669>
- Kuppusamy, M., Kamaldeen, D., Pitani, R., Amaldas, J., Ramasamy, P., Shanmugam, P., & Vijayakumar, V. (2020). Effects of yoga breathing practice on heart rate variability in

- healthy adolescents: A randomized controlled trial. *Integrative Medicine Research*, 9(1), 28-32. <https://doi.org/10.1016/j.imr.2020.01.006>
- Lidstone, J. S. M., Meins, E., & Fernyhough, C. (2010). The roles of private speech and inner speech in planning during middle childhood: Evidence from a dual task paradigm. *Journal of Experimental Child Psychology*, 107, 438–451. <https://doi.org/10.1016/j.jecp.2010.06.002>
- Luciana, M., Bjork, J. M., Nagel, B. J., Barch, D. M., Gonzalez, R., Nixon, S. J., & Banich, M. T. (2018). Adolescent neurocognitive development and impacts of substance use: Overview of the adolescent brain cognitive development (ABCD) baseline neurocognition battery. *Developmental Cognitive Neuroscience*, 32, 67-79. <https://doi.org/10.1016/j.dcn.2018.02.006>
- Lüftenegger, M., Schober, B., van de Schoot, R., Wagner, P., Finsterwald, M., & Spiel, C. (2012). Lifelong learning as a goal – do autonomy and self-regulation in school result in well prepared pupils? *Learning and Instruction*, 22(1), 27-36. <https://doi.org/10.1016/j.learninstruc.2011.06.001>
- Manjushambika, R., Prasanna, B., Vijayaraghavan, R., & Sushama, B. (2017). Effectiveness of Jacobson's progressive muscle relaxation (JPMR) on educational stress among school going adolescents. *International Journal of Nursing Education*, 9(4), 110. <https://doi.org/10.5958/0974-9357.2017.00106.4>
- Marksberry, K. (2017, January 4). *Take a deep breath*. The American Institute of Stress. <https://www.stress.org/take-a-deep-breath>
- McCraty, R., & Zayas, M. A. (2014). Cardiac coherence, self-regulation, autonomic stability, and psychosocial well-being. *Frontiers in Psychology*, 5, 1090-1090. <https://doi.org/10.3389/fpsyg.2014.01090>
- McGee, P. (2022, June 16). *How we can use writing time to nurture SEL skills*. We Are Teachers. <https://www.weareteachers.com/writing-and-social-emotional-growth/>
- Meichenbaum, D. H., & Goodman, J. (1971). Training impulsive children to talk to themselves: A means of developing self-control. *Journal of Abnormal Psychology*, 77(2), 115-126. <https://doi.org/10.1037/h0030773>
- Mooney, P., Ryan, J. B., Uhing, B. M., Reid, R., & Epstein, M. H. (2005). A review of self-management interventions targeting academic outcomes for students with emotional and behavioral disorders. *Journal of Behavioral Education*, 14(3), 203-221. <https://doi.org/unco.idm.oclc.org/10.1007/s10864-005-6298-1>
- National Academies of Sciences, Engineering, and Medicine. (2019). *The promise of adolescence: Realizing opportunity for all youth*. The National Academies Press. <https://doi.org/10.17226/25388>
- National Education Association. (2019). *Addressing the epidemic of trauma in schools*. <https://www.nea.org/sites/default/files/2020-09/Addressing%20the%20Epidemic%20of%20Trauma%20in%20Schools%20-%20NCSEA%20and%20NEA%20Report.pdf>
- National Library of Medicine. (2011). *The science of adolescent risk-taking: Workshop report*. National Academies Press. <https://www.ncbi.nlm.nih.gov/books/NBK53418/>
- Norbury, R., Goodwin, G.M. (2007). Fear and the amygdala. In G. Fink (Ed.), *Encyclopedia of Stress* (2nd Ed.). Elsevier Academic Press.
- Norelli SK, Long A, Krepps JM. (2021). *Relaxation techniques*. StatPearls Publishing; <https://www.ncbi.nlm.nih.gov/books/NBK513238/>

- Patrick, H., Anderman, L. H., Bruening, P. S., & Duffin, I. C. (2011). The role of educational psychology in teacher education: Three challenges for educational psychologists. *Educational Psychologist, 46*(2), 71-83. <https://doi.org/10.1080/00461520.2011.538648>
- Pawlo, E., Lorenzo, A., Eichert, B., & Elias, M. J. (2019). All SEL should be trauma-informed. *Phi Delta Kappan, 101*(3), 37-41. <https://doi.org/10.1177/0031721719885919>
- Phelps, E. A., & LeDoux, J. E. (2005). Contributions of the amygdala to emotion processing: From animal models to human behavior. *Neuron, 48*(2), 175-187. <https://doi.org/10.1016/j.neuron.2005.09.025>
- Pintrich, P. R. (2003). A motivational science perspective on the role of student motivation in learning and teaching contexts. *Journal of Educational Psychology, 95*(4), 667-686. <https://doi.org/10.1037/0022-0663.95.4.667>
- Pogere, E. F., López-Sangil, M. C., García-Señorán, M. M., & González, A. (2019). Teachers' job stressors and coping strategies: Their structural relationships with emotional exhaustion and autonomy support. *Teaching and Teacher Education, 85*, 269-280. <https://doi.org/10.1016/j.tate.2019.07.001>
- Popham, M., Counts, J., Ryan, J. B., & Katsiyannis, A. (2018). A systematic review of self-regulation strategies to improve academic outcomes of students with EBD. *Journal of Research in Special Educational Needs, 18*(4), 239-253. <https://doi.org/10.1111/1471-3802.12408>
- Pressley, T., Ha, C., & Learn, E. (2021). Teacher stress and anxiety during COVID-19: An empirical study. *School Psychology, 36*(5), 367-376. <https://doi.org/10.1037/spq0000468>
- Princing, M. (2022, June 14). *What is deep breathing? Right as rain by UW Medicine.* <https://rightasrain.uwmedicine.org/mind/stress/why-deep-breathing-makes-you-feel-so-chill>
- Public Counsel. (2015). *Fix school discipline: How we can fix school discipline: Toolkit for educators.* <http://fixschooldiscipline.org/educator-toolkit/>
- Rausch, S. M., Gramling, S. E., & Auerbach, S. M. (2006). Effects of a single session of large-group meditation and progressive muscle relaxation training on stress reduction, reactivity, and recovery. *International Journal of Stress Management, 13*(3), 273-290. <https://doi-org.unco.idm.oclc.org/10.1037/1072-5245.13.3.273>
- Rimm-Kaufman, S., Jodl, J. (2020). Educating the whole learner. *Educational Leadership, 77*(8), 28-34.
- Roelofs, K., & Dayan, P. (2022). Freezing revisited: coordinated autonomic and central optimization of threat coping. *Nature Reviews Neuroscience, 23*(9), 568-580. <https://doi.org/10.1038/s41583-022-00608-2>
- Skeens, L. (2017). Guided imagery: A technique to benefit youth at risk. *National Youth Advocacy and Resilience Journal, 2*(2) <https://doi.org/10.20429/nyarj.2017.020207>
- Substance Abuse and Mental Health Services Administration. (2014). *SAMHSA's concept of trauma and guidance for a trauma-informed approach.* HHS Publication No. (SMA) 14-4884. Substance Abuse and Mental Health Services Administration. https://ncsacw.acf.hhs.gov/userfiles/files/SAMHSA_Trauma.pdf
- Siegel, D. (2014). *Dopamine and Teenage Logic: Young minds are often portrayed as stewards of hormones and impulse; but the decisions they make are often deeply rational and deserving of greater consideration.* The Atlantic. <https://www.theatlantic.com/health/archive/2014/01/dopamine-and-teenage-logic/282895/>

- Sokal, L., Trudel, L. E., and Babb, J. (2020). Canadian teachers' attitudes toward change, efficacy, and burnout during the COVID-19 pandemic. *International Journal of Educational Research Open*, 1. <https://doi.org/10.1016/j.ijedro.2020.100016>
- Thiers, N. (2020). Turn and Talk: Ayanna Thomas on anxiety, the brain, and helping learners cope. *Educational Leadership*, 77(8), 14-20.
- Tsai, M., Cheng, T., Yang, Y., & Wang, C. (2021). A school-based progressive muscle relaxation program for female adolescents: Development and the effectiveness on physiological and psychological evidence. *Healthcare*, 9(10), 1319. <https://doi.org/10.3390/healthcare9101319>
- Urban Dictionary. (n.d.). Chill. Retrieved September 12, 2019, from www.urbandictionary.com/define.php?term=Chill
- Van Raalte, J. L., Vincent, A., & Brewer, B. W. (2016). Self-talk: Review and sport-specific model. *Psychology of Sport and Exercise*, 22, 139-148. <https://doi.org/10.1016/j.psychsport.2015.08.004>
- West, S. D., Day, A. G., Somers, C. L., & Baroni, B. A. (2014). Student perspectives on how trauma experiences manifest in the classroom: Engaging court-involved youth in the development of a trauma-informed teaching curriculum. *Children and Youth Services Review*, 38, 58-65. <https://doi.org/10.1016/j.childyouth.2014.01.013>
- Willoughby, T., Good, M., Adachi, P. J. C., Hamza, C., & Tavernier, R. (2013). Examining the link between adolescent brain development and risk taking from a social–developmental perspective. *Brain and Cognition*, 83(3), 315-323. <https://doi.org/10.1016/j.bandc.2013.09.008>
- Wilson, C. J., & Deane, F. P. (2001). Adolescent opinions about reducing help-seeking barriers and increasing appropriate help engagement. *Journal of Educational and Psychological Consultation*, 12(4), 345-364. https://doi.org/10.1207/S1532768XJEPC1204_03
- Winsler, A., & Naglieri, J. (2003). Overt and covert verbal problem-solving strategies: Developmental trends in use, awareness, and relations with task performance in children aged 5 to 17. *Child Development*, 74(3), 659–678. <https://doi.org/10.1111/1467-8624.00561>
- Xin, W., & Chan, J. R. (2020). Myelin plasticity: sculpting circuits in learning and memory. Nature reviews. *Neuroscience*, 21(12), 682–694. <https://doi.org/10.1038/s41583-020-00379-8>
- Yeager, D. S. (2017). Social and emotional learning programs for adolescents. *The Future of Children*, 27(1), 73-94. <https://doi.org/10.1353/foc.2017.0004>
- Yeager, D., & Walton, G. (2011, June). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81(2), 267-301. <https://doi.org/10.3102/0034654311405999>

Author Notes

Stacy Bailey

<https://orcid.org/0000-0002-8661-8068>

University of Northern Colorado

Stacy.bailey@unco.edu



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